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Quantum Medicine

The Radical Power of Love, Energy, and Soul to Heal Body and Planet

By
Dawson Church

Santa Rosa, California
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Chapter One

The Crisis in Health Care

Medicine in America is in crisis. Many informed people will tell you so: doctors, hospitals, insurers, politicians, alternative medicine practitioners, and the makers of public policy. But they are almost all wrong. They are wrong about the nature of the crisis, wrong about the causes of the crisis, and wrong about the solutions to the crisis. The debate about "health care" is everywhere; in magazines, in presidential debates, on web forums, and that electronic media. It fills thousands of minutes, lines, and bytes, yet all this chatter manages to miss the most important problems and solutions.

Take the much-quoted figure that 43 million Americans (some 12% of the population) do not have health insurance.¹ Getting these uninsured people into the system has dominated public debate for two decades. It was to be the social centerpiece of President Clinton's first term, until it hit the opposition of entrenched interests and floundered. It was the primary concern of virtually all the Democratic presidential candidates for the 2004 election.² Yet it's

entirely the wrong direction for public policy to go; the system into which politicians want to bring the uninsured manages the remarkable simultaneous feats of incompetence at keeping people well, and spending obscene amounts of money to practice their incompetence.

The costs are truly staggering. The US spends about three times as much as Great Britain per person on health care, and twice as much as Canada.³ Both those countries have universal health care—every single person is covered. The US spends almost twice as much as Germany and France, and more than twice as much as Japan.⁴ These are all comparable post-industrial societies and economies. Some, like France, have inefficient, fossilized or costly systems. If American costs were 20% higher than the average among rich industrialized countries we would have cause for concern. Costs that are more than double the average are a national disgrace. And that's for a system that does not cover everyone.

Solutions like capping payments to doctors in the Medicare program which provides care to the elderly, or moving patients into Health Maintenance Organizations, have at best slowed the growth of spending. They have not brought costs down. Medicare is currently predicted to go

broke by the year 2019.⁵ The unfunded liabilities of the system for the next 75 years have been calculated at a staggering \$27.7 trillion.⁶ Faced with this crisis, national leaders have recently not been content with merely ducking the issue. They've made it worse by piling on added benefits for seniors (who vote in large numbers), that today's children (who can't vote at all) will have to pay for—with interest.

If this bizarre amount of spending were producing a marvelously healthy population, there might be some defense for it. It doesn't. Infant mortality rates are higher, and life expectancy lower, than every single one of the countries mentioned above.⁷ According to a recent, large-scale study of twelve different metropolitan areas from Newark, New Jersey, to Miami, Florida, Americans get substandard medical care more than half the time, leading to "thousands of needless deaths each year."⁸ The Middle American diet of highly processed, fat-laden foods, is a disaster; Norm Shealy, M.D., Ph.D, says, "We've gone from eating off the farm to eating off the factory."⁹ Andrew Weil, M.D. begins an authoritative survey of the medical profession, recently published in *The Archives of Internal*

Medicine, with these words: "The chassis is broken, and the wheels are coming off."¹⁰

Asking questions like, "How can we slow the growing cost of our medical system," and, "How can we bring the uninsured into the system," have brought us to grief. They are the wrong questions. As long as we keep on asking them, we will get the wrong answers. If we stick with our current disease-centered and money-centered paradigm, our health will keep declining, and we will pay even more. Good ideas are what is needed; when our thinking changes, our institutions change with it. Changing the institutions without changing the flawed thinking behind them results only in hastening their collapse, as was evident in the Medicare prescription drug benefit passed by Congress in 2004; it brought forward the date of Medicare's insolvency by eight years.¹¹ Asking how we can get the uninsured into the system—which is as far as most policymakers think—is like asking how to cram more passengers onto a train that is already jammed, has some cars that are falling to pieces while others that are trimmed with diamonds, is about to crash, and is anyway heading in the wrong direction.

What then are the right questions?

Let's start with, "How can we make the largest number of people as well as possible?" This question abandons our old way of thinking, about how to tinker incrementally with our broken system, and invites a fresh awareness. Our assumption shifts away from treating disease, and toward creating health. As we create health, there is less disease to treat.

What can we teach all high school students, and all retirees, that would maintain their bodies in the best possible condition for the longest possible time? And once their bodies are functioning well enough to circumvent the distraction of illness or low vitality, how do we optimize their spiritual and emotional wellbeing? There are four simple and obvious remedies. They cost almost nothing. They require very little time and attention; much less attention certainly than being sick does. And, if implemented, they would radically alter the health picture of our entire civilization within thirty days.

Here's a base line that every person could be supported in achieving:

- A period of aerobic exercise, flexibility and strength training averaging at least thirty minutes a day.

- A diet of simple, unprocessed foods, including lean protein and complex carbohydrates, in moderation.

- Supplements: At minimum, a capsule each day of multivitamins, antioxidants and fish oils.

- Proficiency in a stress-reduction technique such as meditation, prayer, or contemplation.

The first three items provide a foundation of physical health on which a structure of spiritual wellbeing can be built. It's hard to meditate, do yoga, contemplate, or pray with serenity, when your body's sick, so addressing basic physical wellbeing is an early-stage requirement. And while conflicting dietary advice abounds, it's hard to find any authority who will argue with a focus on moderate amounts of minimally-processed foods. These may not be optimal levels of exercise and nutrients, but they provide a minimal threshold for the creation of health.

The health benefits of meditation alone are well-documented and numerous. Dr. Robert Dozor, co-founder of the Integrative Health Clinic of Santa Rosa, California, and author of a chapter later in the present bolumn, says, "Meditation—all by itself—may offer more to the health of a modern American than all the pharmaceutical remedies put together."¹² Meditation has been shown to lower blood

pressure, improve resting heart rate, reduce the incidence of strokes, heart disease and cancer, diminish chronic pain, ameliorate anxiety and depression, and have a beneficial effect on many other diseases.¹³ If meditation were a drug, it would be considered medical malpractice for a physician to fail to prescribe it. The results of studies of prayer are equally impressive. A study currently underway at Duke University Medical Center, and covered in more detail in a later chapter, shows that cardiac patients who are prayed for have fewer than half the post-surgical complications of those who are not.¹⁴

The answers to our dilemmas are staring us in the face. Millions of ordinary Americans are bucking the national trend towards obesity and illness by using one or all of these simple remedies. They are daily countering the dysfunctionality of the disease- and money-centered medical paradigm. If a majority of Americans followed the simple four-part prescription above, which takes less than an hour per day and could cost less than one dollar per day, much of the superstructure of our current system would become obsolete. The numbers of people requiring treatment would drop precipitously. As far fewer people utilized the system, costs would fall, creating a pool of funds to treat

all those, including the uninsured, who require the ministrations of allopathic and alternative medicine.

Not only are such interventions cheap and effective. They are fast. Recent studies show that fish oil supplementation leads to marked improvements in mental acuity in 30 days or less. Fish oils have been shown to prevent cancer,¹⁵ reduce heart attacks, improve cardiovascular health,¹⁶ and reduce the incidence of diabetes, autoimmune diseases, and inflammatory diseases.¹⁷ Some of the supplements in antioxidant and multivitamin tablets are absorbed by the body in minutes. Many of the benefits of exercise and meditation occur immediately, others show up cumulatively in the form of stronger, more durable bodies, and a reservoir of inner peace from which people who pray and meditate can nourish themselves in times of stress. The sense of physical and spiritual wellbeing that people get from these simple lifestyle choices can improve their lives dramatically in a month. When we start to ask the simple question about how we support ourselves in optimal wellness, we are led by compelling data to the four simple lifestyle choices above. Science now points us inexorably toward the value of diet, exercise, meditation, and wellness-based therapies.

Shifting the health habits of an entire civilization seems like a tall order. The system towers like a giant, immobile bronze statue over the country, impervious to any change except one that strengthens it. The frozen system affects every individual. People wishing to attend a yoga class, join a gym, get a massage, visit an alternative healer, or otherwise nurture their wellness, must pay for it themselves. Dr. Dozor observes, "To health insurance companies, integrative healing practices appear to be simply another expense."¹⁸ Dr Dean Ornish ponders, in a later chapter, "How did we get to a point in medicine where interventions such as radioactive stents, coronary angioplasty and bypass surgery are considered conventional, whereas eating vegetables, walking, meditating, and participating in support groups are considered radical?"¹⁹

Yet I predict that our definition of what is—and is not—conventional in medicine will shift, and shift quickly. Scholar Jean Houston, in her book *Jump Time*, points out that social evolution does not happen in a gradual upward curve.²⁰ It is marked by long plateaus, followed by rapid jumps. She identifies the Renaissance as one such jump. Within 25 years, all the assumptions of society had changed—assumptions about politics and governance; about money and

economics; about gender roles; about religion and science; and about health, medicine and wellness. She believes that we are in the middle of another such jump, and that the landscape of consciousness will be radically different by the second and third decades of the twenty-first century. Health-conscious Americans today are jumping with their pocketbooks. The dollar amount spent on alternative therapies now exceeds Americans' out-of-pocket payments for conventional medical care, according to Dean Ornish.²¹

The benefits of getting and staying healthy are so obvious that they are attracting social consciousness like a magnet. As I have surveyed the field of wellness for several large scale anthologies, interviewing dozens of authorities on the leading edge of wellness research, I have been struck by two things. One is that our crisis is not one of money, access, or technology. It is a crisis of consciousness. As we reformulate our national debate in order to ask the right questions, as we change our collective minds, better answers will emerge as surely as night follows day. All our efforts to change "the system" won't have nearly the effect that a change of heart and mind will have on all our systems, both global social systems and personal physiological systems. Social consciousness, that

which Teilhard de Chardin referred to as the "psychosphere," is the aggregate of the consciousness of all the individuals in the society. When many individual consciousnesses shift, the group consciousness inevitably shifts to reflect the new mix. Personal inner change is, in aggregate, outer social change.

As we as individuals begin to set aside time in our busy days for meditation, prayer and contemplation, we become aware of the immanent side of existence. We become attuned to the flow of energy through our bodies, and we become more sensitive to the subtle forces that shape our lives. As well as tackling our challenges by outer action, we awaken of the power of pure awareness. As inner peace and serenity become an integral part of our daily practice of life, we become aware of the infinite possibilities of the energy fields in which we have our being. We see how changes in energy can result in changes in outer form, and how changes in our awareness can affect our world. From a calm mind and a serene heart, and a sense of being part of a larger ordered whole, we see new potentials for our lives, and make choices that unlock those potentials.

The results are good for our bodies. The effects of spiritual or religious practice and social support on people

undergoing heart surgery were studied by a group of researchers led by Thomas Oxman from the University of Texas Medical School. They discovered that those patients that were richly networked or had a strong spiritual or religious practice had only one-seventh the mortality rate of those who did not.²² These astonishing results are not an isolated instance. The effect of consciousness upon physical healing is already documented, and is being studied more and more. Larry Dossey, in a later chapter, points out that there are some 150 studies already completed, with more in progress. This improvement in physical health gives an individual greater energy and vitality, which leads to more attention being available for meditation, yoga, prayer and other spirit-strengthening activities. Integrating these activities into one's life leads to better physical health, in a virtuous and mutually-reinforcing cycle.

Health care will look very different after the present jump. Clinics will be places of spiritual and emotional soothing, rather than service stations for mechanical defects in bodies. Science will be welcomed as the ally of holistic approaches, rather than merely a tool of drug companies and medical technology manufacturers. Doctors and patients may routinely pray together, and pray for each

other. Patients' mental, emotional and spiritual states may receive as much of a workup as their bodies, if not more so, and intention and other intangible factors might become the primary method of treatment. Many different healing modalities may be combined, with the line between what we now call "conventional" care and "alternative" care blurring into the question: "What combination of approaches will help us to be most well?"

I observe a collective social consciousness in the process of rapid, radical, and irreversible change, a change only thrown into sharp relief by counter-indications like the alarming increase in obesity. Public society and governance are still mired in the wrong questions, about bringing the uninsured into the system, and about limiting cost increases. But enough individuals are finding personal answers that, in aggregate, may topple the seemingly-immovable statue of conventional medical care within the next few years. Margaret Mead famously observed: "Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has." Every day that any of us prays, meditates, exercises, eats a healthy diet, and maintains a calm state of mind, is a day in which the fossilized old edifice of conventional

medical care is given a little nudge. One day soon, the aggregate of those nudges may bring it crashing down into the sea of common sense, out of which a new health care model is right now being born.

Chapter Two
Quantum Healing:
Medicine for the Future

One of the most striking features of research on consciousness in healing is the size of the effect. If a new drug or surgical treatment for angina produced a statistically significant improvement in the health of patients of 15%, it would (literally) warrant a feature story in the *New York Times*.

Some of the studies of meditation, prayer, spiritual practice, and social goodwill and other intangibles sometimes show effects that are much more dramatic—though they are rarely publicized in the mainstream media. The Oxman study cited above showed factors of belief and behavior that produced a *sevenfold reduction* in mortality. It is hard to imagine any conventional medical treatment that comes close. Intangible changes in consciousness, as well as having potentially huge effects, are also usually free, have no side effects, and do not require the patient to become enmeshed in an expensive, dysfunctional medical “system” so dangerous that iatrogenic illnesses (illnesses

brought about by medical treatment) rank as the third leading cause of death, after heart disease and cancer.²³

Besides the size of the effects, the pervasiveness of the benefits of consciousness change is becoming apparent. Many studies, going back over thirty years, show changes in brain function among meditators. Newer studies are demonstrating that meditation does not just make subjects calmer; it has beneficial effects on many different measures of their health. A recent study of mindfulness meditation by researchers at the University of Wisconsin at Madison showed that mindfulness meditation produces significant rises in a variety antibodies and blood cells all associated with increased immune function. Another study by the same institution recruited veterans with post-traumatic stress syndrome and also coronary artery disease, and gave the experimental group forgiveness training. After practicing forgiveness, this group showed increased blood flow to their hearts. This new crop of studies is showing that in addition to the other benefits of meditation, it measurably improves the body's ability to resist disease and the effects of stress—systemwide.²⁴

The study mentioned briefly in the previous chapter, by Mitchell Krucoff, M.D. and Suzanne Crater, R.N., his nurse

research assistant, and performed at Duke University Medical Center, one of the most prestigious medical facilities in the world, is especially intriguing. They refer to the effects of consciousness as *noetic* effects.

The study was conducted on patients admitted to Duke's cardiac care unit with severe chest pain. Patients were asked, upon admission, "Do you wish to participate in a prayer study?" The ones who answered in the affirmative were then randomized. Some were assigned to an experimental group, and others to a control group. Both groups got the same care at the hospital. The first names of the experimental group were e-mailed to religious communities who prayed for them. These included a convent of Catholic nuns in Baltimore, Buddhist temples in Nepal and India, a group called Virtual Jerusalem that inserts slips of paper containing prayers into the chinks of the Wailing Wall in Jerusalem, fundamentalist congregations in the Central States, and the Silent Unity worldwide prayer service of the Unity church, one of the "New Thought" churches that sprang from the American Transcendentalist movement of the late 1800s.

They offered the cardiac patients admitted to Duke in their study one of four "noetic interventions" prior to

surgery: stress relaxation, imagery, touch therapy, and prayer. The response of patients to prayer is mentioned above because, of all four noetic interventions, prayer produced the most dramatic results.

The researchers then tracked the number of patients who died after surgery, or had other serious complications, and compared their results with a control group not receiving any of the noetic interventions. The study showed a complication rate for the group of cardiac patients receiving the noetic interventions that was at least 25% lower than patients in the control group. All of those techniques worked to reduce patient deaths and complications. However, those patients who were prayed for had less than half the number of deaths and complications of the control group.

Krucoff and Crater developed an interest in these topics in the early 1990s, and began to publish papers that indicated that their research was moving in this direction.²⁵ The first results of the noetic interventions study appeared in the *American Heart Journal* in 2001.²⁶ The medical community recognized the importance of these findings; no drug or surgery currently practiced, or in development, could even begin to compare with such

beneficial effects on patients. In contrast to earlier decades, when such results might have been dismissed as "soft" science, ignored, and rarely implemented in clinical settings, the Duke University prayer study was expanded. After Krucoff and Crater published their preliminary results in 2001, nine other hospitals came into the study, with the result that it is now one of the largest studies of its kind ever conducted, and is positively affecting the lives of thousands of patients.

Another experiment done by the same team of researchers measured the amount of worry being experienced, prior to treatment, by patients who had been admitted to a hospital because of unstable coronary syndromes. The period before treatment, especially for a known killer like cardiac disease, is likely to be filled with anxiety for a patient who has just been admitted to a coronary intensive care unit. This stress is not conducive to effective treatment, whatever that treatment turns out to be, and the researchers wanted to find out what effect their noetic interventions might have on such patients, and whether it would reduce their worry. Stress management, touch therapy, and imagery were done in a single thirty-minute session just before treatment. The researchers measured factors like the

patient's sense of happiness, satisfaction, fear, worry, calmness, and shortness of breath.

The patients in the experimental group all experienced a reduction in their sense of anxiety, regardless of the noetic intervention performed.²⁷ Interestingly enough, in a follow-up to this study done after the treatment, the patients who had reported a decrease in worry and an increase in hope after the treatment, also showed these same characteristics six months later.²⁸ This is a profound long-term beneficial effect to result from a mere single thirty-minute treatment!

The medical paradigm in the United States has gone through several stages. The first stage was roughly parallel to the century up till the First World War. The 1800s were more than a period of exploration of the Western frontier; they were also the Wild West of medicine, in which dedicated practitioners mixed with snake-oil vendors, in which experienced Civil War combat surgeons rubbed shoulders with "doctors" whose only qualification was the cedar shingle hung from their front porch, in which the clear-sighted clinical observations of such geniuses as Andrew Still, the founder of Osteopathy, were indistinguishable to the layman from the extravagant claims made for patent

elixirs and technologies ("Be a Radioesthesiast! Only \$9.99—includes instructions!").

That First Stage—the Wild West of Medicine, was tamed by the Flexner Report, commissioned by the Carnegie Foundation and published in 1910. It ushered in the second stage, by setting up licensing and professional standards for medical schools—or at least the AMA-sponsored institutions it favored. This new rigor was welcome in that it led to the outlawing of the worst kinds of quack medicine. Unfortunately, it also led to the censure of many of the most original and effective "unconventional" treatments. It also fostered the rapid ossification of medicine into an orthodoxy controlled by the American Medical Association; for instance, by 1918, all but one of the homeopathic medical colleges—up to then the main competition to conventional medicine—had been forced to close their doors. Practices such as Osteopathy, and later Chiropractic, struggled to survive. The second stage might be considered the Age of Conformity in Medicine, when any promising findings outside of officially sanctioned channels—like those of Royal Rife in pathology, Harry Hoxsey in oncology, Wilhelm Reich in psychiatry, and D. D. Palmer in skeletal manipulation—were suppressed or punished. "Because

physicists had not yet discovered the quantum universe," notes a modern cell biologist, "energy medicine was incomprehensible to science."²⁹

The priesthood of biomedical orthodoxy came under increasing strain in the second half of the twentieth century. In 1987, chiropractic won a victory when federal judge Susan Getzendanner ruled that the American Medical Association had illegally conspired to destroy the profession through the restraint of trade. New discoveries and the anecdotal evidence of patients and physicians formed a background chatter that became increasingly difficult for the mainstream medical establishment to ignore.

Randomized controlled double-blind studies, the Gold Standard of medical research, have been upheld by the medical establishment for more than four decades to determine the efficacy of new drugs and surgical techniques. Ironically, that same scientific method, when it began to be applied to alternative therapies in the nineteen eighties and nineties, began to turn up results like the noetic interventions study quoted above, ushering in the Third Stage, the Age of Convergence—perhaps better titled the Age of Infinite Potentials. The characteristic of this stage is that the supposed antagonism between "conventional" and

alternative medicine is being shown for the hoax it always was. Emblematic of this shift is the irony that the same scientific tool—clinical studies—that had allowed the drug companies and surgical instrument makers to capture the high ground of medical treatment during the Age of Conformity, now became the means by which many useful alternative therapies were shown to be far more effective than their conventional counterparts. The world of medical research is being turned on its head. A study like the Duke University study represents the dawning of the Age of Convergence, in that scientific method is validating the efficacy of treatments that would have been laughed out of a consulting room or professional convention twenty-five years before. A century after it began to transform physics, quantum theory has finally hit medicine.

The “infinite potentials” part of this age is that the potential of some of the alternative therapies is only now becoming apparent. We may need to adjust our thinking about the upper limits of human longevity, the duration of the human health span (as opposed to “life span,” the term “health span” is the number of *healthy* years lived), the scope of brain function, the implications for medicine of quantum physics and especially the phenomenon of non-

locality of consciousness, and the upper limits of human physical performance. Very recently, Jay Olshansky, professor of epidemiology and biostatistics at the University of Illinois at Chicago, debunked the idea that human life expectancy might increase significantly in the years to come. In a *New York Times* article that holds that, "the era of large increases in life expectancy may be nearing an end," he asserts that, "there are no lifestyle changes, surgical procedures, vitamins, antioxidants, hormones or techniques of genetic engineering available today with the capacity to repeat the gains in life expectancy that were achieved in the twentieth century."³⁰ I believe that this conclusion could not be more mistaken. It is based on the extrapolation of Second Stage science. Third Stage breakthroughs will, I believe, yield hitherto unknown benefits, and possibly exponential leaps in wellness and longevity; at the dawn of the Third Stage, we don't know the answers: researchers are still stumbling merely to formulate the issues and find the right questions to ask.

The Duke University studies look at the effect of noetic interventions on patients who are undergoing conventional cardiac treatment, and for this reason they are on the cusp of the Age of Conformity (scientific study, conventional

cardiac treatment, hospital setting) and the Age of Infinite Potentials (prayer, hope, forgiveness, and other phenomena of non-local mind).

Third Stage studies will start from different premises. Why study the effects of infinite potentials on conventional medical treatment, in this case studying the effect of prayer on post-surgical complications? Why not cut out the second stage procedures, and start studying the first causes, the immanent basics of life itself? To reformulate the question in medical terms: Is there a point at which prayer, hope, and other practices could make obsolete a surgical procedure like sawing through a patient's sternum in order to slice open the heart and repair a valve?

One of the most fascinating avenues of Third Stage enquiry is the study of how DNA works. I have been privileged to edit a book about this entitled *The Biology of Belief*, which will be published in mid-2005, by cell biologist Bruce Lipton, Ph.D.³¹ aBased on pre-publication word-of-mouth alone—the book has hit the best-seller lists before the first copy has been shipped. Lipton is a former professor at Sanford University School of Medicine. His forthcoming book has been hailed as a masterpiece by Ralph Abraham, Karl Pribram, Gregg Braden, Joseph Mercola, and

many other authorities. Joseph Chilton Pearce, Ph.D., calls this book, "the definitive summary of the New Biology and all it implies. It synthesizes an encyclopedia of new information into a brilliant yet simple package."

Lipton began his scientific career as a cell biologist. He received his Ph.D. degree from the University of Virginia at Charlottesville before joining the Department of Anatomy at the University of Wisconsin's School of Medicine in 1973. His research on muscular dystrophy, studies employing cloned human stem cells, focused upon the molecular mechanisms controlling cell behavior. An experimental tissue transplantation technique developed by Lipton and colleague Ed Schultz and published in *Science* was subsequently employed as a novel form of human genetic engineering.

In 1982, Lipton began examining the principles of quantum physics and how they might be integrated into his understanding of the cell's information processing systems. He produced breakthrough studies on the cell membrane, which revealed that this outer layer of the cell was an organic homologue of a computer chip, the cell's equivalent of a brain. His research at Stanford University's School of Medicine, between 1987 and 1992, revealed that the environment, operating through the membrane, controlled the

behavior and physiology of the cell, turning genes on and off. His discoveries, which ran counter to the established scientific view that life is controlled by the genes, presaged one of today's most important new fields of study, the science of epigenetics. Two major scientific publications derived from these studies defined the molecular pathways connecting the mind and body.^{32 33} Many subsequent papers by other researchers have since validated his concepts and ideas. Epigenetics was ably defined by the journal *Science* as "the study of heritable changes in gene function that occur without a change in the DNA sequence," and a special issue of the magazine was devoted to the emerging discipline in 2001.³⁴

Today, Bruce Lipton lectures to conventional and complementary medical professionals and lay audiences about leading-edge science and how it dovetails with Mind-body-spirit medicine and spiritual principles. He has been heartened by anecdotal reports from hundreds of former audience members who have improved their spiritual, physical and mental well being by applying the principles he discusses in his lectures, and he is widely regarded by his colleagues as one of the leading popularizers of the new biology.

Lipton has pioneered the application of the principles of quantum physics—especially the notion that the quantum universe is a set of probabilities, which are susceptible to the thoughts of the observer—to the field of cellular biology. While traditional cell biology focuses on the physical molecules that control biology, Lipton's work focuses on the chemical and electromagnetic pathways—explained in great detail in *The Biology of Belief*—through which energy in the form of our beliefs can affect our biology, including our genetic code. His deep understanding of cell biology highlights the mechanisms by which the mind controls bodily functions, and implies that our bodies can be changed as we change our thinking. He shows in his book that human beings can affect gene activity through their beliefs. These beliefs—true or false, positive or negative, creative or destructive—exist not simply in our minds; by interaction with the infinite probabilities of a quantum universe, they can affect the cells of our bodies. He also shows how even our most firmly held beliefs can be changed, which means that we have the power to reshape our lives.

Lipton describes the mechanisms by which this occurs, step by step. He explains that there are protein molecules on either side of the cell membrane. The proteins on the

external surfaces of the cell are receptive to external forces, including the biochemical changes in the body produced by different kinds of thought and emotion. These external receptors, in turn, affect the internal proteins, altering their molecular angles. The two sets of receptors function like a lattice-work that can expand or contract. The degree of expansion determines the size and shape of the molecules—the so-called “effector proteins”—that can pass through the lattice. “Together,” Lipton says, “the receptor-effector complex acts as a switch, translating environmental signals into cellular behavior.” These molecules, or their byproducts, “provide signals that control the binding of the chromosome’s regulatory proteins that form a sleeve around the DNA.” He notes that there are hundreds of thousands of such switches in a cell membrane, and that the behavior of a cell “can only be understood by considering the activities of all the switches at any given time.”

“Specific frequencies and patterns of electromagnetic radiation regulate DNA, RNA, and protein syntheses, alter protein shape and function, and control gene regulation,” continues Lipton. This includes the radiation from our electromagnetic heart and brain. “We know that living

organisms must receive and interpret environmental signals in order to stay alive," he says. "In fact, survival is directly related to the speed and efficiency of signal transfer. The speed of electromagnetic energy signals is 186,000 miles per second, while the speed of a diffusible chemical is considerably less than 1 centimeter per second. Energy signals are 100 times more efficient and infinitely faster than physical chemical signaling. What kind of signaling would your trillion-celled community prefer? Do the math!"

"Neuroscientists," follows Lipton, "are conducting exciting new research in the area of vibrational energy therapies." He believes that this emerging model of cell biology will have as great an effect on our scientific paradigm as the emergence of quantum theory had on physics. The fact that energy impacts cells as profoundly as physical molecules provides a single, unified scientific explanation for the efficacy of conventional medicine, alternative therapies, and spiritual healing. The old divides simply dissolve under the scrutiny of Third Level ideas of the Age of Convergence. Yet he laments, "Though these research studies have been published in some of the most respected mainstream biomedical journals, their revolutionary findings

have not been incorporated into the medical school curriculum.”³⁵ Then he concludes with confidence: “The medical establishment will eventually be dragged, half kicking and screaming, full force into the quantum revolution.”

While the work of Lipton and his colleagues shows the precise biological and chemical pathways that influence DNA, an intriguing series of experiments on the effect on DNA of intention and emotion has been performed by researchers at the Institute of Heartmath in Boulder Creek, California, led by Rollin McCraty, Ph.D. The Heartmath experiments harness the work of Lipton and others to demonstrate practical applications of this knowledge, showing that measurable molecular changes in the DNA molecule can result from human desires, intentions, and emotions.

In a series of papers published over the course of the last decade,³⁶ McCraty and his colleagues have looked at various aspects of heart function and of DNA modulation under different conditions and at various physical distances (to control for the effects of electromagnetic radiation, which can also affect DNA modulation). One of the Institute’s research summaries begins by illuminating the relationship of energetic to chemical transmission

mechanisms, a crucial step in understanding the importance of energy in human systems:

The current scientific conception is that all biological communication occurs at a chemical/molecular level through the action of neurochemicals fitting into specialized receptor sites, much like keys open certain locks. However, in the final analysis, the message is actually transmitted to the interior of the cell by a weak electrical signal. This signal, in turn, can act to either stimulate or suppress enzyme systems. It is now evident that the cell membrane is more than a protective barrier; it also serves as a powerful signal amplifier.

From these and related findings, a new paradigm of energetic communication occurring within the body at the atomic and quantum levels has emerged--one which is compatible with numerous observed phenomena that could not be adequately explained within the framework of the older chemical/molecular model. For instance, our responses to stress have been exquisitely honed over millennia of evolution. "Fight or flight" reactions to life-threatening situations include shunting of blood

away from the gut to the large muscles of the extremities to provide greater strength in combat or speed of locomotion away from a site of potential peril, increased blood flow to the brain to improve decision making, dilatation of the pupils to provide better vision, quicker clotting of the blood to reduce loss from lacerations or internal hemorrhage, and a host of other reactions that occur automatically and instantaneously. These responses are too immediate and manifold to be consistent with the key-lock model of communication and thermodynamic laws involving caloric exchange. However, they are comprehensible within the framework of quantum physics and an internal and external electromagnetic or energetic signaling system, which may also explain such well-acknowledged but poorly-understood phenomena as the placebo effect, spontaneous remission in cancer, the health rewards of a strong faith, prayer, homeopathy, and the energetic communication links between cells, people, and the environment.

As we gain new understanding of these fundamental aspects of human function, it will undoubtedly lead to the generation of more effective strategies for

improving health, performance, and happiness. We have already found that several of the brain's electrical rhythms, such as the alpha and beta rhythm, are naturally synchronized to the rhythm of the heart and that this heart--brain synchronization significantly increases when an individual is in a physiologically coherent mode. This synchronization is likely to be mediated at least in part by electromagnetic field interactions. This is important as synchronization between the heart and brain is likely involved in the processes that give rise to intuition, creativity, and optimal performance.³⁷

One of the Heartmath experiments used human placental DNA, and determined whether the molecule's helicular coils became more tightly wound or less tightly wound, a characteristic that can be measured by the molecule's absorption of ultraviolet light.

Individuals trained in Heartmath techniques generated feelings of love and appreciation while holding a specific intention to either wind or unwind the DNA in the experimental sample. In some cases, there was a change of 25% in the conformation of the DNA, indicating a large

effect. Similar effects occurred whether the intention was to wind the helixes tighter, or to unwind them.

When these participants had no intention of changing the DNA, yet generated the same feelings, the DNA changed no more than it did with the control group, which was composed of local residents and students. When trained participants held the intention of changing the DNA but did not move into the emotional state of love and goodwill, the DNA likewise remained unchanged.

In order to determine just how specific and local the effect might be, in one experiment with a highly trained volunteer, three separate vials of DNA were prepared. The volunteer was asked to wind the DNA spirals tighter in two of the samples, but not in the third. Those were exactly the results that showed up under later UV analysis in the laboratory; changes showed up only in the two samples to which the volunteer had directed his intention. This suggests that the effects are not simply an "amorphous energy field," but are highly correlated with the intender's intentions.

The researchers speculated that the effects might be due to the proximity of the samples to the participants' hearts, since the heart generates an electromagnetic field. They

therefore performed similar experiments at distance of half a mile from the DNA samples. The effects were the same. Five non-local trials showed the same effect, all at or below statistically significant levels.

These studies demonstrate that the DNA molecule can be altered through intentionality. And when individuals are in a relaxed, heart-centered state, that intentionality is most effective. The better participants were at generating a loving, heart-focused state, the better they were at affecting DNA with their intentions; control group participants who were untrained and unskilled at this "heart coherence," as the researchers call it, were unable to produce an effect despite the strength of their intentions. Both intention, and heart coherence, were required in order to alter the DNA molecules. "These data," conclude the researchers, "support the hypothesis that an energetic connection exists between structures in the quantum vacuum and corresponding structures on the physical plane, and that this connection can be influenced by human intentionality."

The researches used an *in vitro* DNA target for the study in order to eliminate any potential biochemical influence that might occur *in vivo*. However, they speculate that an individual's own DNA might more resonant, and therefore more

responsive, to that person's intentions. Backing up Lipton's discoveries, they assert that, "the data presented here support the concept that cell-level processes can be influenced by human intention, mediated via energetic interactions."

They also speculate that the requirement that positive emotions must be employed to make changes in these cellular structures might play a part in many other phenomena that are well documented but poorly understood, such as the placebo effect, spontaneous remissions, the health and longevity rewards of faith, and the positive effects of prayer.

In her book *The Private Life of the Brain*, British research scientist and Oxford Don Susan Greenfield says, "the reductionist genetic train of thought fuels the currently highly fashionable concept of a gene for this or that."³⁸ Niles Eldredge, in his book *Why We Do It*, says, "genes have been the dominant metaphor underlying explanations of all manner of human behavior, from the most basic and animalistic, like sex, up to an including such esoterica as the practice of religion, the enjoyment of music, and the codification of laws and moral strictures. ... The media are besotted with genes. ...genes have for over

half a century easily eclipsed the outside natural world as the primary driving force of evolution in the minds of many evolutionary biologists.”³⁹ How did the dogma that DNA holds the blueprint for development become so firmly enshrined? In his book *Born That Way*, medical researcher William Wright gives a concise and entertaining history of the rise to supremacy of the idea that genes contain the codes that control life.⁴⁰ In *The Imitation Factor: Evolution Beyond the Gene*, Lee Dugatkin, Professor of Biology at the University of Louisville, tells it this way:

Once Mendel’s discovery of the basic rules of inheritance was made and the term *gene* became common scientific parlance, genes quickly became thought of as *the* means by which traits could be transmitted across generations. We see this trend continuing today in research labs throughout the world as well as in the media in reports of genes for schizophrenia, genes for homosexuality, genes for alcoholism, and so on. Genes for this, genes for that. We live in a time when molecular biology seems to be front-page headline news almost every week.

If evolutionary biology could be summarized in a single sentence, it would read something like this: Genes are selected to do whatever it takes to get copies of themselves into the next generation; everything else is just details.⁴¹

Dugatkin's fascinating book points out that behaviors aren't just transmitted genetically across generations; they may be newly developed by many individuals during a single generation through the process of imitation. Think Pokemon cards. Think Polo shirts. Think iPods. He points out that while genetic evolution takes eons, evolution by imitation can occur within minutes—and *then* be passed on to the next generation.

Wright goes on to describe the crumbling of this reductionism, as what he calls the "genes-environment-behavior nexus" emerges from the most recent research. Even Edward O. Wilson, the father of sociobiology, hinted at the very end of the twenty-fifth anniversary edition of his tremendously influential book *Sociobiology*, that "sociology must await a full, neuronal explanation of the human brain. Only when the machinery can be torn down on paper at the level of the cell and put together again will the properties

of emotion and ethical judgment come clear." He went on to speculate that, in future research, "Learning and creativeness will be defined as the alteration of specific portions of the cognitive machinery regulated by input from the emotive centers. Having cannibalized psychology, the new neurobiology will yield an enduring set of first principles for sociology. ...we are compelled to drive toward total knowledge, right down to the levels of the neuron and gene."⁴² And now past them, to the levels of the energy structures that influence and give rise to neuron and gene. "There is matter and energy galore flowing through biological systems," says Eldredge. "But it is in the bodies of organisms and their interactions with other organisms and the physical world, in the context of ecosystems, where all that matter and energy flows. Genes, in contrast, are about storage and utilization of information."⁴³

The quest for "total knowledge" has a hard time modifying long-held convictions. I remember one particular evening right around my thirtieth birthday in 1986. I was sitting in front of a roaring fire, on a cold November evening, in a town called Dun-na-sead, at the extreme Southwest tip of Ireland, in the middle of a three month contemplative

retreat in a place about as far from the centers of metropolitan life as one can get while still remaining on dry land.

I was having a debate with my hosts, a genial retired American doctor and his wife. He was listening to some of my stories about the furthest reaches of consciousness change. His face registered polite skepticism, even though his comments indicated an open mind. As his wife poked the fire and brought us tea and crumpets, I talked about the giant vegetables then being grown at the Findhorn community in Scotland, and possible explanations for this phenomenon. Staring at the Wedgwood china and white cotton doilies on the sideboard, I reminded him about examples like that of Jack Schwarz, a subject who was extensively studied in laboratory settings in the nineteen sixties. Schwartz could push a large darning needle through his biceps, without pain or bleeding. He could stop his pulse for limited periods of time at the request of researchers. I talked about the experiments done with Olga Worrall, which determined that when she held a beaker of water in her hands and applied the techniques she used as a faith healer, the molecular angle of the bond between the oxygen atom and the two hydrogen atoms changed throughout the fluid. If a few isolated

individuals could produce remarkable results in physical matter using the powers of their minds, I argued, what possibilities might lie in store for humankind as such abilities became understood and more human beings were able to perform them?

The esteemed doctor hung in there with me for the conversation—for these were all proven phenomena—but by the slenderest of threads. Then I said something that snapped the thread. Looking for the furthest out claim I could possibly make, I blurted out, “I believe that, within my lifetime, human beings may be able to alter their own DNA by the power of their minds alone.” I remember the look of disbelief that came over the kind old gentleman’s face. My assertion had no possible scientific basis at the time; it was simply as far as my imagination could carry the implications of these ideas.

To get the right answers, you have to ask the right questions. To the scientists of a generation ago, the idea that DNA might be malleable was unthinkable. Genes were taken to determine the physical characteristics of organisms, and that was that. Researchers didn’t look for answers to processes in organisms that might suppose pliable DNA, because they were embedded in an orthodoxy that held

genes to contain the DNA sequencing around which physical, mental, and emotional development occurred.

It took a bold new generation of experimenters to ask the right questions, questions that wondered whether DNA could change as environmental factors changed. Once they had been asked, experiments could be set up that would yield fresh new answers, answers that flew in the face of orthodoxy but held keys to a scientific explanation of such phenomena as the effectiveness of distant intercessory prayer. To date, there are not very many experiments that proceed along this line of enquiry. As the right question tickles the curiosity of more researchers, experiments—and answers—will multiply.

The Institute of Heartmath has done another series of experiments, this one on the effects of consciousness on cells. Some of these have been published, but much of their work is unpublished, and lead researcher Rollin McCraty is in the process of compiling several papers to be published in 2006, and also designing new experiments with rigorous protocols, intended to replicate and extend earlier research.⁴⁴ One of the researchers whose work he hopes to replicate and extend is Dean Radin, Ph.D., Senior Scientist at the Institute of Noetic Sciences in Petaluma, California.

Radin, and some of his colleagues, measured the galvanic skin response of subjects exposed to? the mental influences of others.⁴⁵ In a follow-up study which replicated the results of earlier studies done by them and others, the researchers set up sixteen sessions. In each session, there were seven people acting as mental influencers, and ten acting as remote targets of influence. Influencers were instructed to either calm or activate a remote person's electrodermal activity. The investigators found that, to a statistically significant degree, when the influencers attempted to calm the subjects, the subjects exhibited a lower level of electrodermal activity. When the influencers attempted to activate the subjects, the subjects showed a higher level of electrodermal activity.

Building on Radin's research, the experimenters at Heartmath went further. Rather than the relatively simple and uninformative measurement of galvanic skin response, they also used an electroencephalogram (EEG) in order to measure changes in the cerebral cortex, and an electrocardiogram (ECG), to measure the acceleration or deceleration of a subject's heartbeat.

Rather than a remote influencer attempting to influence their experiences as Radin had done, with all the

uncertainties inherent in human processes, the Heartmath subjects stared at a blank white computer monitor screen. After a period of a few seconds, an image came up on the screen. One set of images was designed to calm the subjects, as measured by brain and heart responses, and the other set of images was designed to produce emotional arousal. The images were generated at random by the computer just before the instant of projection from amongst 45 images stored on the hard drive.

The researchers wanted to find out precisely where and when emotional arousal occurred in the body, heart, and brain. They also presented the images to the subjects under two sets of experimental conditions. One was a baseline condition of normal physiological function. The second was a state of heightened physiological coherence.

They discovered that the heart responded to the images. This was not surprising. What was surprising was that it responded *first*, before any mental activity had shown up on the EEG. It appears that the heart communicates its perceptions to the brain, rather than vice versa. But the truly astonishing finding of these experiments was that both heart and brain responded *before* the image had flashed onto the screen, before the random image generator in the

computer had generated any image at all. Heart and then brain responded to the type of image *about to be* flashed on the screen—several seconds before the computer made its random choice and presented it to the subject. The subject's body then responded appropriately to the emotional stimulus of the image, even though in the objective real world, that stimulus had not yet been presented to either heart or brain. In the words of the amazed researchers: "This study presents compelling evidence that the body's perceptual apparatus is continuously scanning the future."⁴⁶

A second study by the same researchers also studied where and when in the body, heart, and brain intuitive information outside the range of conscious awareness is processed. They found that the primary areas of the brain involved are the frontal cortex, temporal, occipital, and parietal areas, and that these are all influenced by the heart. They concluded that, "Our data suggest that the heart and brain, together, are involved in receiving, processing, and decoding intuitive information. On the basis of these results and those of other research, it would thus appear that intuitive perception is a system-wide process in which both the heart and brain (and possibly other bodily systems) play a critical role."⁴⁷

"The heart has access to realms of quantum information not constrained by time and space," Dr. McCraty told me during a telephone interview. He continued, "There is no explanation other than that consciousness is non-local and non-temporal." He is preparing a new set of papers, to postulate a theory based on holographic principles that explain how intuitive perception allows us to gain access to an energy field that contains information about "future" events. In the early part of the twentieth century, as quantum theory was being described, Nobel-winning physicist Niels Bohr declared that anyone who is not shocked by quantum theory has failed to understand it.⁴⁸

McCraty is also preparing a rigorous new set of protocols for experiments that will use live cells from the subject's own body to see if there is a similar prior effect in those cells to intentions generated remotely by the subject. John Arden, Ph.D., Chief Psychologist at the Kaiser Permanente Medical Center in Vallejo, California, has a long and careful discussion of theoretical physics, subatomic particles, and their implications for the study of consciousness, in his book *Science, Theology and Consciousness*. He concludes by reminding us that, "nonlocality is a phenomenon operative in nature. This

discovery necessitates a fundamental reevaluation of causality and the nature of nonlocal interaction."⁴⁹

This is a reminder of a set of experiments conducted by Benjamin Libet, in which he noted the precise instant at which brain activity indicated awareness of a sensation on the skin. He measured when the skin became aware of the sensation, and when the brain did. This led to the discovery of the famous "half-second delay," in which he discovered that our consciousness projects itself backward in time, to believe that it became conscious of a stimulus about half a second before it actually did so. In his funny, provocative and oft-quoted book *The User Illusion: Cutting Consciousness Down To Size*, Danish science writer Tor Norretranders, explaining Libet's work, says, "The show starts before we decide it should! An act is initiated before we decide to perform it!"⁵⁰ He goes on to say, "Man is not primarily conscious. Man is primarily nonconscious. The idea of a conscious I as housekeeper of everything that comes in and goes out of one is an illusion; perhaps a useful one, but still an illusion."⁵¹ Brad Blanton, in his *Radical Honesty* books, applies Libet's work to practical psychotherapy.⁵² He points out that the half-second delay means that the mind thinks up rationalizations to explain

what we did—after we already decided to do it. While we present these as reasons for our actions, Libet's experiments show that these rationalizations occur after the fact. His therapy is aimed at bringing us as close to the moment of action as possible, and abandoning our rationalizations for that moment, and also abandon the layers of interpretation and story we build upon our foundation of rationalizations. Physicist Roger Penrose summarizes Libet's results in his book *The Emperor's New Mind*, and then speculates that, "I suggest that we may actually be going badly wrong when we apply the usual physical rules for time when we consider consciousness!"⁵³

Mitchell Krucoff's prayer study has shown the effectiveness of prayer as a conscious intervention, and a new large-scale survey now reveals how pervasive the presence of prayer has become in the medical community. It was a study performed by the Jewish Theological Seminary in December of 2004, and included 1,087 physicians. Among the doctors were practitioners of many faiths: Catholics, Protestants, Jews (broken out into groups of Orthodox, Conservative, Reform, and culturally identified but not observant Jews), Muslims, Hindus, and Buddhists.

The survey found that some two thirds of the doctors surveyed believed that prayer was important, and that three quarters of them believe that miracles occur today. In every group, with the sole exception of the less religiously observant Jews, over 50% of the physicians believed that miracles occur today. In some groups, like Orthodox Jews and Christians of all stripes, 80% or more of the physicians polled believed that miracles happen today.

Two thirds said that they encouraged their patients to pray, either because they believed it was psychologically beneficial to the patient, or because they believed that God might answer those prayers, or both. Half of them said that they encouraged their patients to have other people pray for them. Half of them said that they prayed for their patients as a whole, and almost sixty percent said that they pray for individual patients. An average of fifty-five percent of the physicians reported seeing miraculous recoveries in patients, and a third or more of physicians (of every religious group) said they had seen miraculous recoveries—even when the percentage of doctors in that group who prayed for patients was well below one-third.⁵⁴ Prayer has arrived in the consulting room and hospital in force—and perhaps it never left.

One of the striking findings of this poll is that between fifty and eighty percent of physicians, even those of weak religious faith, believe that miracles can happen today. There are many accounts of sudden and dramatic improvement in health, but it is not a well-studied phenomenon, since these tend to be viewed as anomalous phenomena. In their book *Catastrophe Theory*, Alexander Woodcock and Monte Davis note that, "The mathematics underlying three hundred years of science, though powerful and successful, have encouraged a one-side view of change. These mathematical principles are ideally suited to analyze—because they were created to analyze—smooth, continuous quantitative change: the smoothly curving paths of planets around the sun, the continuously varying pressure of a gas as it is heated and cooled, the quantitative increase of a hormone level in the bloodstream. But there is another kind of change, too, change that is less suited to mathematical analysis: the abrupt bursting of a bubble, the discontinuous transition from ice at its melting point to water at its freeing point, the qualitative shift in our minds when we 'get' a pun or a play on words."⁵⁵

A serious attempt to collect stories of sudden, discontinuous personal change has been made by psychiatry

professor William Miller at the University of New Mexico, author of some 25 books and many articles, and clinical psychologist Janet C'de Baca, Ph.D. After a newspaper article about their research in rapid personal shifts, they received hundreds of phone calls from people who had undergone rapid personal changes, including miraculous healings. They coined the term *quantum change* to describe this phenomenon, a term which, unlike the word "miracles," frees this type of experience from identification solely with religious observance (though the majority of quantum changes do indeed occur in the context of religious experiences). They tell many of these stories in their book *Quantum Change*.⁵⁶ They tell us that, "A decade later, we have a reasonably good description of the phenomenon and full confidence that sudden, profound and enduring positive changes can and do occur in the lives of real people. Lives are transformed utterly and permanently, as utter darkness suddenly gives way to a joyful dawn that had not even been imagined. It happens." In the book they also look for the commonalities associated with all such quantum healings, although they grapple to explain how and why it happens; they eventually offer five different perspectives that may explain why quantum change occurs. But there is no doubt that it occurs; our difficulties in measuring it and

describing it are the result of the early stage of scientific enquiry in which we find ourselves, not an invalidation of the phenomena we are studying. In his book *Sacred Healing*, Norman Shealy, M.D., Ph.D., put it this way: "Science can measure the earth only in plain facts in terms of electromagnetics, but quantum physicists have theories that are compatible with that subtle part of the unmeasurable higher dimensions. The mind appears to be capable of transcending time and space..."⁵⁷

We change constantly, and the principles used in energy medicine can nudge that change in life-affirming directions. In *The Private Life of the Brain*, Susan Greenfield reminds us that, "We are not fixed entities. Even within a day, within an hour, we are different. All the time, experience leave their mark and in turn determine how we interpret new experiences. As the mind evolves, as we understand everything more deeply, we have increasing control over what happens to us: we are self-conscious. But this self-consciousness itself is not fixed. ...it will ebb and flow..."⁵⁸

Not only is consciousness shifting; recent research shows that the cells of our brain are being created and destroyed by metabolic activity much more rapidly than previously

believed. In the June 2004 issue of *Science and Consciousness Review*, John McCrone writes: "Do you know the half-life of a microtubule, the protein filaments that form the internal scaffolding of a cell? Just ten minutes. That's an average of ten minutes between assembly and destruction.

"Now the brain is supposed to be some sort of computer. It is an intricate network of some 1,000 trillion synaptic connections, each of these synapses having been lovingly crafted by experience to have a particular shape, a particular neurochemistry. It is of course the information represented at these junctions that makes us who we are. But how the heck do these synapses retain a stable identity when the chemistry of cells is almost on the boil, with large molecules falling apart nearly as soon as they are made?

"The issue of molecular turnover is starting to hit home in neuroscience, especially now that the latest research techniques such as fluorescent tagging are revealing a far more frantic pace of activity than ever suspected. For instance, the actin filaments in dendrites can need replacing within 40 seconds, making microtubules look like positive greybeards (Star et al, 2002). A turnover time of

five days for NMDA receptors seemed pretty steep when it was reported a few years back. (Shimizu et al, 2000). But recently Michael Ehlers at Duke University Medical Center in Durham, North Carolina, reported that the entire post-synaptic density (PSD)—the protein packed zone that powers synaptic activity—is replaced, molecule for molecule, almost by the hour.”⁵⁹ The conclusion of this research is that the entire brain is being recycled about once every other month, opening up an enormous field of enquiry into how neurological change interacts with changes in energy systems. Cutting-edge scientists are left wondering not so much how we can change, but how we can endure. The brain is much more plastic than we once thought, and the possibilities of rapid, miraculous quantum healing are becoming apparent.

One of the most striking applications of quantum healing is the group of “energy psychologies” or “meridian-based therapies” (MBTs): techniques like Emotional Freedom Technique (EFT), Emotional Movement Desensitization and Reprocessing (EMDR), and the Tapas Acupressure Technique (TAT) and Thought Field Therapy (TFT). These therapies have demonstrated the ability to heal, in very short periods of time, psychological conditions that can take many months or

years with conventional psychiatry and psychotherapy, if indeed they can be healed at all.

Emotional Freedom Technique (EFT) was developed by an engineer, Gary Craig, in the 1980s. After reading the existing literature on MBTs, he set out to find the simplest possible expression of them, in a technique that did not require a therapist (as does EMDR) and can be self-applied. The result was EFT.

EFT consists of a simple routine. It starts with an affirmation: "Despite the fact that I have (this problem), I fully and completely accept myself." While saying this, the participant rubs one of two specific acupressure points. Twelve other acupressure meridian end points are then tapped by the participant five or more times, and a brief sequence of eye movements is undertaken. The whole procedure takes about forty seconds. Although it does not require a clinical setting, and can be self-administered, it does require training, especially in locating accurately the meridian end points on the body. EFT includes a self-assessment system, that the subject can use before and then again after the session, to determine whether or not the problem has been cleared with that session, or whether further work is required.

In a study of EFT published in the *Journal of Clinical Psychology* in 2003, Steven Wells and his fellow researchers performed a controlled experiment to find out whether EFT could assist people with phobias. The subjects of the study had all been clinically diagnosed as having a phobia to small animals such as spiders, snakes, bats, and mice.

The study used several different measures of the strength of the participants' phobia before and after the study, including written questionnaires, pulse rate measures, subjective tests of fear, and an objective test to see how many steps they could walk toward the object of their fears. During the study, individuals in the experimental group were given just one thirty-minute explanation of the method, and one session of EFT. They were then put through the same tests.

The results were remarkable. On every measure, the subjects' fear dropped dramatically, and some were able to walk right up to the very animals which before had triggered in them crippling phobias. Not only were the results of EFT dramatic at the time, but in a follow up study done six months later, the subjects still had a much lower rate of phobic reaction to the objects of their fear.⁶⁰

For any therapy to be able to produce such large results in so small a time is almost mind-boggling. When I first heard of the results being obtained through EFT, I dismissed them as hyperbole; I simply could not believe it. However, after having tried the technique myself, on some mental conditions where other approaches like meditation were having no impact, I was impressed with the immediate changes I experienced. After learning more about the technique from Gary Craig, the originator of EFT, and witnessing the spectacular and immediate results reported by his subjects, I began to apply it with other people. While the basic routine is very simple, applying it correctly to sufferers from long-term psychological trauma requires a deep understanding of its applications and limitations.

Here's a typical instance: An employee of mine showed up for work recently in a state of high anxiety. She's in her mid thirties, a tall, slender, attractive woman with piercing blue eyes and long, curly brown hair. It was clear to me that she was so distraught that she would not be able to function at work, so I sat her down in my waiting room and talked with her for an hour instead.

She was very upset about her stepfather, who had hit her physically, even up to the time she became an adult. She

had earlier that day received an invitation to a family reunion at which he would be present.

I asked her, "Imagine the moment when you opened that invitation to the reunion," I said. She began to cry. Her cheeks were flushed, her voice was high pitched, and she fidgeted with agitation as she described the moment. To her, getting the invitation felt as though her family, in having the reunion and bringing them both into the same room, was minimizing her pain. And she did not want to see him again.

"On a scale of one to ten, how upset are you right now?"

"I'm a ten," she replied.

I then did the EFT routine with her. It took less than a minute. "Now, think again of the moment when you opened the invitation," I instructed her. "On a scale of one to ten, how upset are you."

She was completely calm. "Zero," she said.

"Are you sure?" I asked, incredulous—the results are often hard to believe even when you're the practitioner!

"Yes," she replied.

I have seen the same results from EFT time and time again. The EFT website contains stories by hundreds of

doctors, psychiatrists, psychotherapists, social workers and other health professionals of ways in which they have found it useful, and of patients who have responded to EFT after conventional interventions had failed. And the EMDR websites list some thirty clinical studies demonstrating the effectiveness of MBTs in clinical trials.⁶¹ EFT and other MBTs give us access to the realm of quantum healing, and promise to dramatically shorten the time taken to heal psychological traumas. To professionals accustomed to lengthy courses of psychotherapy, or to resorting to drug therapies, they indeed seem like miracles.

The Heartmath researchers express the hope that "understanding gained through this process could...form the basis for a new mode of treating diseases and disorders that are largely unresponsive to existing medical treatments." That is Third Stage medicine: prayer, intention, meditation, visualization, intuition, MBTs and other "soft" disciplines could someday make much "hard" medicine, such as invasive surgery, largely obsolete. They provide, says Lipton, "the scientific underpinning for pharmaceutical-free energy medicine."⁶² Apparently we exist in a sea of quantum potentials, and we affect which ones are actualized by the quality of our feelings and thoughts.

Imagining the healing arts of the future reformulated around the idea of thoughts, driven by the power of feelings, as shapers of our reality. The first prescription a doctor gives a patient might not be for a drug, but for a precisely-formulated sequence of thoughts and feelings designed to work on the DNA structure of that particular patient's heart.

James Dillard, M.D., is a specialist in pain medicine, and director of the Pain Medicine clinic at Beth Israel Medical Center in New York City. He wrote a compendious book on the subject, that combines both alternative and allopathic approaches, called *The Chronic Pain Solution*,⁶³ and also wrote *Alternative Medicine for Dummies*.⁶⁴ He has been featured in *Newsweek* and *People* magazines, and has appeared on Oprah, NPR and the Today Show. In an essay of his that I edited, Dillard tells the following story about an inexplicable impulse he had during a patient consultation:

Irv was just 54 years old. He had been a cop, and then had worked as a private investigator for about 25 years. He liked to go sailing in Sheepshead Bay, and did woodworking in his garage. When the heart attack

hit, it felt like someone had slugged him in the chest with a 4x4 beam. He says he remembers just dropping like a leaf in the wind.

His wife and son held his hand at the bedside. The Columbia Presbyterian heart surgeon pursed his lips and looked down. "He's been in a coma for five days in spite of everything we've done. He's on the transplant list, but I don't think he'll make it long enough for us to find him a new heart." They cried and kissed him, and said goodbye.

It was five months later when Irv walked into my office. He was still a bit shaky, way overweight, and he looked pale. But he sat down, smiled, and said, "I shouldn't be here, Doc."

"How come?" I asked. He looked down at his hands. "Well, because I died five months ago..."

Or so it seemed to him. A heroic last-option quadruple bypass surgery saved his life—but just barely.

Irv had pretty bad diabetes for about 15 years. That set him up for his severe heart attack, and a lot of other problems. It also left him with numb and

painfully burning feet and hands. I couldn't do much about his diabetes; that was a job for another doctor, but as a pain doc I sure could help him with the burning damage to his nerves.

I adjusted his nerve medications, put him on a couple of new things, a couple of supplements, and then we just sat and talked for about 20 minutes. This was a man who had gone through a huge life crisis, and was actually still in crisis, still very wobbly. His struggle was something palpable in the room, like the shadow of death, still there. He talked about his family, his job, what had been important to him, his past sense of meaning and religious practice, and the future. Then he started to cry.

We talked for a while, then I looked down at my prescription pad and I began to write. As a Scottish Episcopalian who was not particularly religious, I had never written such a thing before in my career. I handed it to him and he looked down at the script. The prescription read "Long conversations with your Rabbi, twice a week." He left the office with an odd smile on his face.

Over the subsequent six months, Irv got more involved with his synagogue. He took the opportunity to allow his terrifying brush with death to work a deep magic on his sense of himself and his day-to-day life. He finally found himself much less concerned with the small things. He still had significant symptoms, but the residual burning in his feet and hands did not bother him as much. He spent more time with his son. He complained much less and got out of the house much more.

He came back to me and told me he had started a program, through his temple, to provide services for older people in the community. His years as a private investigator had given him the ability to find many resources for his clients, and to protect them from fraud. He said that this was what he was meant to do, and that he could not have found it without going through his illness. He allowed the pain and suffering to become his greatest teacher. As he talked to me about his new calling, his face was bright and his hands were steady. The shadow of death was gone from the room.⁶⁵

Dillard's inspired impulse to employ his prescription pad to write down the name, not of a drug, but of a spiritual exercise, may have done far more for Irv than any pharmaceutical. It is possible to imagine a time in the near future when spiritual and emotional remedies will be the first line of defense, not the last; when sufferers seek metaphysical solutions not when they've exhausted all conventional means, but instead before they submit to the drugs and surgery of allopathic medicine. Allopathic medicine might become a medicine of last resort, rather than of first. It will be used to treat certain conditions for which it is admirably suited. But others, especially some of the recently-recognized and still-mysterious conditions like autoimmune disorders, will first be treated with non-invasive methods meant to shift the patient's energy field. Shealy estimates that surgery or drugs are required by no more than 15% of patients.⁶⁶

The energy diagnosis of the future might be focused on discovering the precise leverage point required to produce healing. Imagine a log jam on a river, hundreds of logs piled up producing a blockage through which nothing can pass. Removing the logs one by one is a tedious process requiring the expenditure of great stores of energy.

But if you find the right log, or logs, that are the linchpin around which the pressure pattern of the whole jam takes form, and remove it, suddenly all the other logs are released too, without the massive application of work required to remove them all one by one.

In the same way, each patient responds differently. One might benefit most from aromatherapy, another from acupuncture, another from somatic therapy. The skilled diagnostician and prescriber of the future will be trained to spot the possible constellations of jammed logs, and by going straight to the point of maximum leverage, offering the patient effective relief. He or she might discover which thought, linked to which belief, linked to which strong emotion, will release this particular patient's logjam.

Andrew Weil, M.D., has developed a simple formulation to allow a patient to determine whether conventional or alternative medicine is right for their particular condition. In his book *Spontaneous Healing*, he lays out a set of criteria (discussed at greater length in a later chapter below) that allows both patients and medical professionals to "stream" patients into either alternative or conventional therapies.

One of the most intriguing experiments in setting up the clinic of the future is an establishment called the Integrative Medical Clinic of Santa Rosa, California, or IMCSR. Robert Dozor, M.D., and his wife Ellen Barnett, M.D., Ph.D., established their treatment center in 2001. Walking into the clinic, the first thing the patient sees is a wide hall, with a fountain and beautiful artwork, that opens up into a large room with comfortable couches, an altar, another fountain, and a holistic health library. On the way, there is a glass-fronted herbal dispensary, and a receptionist's desk.

Among the practitioners at the ICMSR are a chiropractor, a somatic therapist, a naturopath, a Qi Gung practitioner, a herbalist, a nutritionist, and a psychologist. In addition, doctors Dozor and Barnett have a compendious knowledge of Ayurveda, Chinese medicine, herbalism, and other alternative medical specialties.

The treatment protocol is coordinated by a computer system that tracks patient files and updates them in real time. During a consultation with the naturopath, for instance, he enters his notes on a screen that is immediately available to all the other practitioners. He might also walk ten steps down the hall to consult with the

psychologist or with the family physician. If a patient goes from him to the physician, the physician has an immediate record of exactly what the naturopath's findings and prescriptions were. This system is essential to the coordination of treatment by so many different specialties.

Barbara Marx Hubbard, one of the world's pre-eminent futurists (quoted at length in a later chapter) points out that many of today's occupations did not exist fifty years ago. She writes: "Just as many of the new functions that people do today—biotechnician, telecommunication specialist, nanotechnologist, environmentalist, futurist, medical ethicist, desktop publisher—didn't exist in the 1950s, the job descriptions that reflect our emerging evolutionary vocations or callings are yet to be defined."⁶⁷

One of the most interesting ways in which the IMCSR points to the future is that it has required the invention of a new job: an intake specialist, or "Navigator" in IMCSR parlance. This highly skilled person meets with patients, and assesses which treatment, or combination of treatments, might work best for them. The mix might change as they visit different practitioners within the building, but the Navigator has responsibility for making the initial determination. Early planning for the IMCSR assumed that a

physician would have this responsibility, but the insurance compensation system of the current American medical system means that the physicians are the financial drivers of the clinic; it is their time that generates the most revenue and supports the rest. The structure of the clinic was adjusted accordingly, and the job of Navigator created. A later chapter tracks the trials, tribulations, and triumphs of the IMCSR in greater detail.

Genetic therapies benefit all humans; all ethnic groups are essentially the same genetically. In their funny and provocative book *Mean Genes*, Harvard Business School scholar Terry Burnham, Ph.D. and his colleague Jay Phelan, Ph.D., a biology professor at UCLA, tell us that: "Using advanced DNA technology, measures of genetic variation confirm that human races are trivially different from one another. From that one-quarter of our genes for which there is some variability, there is little rhyme or reason to how this variation is divvied up from one person to the next. Africans have huge variations in blood type: some are type O, some AB, others A or B. But the same goes for Asians and Turks, Russians and Spaniards."⁶⁸ This means that the psychotechnologies that will eventually result from the work of researchers such as McCraty and Radin can be used by

health care workers in Uganda or Laos as well as in Scotland or Canada.

I have had the privilege of interviewing some of the most prominent authorities in the wellness field today, and rewriting these interviews into the form of chapters and articles. Amongst the contributors appearing in my anthologies are Caroline Myss, Bernie Siegel, Deepak Chopra, Gay Hendricks, Barry Sears, Andrew Weil, Jeanne Achterberg, James Dillard, Paul Pearsall, Jean Shinoda Bolen, Joan Borysenko, Dean Ornish, Rudolph Ballentine, Debbie Ford, Mary Catherine Bateson, Ram Dass, Sandra Ingerman, Huston Smith, and John Gray. The process of assembling these anthologies has shown me the inner workings of some of the minds that are taking our society to the next level of awareness of the potential of some of these therapies, and also given me a fascinating summation of what our collective awareness of healing looks like today. In the following pages, I will excerpt from the articles I have edited and the interviews I have written up in collaboration with these authorities, in order to anchor a consideration of the future of the healing arts in the ideas of some of the most influential thinkers of our time. Occasionally they cite the same studies, but I have not excised every duplication

of this nature, because multiple references indicate the importance of that study.

The next group of chapters begins with Larry Dossey's ideas on the meaning of quantum realities like the nonlocal mind for medicine and healing, and Joan Borysenko's plea to bring the soul back into medicine. Jeanne Achterberg and Dean Ornish assemble a great accumulation of research for the value of nurturing relationships in healing. Sandra Ingerman and Neale Donald Walsch show how some of the same ideas that drive personal wellness apply also to planetary wellness, and Barbara Marx Hubbard talks about what evolved humans on a healthy planet might look like.

Finally we hear from two physicians applying quantum ideas to real-life practices: Eric Robins, a Kaiser Permanente doctor who uses energy medicine in an institutional medical practice, and Robert Dozor, who has created "the healing center of the future," an advanced clinic called the Integrative Medical Center, combining the best of both conventional and alternative treatment. The concluding chapter lays out a set of principles that could shape medical practice into the next century and beyond.

Chapter Three
Larry Dossey:
Non-Local Consciousness and its
Revolutionary Implications for Medicine

Larry Dossey, M.D., is one of the most influential thinkers and writers of leading edge medical ideas today. He is a former physician of internal medicine, and was a battalion surgeon in Vietnam, as well as Chief of Staff of Medical City Dallas Hospital. His first book was called *Space, Time and Medicine*;⁶⁹ he has more recently focused on the power of prayer in healing, publishing *Prayer is Good Medicine*.⁷⁰ The goal in all of Dossey's books is to anchor the holistic health movement in a model that is scientifically respectable and which, at the same time, answers to humankind's inner spiritual needs. The former co-chairman of the Panel on Mind/Body Interventions, Office of Alternative Medicine, National Institutes of Health, he is also the executive editor of the journal *Alternative Therapies in Health and Medicine*. He lives in Santa Fe, New Mexico, with his wife Barbara, a nurse-consultant and the author of several books in her own right. Chapters by Larry

Dossey have appeared in three of my published or soon-to-be published collections. For the following piece, I interviewed him at his home, as well as taking notes at his presentation at the Prophet's Conference in Palm Springs, California, in June 2004. I then wrote this summation of his most current ideas, which he approved with minor changes. This is a shortened version of a chapter which will appear in 2005 in an anthology entitled *Healing Our Planet, Healing Our Selves*.⁷¹

My wife Barbara and I recently visited one of the largest hospitals in Manhattan to talk about new research studies showing the healing effects of prayer. Among the assembled doctors, nurses, and other staff was a rabbi. Employed full time by the hospice unit to pray with patients, he also acted as minister to the staff. When I visited the hospice later that day, the rabbi took me aside. "I've just got to get one thing straight with you," he said. "Are you claiming that prayer actually *works*?"

Many people—even ministers and priests—believe that prayer provides little more than mental comfort. Like the rabbi, they see it as simply a psychological

intervention, and nothing more. New research directly confronts this belief, and shows that consciousness, prayer, and intention are powerfully and literally creative.

Physicians are even more shocked than the rabbi when they see the results of these studies. Prayer, as an effective treatment, is an outrageous notion for most of the medical establishment, since no accepted theory exists to explain this phenomenon. Studies of distant healing and remote intercessory prayer demonstrate that, when a loving, empathic, compassionate intention, formed in the mind and held in the heart, is directed as prayer, a powerful healing effect is produced. Prayer works even if the person being prayed for hasn't a clue that the prayer is taking place. Some 150 studies have now been conducted that support this general idea.

Throughout recent history, our culture has believed that spirituality is an inward state, with little impact on the outside world. We think of spirituality as a private matter. Today, that perspective is being radically challenged by these studies. Science, the most powerful metaphor in our culture, is validating

the power of consciousness to shift material form, and demonstrating that healing starts in consciousness. This is a breathtaking discovery.

Traditional indigenous cultures have much to tell us about this phenomenon, and about why our culture has been unable to act on environmental challenges. Authors such as Constance Grauds, whose book, *Jungle Medicine*, chronicles her studies with shamans in the Amazon, and Sandra Ingerman, who wrote *Soul Retrieval*, tell us what indigenous peoples know: that souls can fragment, and portions can be lost or clouded. In the shamanic traditions, one of the reasons that souls are said to become fragmented is deep-rooted fear and insecurity. Our politicians nowadays have made fear and insecurity an art form. One of the symptoms of soul loss is apathy, *ennui*, the inability to experience passion. Those words describe today's America. We can't muster the political will to handle these problems. I suspect that we're suffering culturally, nationally, from a horrible case of soul loss. Our souls are paying the price of our inability to act.

On the positive side, surveys consistently show that the majority of taxpayers are willing to spend more of

their tax dollars to protect the environment. People are willing to act, and they form a huge reservoir of potential power that can be tapped. But just as the momentum for alternative medicine did not come from the top, neither will the change in environmental practices come from the top. The move toward alternative and integral medicine began at the grassroots level. We may well see a similar phenomenon beginning, a huge surge of environmental concern, emerging from the same source. Although we certainly could use national leadership to capitalize on the groundswell of grassroots interest, a strong collective thrust will bypass politicians and the bureaucracies in many an instance. The movement has already caught fire in certain areas, including Santa Fe, New Mexico, where I live, and other communities. Even in China, one of the most environmentally degraded countries on earth, a small but active environmental group exists. The Chinese government is beginning to respond. Hope begets hope, and we may soon reach a tipping point.

Our national culture needs less a dramatic shift in our programs, private or public, than it needs a shift in consciousness. The programs that have been advanced

during the last few years, notably the Kyoto Protocol, have had great difficulty gaining traction in the U.S. The problem is not only the actual physical pollutants unleashed by our activities, but also our unwillingness as a nation to muster the will to do anything about it. The problem is not a failure of programs; we have plenty of those. We have plenty of intelligence and ingenuity, but we are suffering a failure of will. We need to muster the will, the vision, and the initiative to dig in and do something. We're like a nation of anesthetized zombies, sleepwalkers, stuck in deep emotional mud, unable to find the vision to motivate ourselves.

Fundamental shifts are occurring in certain areas of science if one knows where to look for the indicators. They portend a huge transition in the way we see ourselves in terms of connectedness with the world. The area that excites me most, personally and professionally, is the evidence that our consciousness can make concrete changes in the world. Ancient wisdom held this to be true, but it is new to modern science. Many controlled clinical trials of distant healing make it quite clear that our thoughts, intentions and

prayers can help heal the world. We can do this at a distance, we can do this volitionally, we can do this through our intentions and good wishes, and so we're not as helpless as we might think. These studies show clearly that we can change the state of the physical world by our thoughts, to say nothing of our actions. This opens up a huge new horizon of personal empowerment.

The studies in distant intentionality and healing fall into two different categories. One group, like the Duke University study of the effect intercessory prayer on cardiac patients, examines the restoration of bodily health. The other group studies fertility. If I were designing an ability through which consciousness could interact with the world, I'd select these two categories. What is environmental action if not an effort to heal the earth and increase its fertility? Studies in distant healing examine precisely those factors: Helping restore health in human beings (and sometimes other species), and increasing fertility.

Bernard Grad, at McGill University in Canada, is a pioneer in nonhuman studies, which I consider to be of Nobel quality and significance. He points out similar

remarkable increases in the germination rate of seeds, which is another form of fertility, and the growth rate of plants and seedlings. The nonhuman studies are immensely important because they bypass so many of the objections of critics in this field, such as the placebo response.

Beginning in the 1980s, researchers began to examine the correlations between religious and spiritual conduct, and how long people lived and how healthy they were. Currently we have upwards of 1,200 studies that explore the relationship between religious practices, and health and longevity. This is a huge database. The results are not trivial. These studies show a consistent pattern. Those people who follow some sort of religious path (it doesn't seem to matter which one they pick) live, on average, seven to thirteen years longer than those who do not. They have a lower incidence of virtually every disease, including the major killers of our day such as heart disease and cancer. One of the reasons that medical schools have begun to take notice is because of such data. It is becoming clear to most scholars and academics in medicine that we are no longer justified in not

speaking about this effect of religious and spiritual practices on health. There are few things that doctors can recommend to patients that add seven to thirteen years to their life expectancy. This is a huge effect. To withhold this information and advice from patients is unethical and may constitute medical malpractice.

The reasons for this effect are several. Living within a rich social network—which most religious people do—promotes health. A positive health effect also comes with having a sense of meaning and purpose in life. Religious people may pay more attention to diet, and may avoid excessive smoking and drinking. When you put all these factors together, the incremental effects are significant. But where disagreement with the biomedical model opens up is when we begin assert that prayer works in and of itself.

When I began to investigate this area in the mid-1980s, I found a survey by Dr. David Benor, an American-trained psychiatrist working in England. At that time, there were 131 controlled trials of spiritual healing in a variety of species. Most of these were not studying human beings. Some were. The studies mainly looked at the ability of people—

intentionally, empathically, compassionately and prayerfully—to influence biological systems. Some studied the growth rate of bacteria, the replication rate of test tube organisms, the spread of yeast on petri dishes, the germination rate of seeds, and the growth rates of seedlings.

Roughly two-thirds of the cases showed statistically significant correlations in the outcomes of the experiments. Now fast forward to the present. If we confine our interest to just human studies, we can find nine major randomized controlled clinical trials of distant healing or intercessory prayer. Statistics from five of these studies show profoundly significant results. You cannot explain this according to chance. Religious affiliation doesn't appear to matter.

As a doctor considering these questions, you ask yourself, "If the science is this compelling, am I ethically justified in withholding prayer from my patients?" I got to the point where I said, "No, I'm not." It changed my life as a doctor, and changed my patients' lives as well. I began going into my office earlier each morning. I devised my own prayer ritual; I prayed for the patients I was about to see on

hospital rounds, and for all the patients who would come to my office later that day. I kept up that prayer ritual until I left my practice. Many physicians have told me that they have had similar life experiences as they engage this dramatic and exciting body of information.

I define prayer as, "Communication with the Absolute." I invite everyone to define what this communication might be, and what the Absolute may be within the context of their own wisdom tradition. My personal prayer is non-directed. It doesn't ask for specific goals. I think that the universe and this planet is smart enough to take care of itself without any instructions from me. So I simply pray, daily, "May the best thing happen to this world." Each person can pray in the way that feels most authentic and genuine for him or her. Religious historian Huston Smith writes about what he calls, "the tug from in front." I feel as though I'm being tugged by something out there, attracting me toward it. I've always felt that way. The importance of one's inner environment, a person's spiritual life, has always seemed self-evident to me. Even when I first entered medical school, it

seemed to me to be the most important aspect of healing.

The effectiveness of prayer and intention shown by these studies demonstrates to us that our society doesn't have to wait on intractable politicians and corporations to do something about the problems facing our world. We want to bring politicians and institutions along with us. But in the meantime we don't have to sit on our hands. We can put our own thoughts and will to work right now.

Yet I feel a sense of urgency about this transition. I do not believe that time is on our side. While we can rejoice that healing has become a legitimate source of study, we still need to be advancing as fast as we can. About a year before he died, I asked the late great physicist David Bohm if he thought we were going to survive without destroying the earth's environment. He pondered for a moment and said, "Yes, Larry, I think we will—barely."

I think we will squeak by. But we don't want to just barely make it. We need to do better than having to fall into the gutter before becoming motivated. Our society clearly has the understanding and the

technologies to initiate a new Manhattan Project to rescue our environment. The technology to meet these tests is already available. I attend the Bioneers conference regularly, and I come away astonished at the solutions that are already in place. We need to incorporate them rapidly into our global culture. This is not complicated. For what we're spending annually in Iraq, we could underwrite these projects and have money left over. What is needed is will and vision. We need to find a source of vitality, and leadership to implement the obvious solutions.

Science can be a spiritual path. If used wisely, technology can be used for healing rather than destruction. Today, ninety of the 125 medical schools in the U.S. have courses devoted to exploring the links between spirituality and health. Ten years ago there were only three. This is a landmark development. It is an historic transition.

Medicine is on the threshold of a profound change. It is recognizing that emotions, feelings, and intentions are as much of the healing process as drugs and surgery. This realization is humanizing medicine, not just from a patient's point of view, but from the

doctor's point of view. It is not fulfilling, as a doctor, to practice medicine as if people are just physical machines. The whole ambiance of the medical encounter is shifting. As I talk to young students now coming out of medical schools, they hold these values as self-evident. The medical profession has gone from rejecting prayer as "unscientific" to believing in it as received wisdom.

In 1998, the association of American Medical Colleges, to which all U.S. medical schools belong, drafted a resolution requiring all students be able to take a spiritual history from patients, and demonstrate an understanding that spirituality is important in the clinical encounter. In 1997, the Joint Commission on Accreditation of Health Care Institutions mandated that all their members—some 19,000 clinics and hospitals—have a mechanism in place to take a spiritual history from every patient who comes through the door. Most don't do this diligently yet, but this policy expresses an awareness that spirituality is important. While it may be a formality today, in the next twenty years it will become integral to the practice of medicine.

The most profound change in medicine in the future may have nothing to do with diseases getting better more quickly, or people living longer. They flow from the enormous spiritual implications of these studies, which clearly show that there's some quality or aspect of consciousness that operates beyond the body. This goes a long way toward validating the old idea of the soul. Some quality of who we are is infinite in space and time, and does not perish with the death of the body. This implication dwarfs whatever contribution these studies make toward healing. This is the greatest story of hope for human beings: the most essential part of who you are cannot die.

Today, the beginning assumption of medicine is tragedy—we all get sick, and eventually die, no matter what the doctor does. This is "time-based" medicine, and everyone's time runs out sooner or later. Tomorrow, the beginning assumption of medicine will be immortality—what I call "Eternity Medicine." The new medicine assumes that the most essential part of who we are is immortal. It doesn't have to be repaired or acquired. It's factory issue original equipment. You don't have to develop it or create it. It's the hard

drive, and it can't crash. Realizing this deep in your heart is the essence of spiritual work. The antidote to soul loss, then, is the restoration of soul. In William Wordsworth's immortal words in his great poem, *Tintern Abbey*, he says:

And I have felt a presence that disturbs me with
the joy of elevated thought
A sense sublime of something far more deeply
interfused
whose dwelling is the light of the setting suns
And the round ocean of the living air,
And the blue sky
And in the mind of man
A motion and a spirit that impels all thinking
things
all objects of all thought
and rolls through all things

This presence that so enraptured Wordsworth constantly rolls through the human heart. The medical profession is now looking inside the human heart, and this is leading to a great rethinking. Spirituality is returning to modern medicine. Health care

professionals steeped in Eternity Medicine approach their patients knowing that their most essential self is immortal, eternal, infinite.

Spirituality, for me, is that sense of connectedness with an absolute and transcendent power beyond the individual self and ego. Whatever name you use for that presence and that power—God, the Great Spirit, Jehovah, the Goddess, Allah, the universe, overwhelming beauty and logic and order—that for you is spirituality. It is not the same as religion.

Religion is simply ritualized spirituality. It has to do with those traditional behaviors such as attending worship services, reading sacred texts, and observing codes of conduct. Religion often includes a sense of the spiritual. Some people can be spiritual without being at all religious, and people can certainly be religious without having a shred of spirituality. People can be both or neither.

Whatever name we use for spirit, we are going to have to come up with a non-local picture of consciousness to accommodate the phenomena these studies point to. If you're going to think non-locally, here's what you've invented. You've come up

with a picture of consciousness that has certain characteristics including being omnipresent, eternal and immortal. The most majestic contribution these studies make is to clearly show that there is some quality of consciousness that is unconfined to specific points in space such as the brain, or specific points in time such as the present. There are certain operations of consciousness such as those we see in distant healing and prayer, to which the categories of space and time simply do not apply. The new physics teaches us that "non-local" is just a fancy word for "infinite." We have discovered a non-local or infinite quality of consciousness flowing from these studies. They reveal that there's some quality to who we are that's immortal. These studies are indirect evidence for the existence of the Soul, something that isn't born, doesn't die, and does not disappear with the death of the brain and body.

This is not a new idea. Irwin Schrödinger, a great quantum physicist who was awarded the Nobel Prize for his Schrödinger wave equations, said, "Mind—by its very nature—is a singular entity. I should say the overall number of minds is just one." His reasoning went like

this: If there is some factor of consciousness that is non-local or infinite, that means you can't put it into a box, and wall it off from all other minds. In some dimension, minds come together to form what he called the one mind; what our ancestors used to refer to as the universal mind. The poet William Butler Yeats said, "The borders of our minds are ever shifting, and many minds can flow into one another, and create or reveal a single mind, a single energy."

Chapter Four
Joan Borysenko:
Putting the Soul Back in Medicine

Joan Borysenko, Ph.D., has a powerfully clear personal vision—to bring science, medicine, psychology and spirituality together in the service of healing. Her brilliance as a scientist, clinician, and teacher have placed her on the leading edge of the Mind-body-spirit revolution, and she has become a world-renowned spokesperson for this new approach to health, sharing her pioneering work with a gentle graciousness, enthusiasm and humility.

Trained as both a medical scientist and a psychologist, Dr. Borysenko has gone beyond her traditional academic training and developed depth and breadth in a number of fields including behavioral medicine, stress and well-being, psychoneuroimmunology, women's health, creativity and the great spiritual traditions of the world. She completed her doctorate in medical sciences at the Harvard Medical School where she also completed three post-doctoral fellowships in experimental pathology, behavioral medicine and

psychoneuroimmunology and where she was an instructor in medicine until 1988.

A licensed psychologist, Dr. Borysenko was co-founder of the Mind-Body clinical programs at two Harvard Medical School teaching hospitals, now merged as the Beth Israel/Deaconess Medical Center. These programs were the foundation for her 1987 bestseller *Minding the Body, Mending the Mind*.

She went on to write eight other books. Her work has also appeared in numerous scientific journals and has been featured in many popular magazines and newspapers. She has appeared on Oprah, Sally Jesse Raphael, Sonya Live, Geraldo, Hour Magazine and Good Morning America. Her work has been featured in *U.S. News and World Report*, the *Wall Street Journal*, *USA Today*, *Reader's Digest*, and many other magazines and newspapers. I condensed the following chapter from material she wrote for *The Leifer Report*:

Once upon a time, when the rays of the morning sun rose over peoples who were still hunters and gatherers, the clock of the bodymind was regulated by the magnetic forces of nature. By sun and moon, by cycles and seasons, by feasting and fasting.

The wise ones, known as healers or shamans, believed that illness was a result of being out of tune with the natural cycles. The disharmony, and the dis-ease which resulted from it, had different types of cures. There were powerful herbs which could rebalance the flow of energy which, in turn, determined physical function. Some cultures developed a large pharmacopia of active agents. Others, such as some of the Native American cultures, employed only a few plants. The shaman or medicine person dreamed which herb to use and invoked the specific healing quality required through prayer and ritual.

But the shamans were much more than intuitive pharmacologists. They were also intuitive psychologists. The patient was questioned about their life, their role in the tribe, their relationships and their dreams. Turbulent emotions could cause turbulence in the bodymind. The cure in this case was to correct the source of the emotional disbalance. In cases where the patient had been traumatized by grief, accident, heartbreak or abuse, it was not the energy body or the emotional body that required healing, but the soul.

Soul retrieval was a common medical treatment in which the shaman entered a state of non-ordinary reality similar to what people describe during near-death experiences and mystical visions. In this state, the shaman tracked parts of the patient's soul that had been split off and lost as a result of trauma. The retrieved soul parts were then blown back into the patient's body through the heart and the top of the head and oftentimes a physical and emotional cure was achieved. Our modern psychology and psychiatry, in contrast, has a much poorer track record with post-traumatic stress disorder and the cure of dissociative disorders resulting from childhood physical abuse, sexual abuse or unusual trauma.

The soul of medicine itself has become fragmented. We have retained the pharmacology and refined the technical aspects of pathophysiology, diagnosis and treatment, but we have lost the emotional and spiritual components that can make healing a sacred art as well as a more effective science. Nearly two millennia ago, coincident with the spread of the Catholic Church to Europe, tremendous sociological and religious upheavals occurred which resulted in the stamping out of shamanic

cultures. This in turn had a far-reaching effect on the development of medicine. Illness was viewed as evidence of sin, an idea that is poignantly considered in the old testament Book of Job. After all, if illness and misfortune are the result of offending God, then all you have to do is to be is very, very good and then you'll be safe. Or if you are beyond reproach, then all you have to do is get rid of the bad guys who are offending God. Enter the Crusades and the Inquisition.

During the middle ages the Black Death killed one third of the population of Europe. A search for the sinners who must surely have caused it gave rise to a bloody chapter in the history of religious persecution. Entire villages of Jews were murdered and several million women were condemned as witches in the hope of defeating the plague. But when the plague continued to spread, religion ultimately lost its authority over illness and the age of science began. For an excellent review I heartily recommend Sacred Eyes, by psychologist and minister Robert Keck.

By the sixteenth century, modern science was being birthed by the famous triad of scientific

reductionists—Francis Bacon, Renee Descartes and Isaac Newton—who succeeded in reducing nature to a machine devoid of soul or guiding intelligence. To their credit, they exorcised the toxic notion of disease as punishment by a peevish deity. But they also threw the baby out with the bathwater. Bacon's stated purpose was to subjugate nature altogether by desouling it. To take her by force and to "torture and vex" her into revealing her secrets so that mankind would have dominion over the earth—over life and death itself.

This is the thinking that underlies the rape and plunder of natural resources, the dehumanization of third world cultures, and the de-souling of modern medicine. It presumes a lack of organizing intelligence in the universe and since life is therefore not sacred, resources become expendable in the name of progress. Soul loss ultimately leads to amoral behavior—acts performed with oblivion to their eventual consequences. Were we, like our native predecessors, conditioned to assess the consequences of our health-care system seven generations into the future we would have to ask some very penetrating questions. Is it appropriate that the majority of

monies spent on the medical care of any one individual are spent in the last few months of their life? Would they be better spent in prevention programs, or in early childhood education programs, or in parenting programs that would aid emotional wellbeing and therefore cut down on illness and suffering?

And what is a soul approach to an individual patient? Once again, it has to do with a macroscopic view that investigates the illness as part of a life, rather than as an isolated symptom. The physician who practices fragmented medicine and cures a symptom may actually compound the patient's problems. For example, a diuretic may decrease Mrs. Jones blood pressure, but if it is high because of an alcoholic husband, poor self-esteem and ruinous health habits has her physician healed her with a prescription or has he colluded to help her maintain a sick status quo? To be a healer, a physician needs to have a larger vision of the human being than is taught in most medical schools which pander to molecules while denigrating the emotional and spiritual aspects of life.

Part of the problem in medicine's loss of soul is that death is seen as unnatural, as the enemy, so that

disproportionate resources are put into discouraging death as opposed to encouraging life. Let me tell you a story. My mother died in a Boston teaching hospital about five years ago, and overall, she had a wonderful quality of care. But on the last day of her life, as her heart and lungs and kidneys failed, she developed internal bleeding and was whisked off to nuclear medicine so that the source of the bleed could be determined. Why? Was it going to make a clinical difference? Four hours passed, and the family, which was gathered around her empty bed to say goodbye, started to get impatient and scared. Since I had worked in that hospital for a decade, they dispatched me to rescue her. I knew it wouldn't be easy. When I got down to nuclear medicine, she was still waiting on the gurney that had brought her down four hours before. I demanded her immediate release and the doctor was equally adamant about getting a diagnosis. My mother broke the stalemate by virtually resurrecting from near-death to give the doctor a dose of common sense, "A diagnosis. Is that all you need? I'm dying. That's your diagnosis." And with that, the doctor gave in.

Fortunately, we had time to say goodbye back in her room before she slipped into a last morphine-assisted sleep. My son Justin, who was twenty at the time, and I were at her bedside at about three in the morning. I was meditating when I had a vivid vision that seemed far more real than waking life. In the vision I was a pregnant mother giving birth and I was also the baby being born. As the baby, I was being propelled down a long, dark tunnel. And then I came out into the presence of the ineffable light that so many of my patients who have had near-death experiences describe. The light is omniscient, incomprehensibly loving, infinitely wise and perfectly forgiving. It feels like home. In the presence of the light, my relationship with my mother, which had been a difficult one, seemed perfect. I saw the lessons we had learned from one another and felt immense gratitude toward her. She had birthed me into this world, and I felt as though I had birthed her soul back out again.

When I opened my eyes, Justin had a look of total awe on his face. He asked me if I could see the light in the room. When I said that I could, for indeed the whole room was glowing, Justin said, "Grandma is

holding open the door to eternity to give us a glimpse." Justin felt that he had received a priceless gift, because he knew with certainty that we are not our bodies. We inhabit our bodies, but our souls are immortal. He wept as he told me that he would never be afraid of death again. The only type of death that is really worth fearing, after all, is a living death in which we fail to become ourselves because we get stuck in some one else's definition of who we should be.

Albert Camus wrote, "There is but one freedom, to put oneself right with death. After that everything is possible." When people visit their doctor, they might not be thinking in terms of their immortal souls, but most are looking for emotional and spiritual healing. They want to know they are worthy and lovable. They want to confess, to complain, to be forgiven, to make meaning of their lives. Clearly, this can't always be done in an eight-minute office visit. But compassion can be communicated, and when appropriate the patient can be referred to a therapist or clergyperson who can help them with the big questions that illness puts to us. "Who am I?"; "What is the purpose of my life?" and

"How can I profit from this illness as an opportunity to find greater freedom and happiness?"

Consumers are patently dissatisfied with a mechanistic medicine that denies its own soul and theirs. It's time we heed the symptoms indicating that our medical system is dangerously out of balance. Modern technology is marvelous and lifesaving, and if we can integrate it with the deep wisdom of the past then we can birth a medicine that exalts and nurtures life rather than one that is predicated on the fear of death.

Chapter Five

Jeanne Achterberg: The Healing Web of Human Relationships

Jeanne Achterberg, Ph.D., is a scientist who has received international recognition for her pioneering research in medicine and psychology. A faculty member for 11 years at Southwestern Medical School, she is currently a professor of psychology at Saybrook Graduate School in San Francisco. She also co-chaired the mind/body interventions ad hoc advisory panel and the research technologies conference for the Office of Alternative Medicine, and was a member of the Advisory Board, Unconventional Cancer Treatments Study Group, office of Technology Assessment, U.S. Congress. She is a research consultant and advisor to foundations, and has provided mind/body therapies training for health care professionals in Europe, Japan, Argentina, and the Balkans.

She has authored over 100 papers and five books. *Imagery in Healing* is critically acclaimed as a classic in the field of mind/body studies, and *Woman as Healer* is described as a ground-breaking work, surveying the activities of women from prehistoric times to the present. *Rituals of Healing* is a

primer on the use of creative therapies for health and medicine, and won the Book of the Year Award from the American Nursing Association. Her most recent book, *Lightning at the Gate*, the story of her personal healing journey, was published in 2002.

In April of 2001, she was featured in *Time* magazine as one of the six innovators of alternative and complementary medicine for the coming century. Dr. Achterberg is past president of the Association of Transpersonal Psychology. She is Senior Editor for *Alternative Therapies*, a peer-reviewed medical journal with an international circulation. She was also recently appointed Director of Research with North Hawaii Community Hospital, with the responsibility for studying prayer and healing and to develop a innovative cancer aftercare program. For my anthology *entitled The Heart of Healing*, I reworked notes from one of her presentations, and also met with her and e-mailed her in order to arrive at a final draft of a chapter, a condensed version of which appears below:

Healing work is soul work in the most meaningful, deepest sense. Beyond even the mission and purpose of service for the sick and the needy, we are also serving

ourselves. The bonds we form are holy. While all of life is spiritual pathway, if and when we engage in our relationships with others with awakened consciousness about our effect on one another, allowing, if necessary, even our separate selves to bond and shatter, we are engaging in an authentic spiritual practice. The path is already there, winding through the riverbeds of our lives. Bringing the path and our actions to consciousness, we shift our inner reality. This will in turn shift the quality of health practices.

When we profoundly connect with another human being, we may not only polish our own souls and theirs, we may even release light and energy, according to inspired words from the sages.

What about people who are in health crises? Why might the connections, the relationships, the bonds, themselves be healing? How might spiritual practice be a path to wholeness? Let me use an unlikely example, drawn from the filmmaker's art, and not from science or religion: the breathtaking scenes from the movie "Titanic." If you have seen it you know that, only in the most secondary instance, is it a story about a big

ship sinking. First and foremost, it is a story about human love, healing, and soul work. The film expresses the deep human longing to be fully, totally loved—loved more dearly than life itself.

The scene that is most haunting is at the end. Jack and Rose, the young lovers, are holding onto one another in the frigid sea. Dead bodies in life jackets are bobbing around them. The screams of the hundreds who are drowning fill the black night. Neither Jack nor Rose is likely to survive. Jack tells her that she must promise to live: to live to have babies, to live to become an old woman. Fiction or not, I was reminded how often I've heard people who are very ill, or even dying, say that all they need is someone to hold on to them, to remind them that they are worthy and worth being loved, to give them hope. Not more medicine. Not more advice. Just someone to hold onto them. And maybe that's all we do anyway. We hold on to one another in the dark ocean of crisis. There are people drowning around us, but there are also people singing around us and making music. That's what life is about. James Baldwin, the poet, wrote:

The moment we cease to hold each other,

The moment we lose faith with one another,
The sea engulfs us
And the light goes out.

We can look to many levels of information, beyond art and story, to describe how profound relationships are healing. We can find both metaphysical and physical sources. That relationships are healing is no longer in question from a research perspective. A brief excursion into the world of science yields many examples.

Researcher E. W. Bovard suggests that relationships act as stress buffers, and are mediated through the amygdala, stimulating the release of HGH, and inhibiting the brain's posterior hypothalamic zone, thus decreasing release of the adrenocorticotrophic hormones: cortisone, catecholamines, and associated sympathetic autonomic activity.⁷² To say that our relationships serve as buffers against stress is probably correct, if only partially so. To the extent that they do, we might look to the excellent work of Ronald Glaser and Janet Kiecolt-Glaser and their colleagues, who have shown that stressful situations can alter genetic expression and damage the DNA repair

mechanism so that the damaged cells may repair improperly, and herald the onset of many diseases, including autoimmune and immune diseases such as cancer.⁷³⁷⁴ These same investigators studied marital relationship and immune function in 473 women. They found that the stronger and more supportive their relationships were perceived by the women, the higher their immune cell activity.

Another researcher, J. P. Henry, has identified specific biological changes identified with social processes that may speed or impede healing. One of these changes is that, as a person moves from elation or security to dejection, there is a rise in adrenal corticosteroids.⁷⁵ As one moves from being a social success to an outcast, there is a fall in the plasma levels of gonadotrophins, which regulate both parenting and reproductive behavior. There is also significant evidence suggesting the emotional states associated with human relationships can either accelerate or inhibit tissue repair. Blood supply to a wound, critical to the healing process, is affected by our social circumstances and our emotions. Feeling loved, relaxed and happy reduces vasoconstricting

catecholamines, and hope reduces growth-inhibiting corticosteroids.⁷⁶

The astonishing thing about this line of research is that there is so much of it. Some studies are over twenty-five years old. Such work has been published in mainstream medical journals such as *Science*, *Lancet*, the *American Journal of Medicine* and the *American Journal of Epidemiology*, to mention a few. Ordinarily, scientists would drop everything else in order to study and facilitate any medical breakthroughs that have proven this robust, this enduring, this ubiquitous. This is not about medical treatment, not about psychotherapy. It is rather, about the most basic, primal, exalted events in our lives—our relationships. Every study reinforces the same point: We humans affect one another in exhilarating and terrible ways. We are made well through the bonds we form with others. Relationships are the essence of the healing process, especially when health is considered in its fullest sense of Hale (or wholeness) of the mind, body, and spirit. Common bonds. Uncommonly appreciated.

The Five Bonds of Healing Relationships

There are, no doubt, hundreds or thousands of types of bonds that one might identify as part and parcel of the network of support in healing relationships. Many types overlap. Some are as useless to one individual as they are life-saving for another.

Unfortunately, I have found that no matter how much I love someone (or they me), it is not possible to provide all levels of healing relationship oneself. It takes a community effort, one which is sadly unavailable to most people in our (or any) modern culture. It has five components; here are the qualities of the most important medicine in the possession of humankind.

1. The Transpersonal. These are the invisible connections some call prayer, energy, or more scientifically, "distant intentionality."⁷⁷ The evidence is that we influence one another's psyche and physiology, but not always in ways that we can predict or understand. When we focus our attention, even at a distance, on others, we are mutually joined and the physiology of both parties is changed. Research shows, among other things, that our thoughts can influence another's brain rhythms, blood cells, gross motor

activity, and respiration.⁷⁸ Studies of prayer, itself, show positive results in survival of leukemic children, fewer complications post-myocardial infarct, increased self-esteem, reduced depression and anxiety, and improved recovery following hernia surgery—among many other healing effects.⁷⁹ I'm told that over fifty serious prayer studies are now underway around the US.

2. The Power of Presence and Touch. People in crisis need to be touched. They ask to be touched—we need to feel a physical presence on that life raft! One woman said to me, “When you are very sick and very old like I am, people are afraid to touch you. But I am still a sensual being. I can still feel. I would like to make love again. Just because you're sick doesn't mean you're dead.” The burgeoning literature on massage, healing and therapeutic touch is supportive of the special role touch can have in health care practices. In a remarkable series of studies of people in comas by James Lynch, when a compassionate nurse or doctor stopped at the bedside and spoke to the patient or touched the person with a comforting hand, their electrocardiograms showed a slower rate.⁸⁰

3. A Connection of Soul to Soul. What I mean by this is a relationship that is meaningful, beyond the physical self, and connects us beyond the egoic level of, "I am doctor, you are patient," or even, "I am man and you are woman." Beyond pathology. Beyond psychology. These relationships are medicine. They are the most difficult to describe, there certainly no research studies that I know of that measure them, but these soul-to-soul connections are probably the most important bonds of all. It is through them that we connect most intimately with another's humanity. Christopher Reeve, who played Superman in movies, sets a standard for us all in terms of courage, hope and humanity. During an interview on 20/20 with Barbara Walters, he talked about a time—not long after the spinal cord injury that left him a quadriplegic—when he had not yet turned the corner to embrace life. This beautiful man forgot his essential nature. He saw nothing worthy about himself to which life could cling. Then one of his children walked into his room and reminded him, "You are still my Daddy."

Many healing professionals, working in the most difficult circumstances, with badly broken people, know

that this practice demands deep, soul-to-soul connections. I spent several years working at the Burn Unit at Parkland Hospital. Every now and again I would hear a "thunk" and see one of my students passed out cold on the floor—a reaction to the terrible injuries of some patient. The student and I might later speak of the need to see through to the essence of that patient, to honor and respect that soul, and to communicate with that essential presence. Otherwise, the state of the physical body would steal our attention like a robber in the night, and we might forget who we are and they are—really. Soul-to-soul communication: It's hard. But we can do the best we can.

4. The Healing Web of Community. The importance of community and social support (variously defined) is the one level of relationship bonds in healing that has received the most interest, and has the longest history of solid, prospective research.⁸¹ In a famous study that followed the health of nearly 7,000 residents of Alameda County for 17 years, the quality and extent of the social network of participants (how many people they felt close to, or could ask for help from) had the

highest correlation with health and longevity out of 11 variables studied. Those variables included health-compromising habits such as smoking and alcohol use. A deficient social network was associated with death from all diagnoses, including heart disease, cancer, suicide and accidental death.⁸² A study in Tecumseh Michigan replicated these findings in 1982.⁸³

The second major community study that demonstrates the health-giving power of human relationships is the astonishing epidemiological findings of the residents of Rosetto, Pennsylvania, a small Italian-American community. The residents had half the rate of death from heart attacks as the US as a whole, including the neighboring communities. As a group, they were sedentary, overweight, and smoked a lot. The researchers believed that their relatively good health came from mutual social support in a village where cultural ties were strong, there was mutual support in crisis, and people felt a profound sense of belonging. Over the years, as the community lost its cultural identification and became more mobile and materialistic, whatever edge they had on healthy hearts was lost.⁸⁴

The accumulation of empirical evidence shows that social relationships are a consequential predictor of mortality in human and even in animals, according to a review of over sixty studies published by James House and his colleagues in the prestigious journal *Science*, in 1988.⁸⁵ People who feel included in this “web of lights,” as I call it, are at less risk for tuberculosis, accidents, psychiatric disorders, babies with low birth weight, complications from pregnancy, high blood pressure, cholesterol, arthritis, and death from many conditions including cardiovascular disease.⁸⁶ Higher levels of social support have also been associated with longer survival in acute leukemia, localized or regional breast cancer, mixed cancer disease sites, recovery from surgery, a reduced need for steroid therapy in asthmatics, reduced physiological symptomatology in those working in highly stressful environments, and on and on.⁸⁷ Social relationships—or the lack thereof—constitute a major risk factor for health, rivaling the effects of cigarette smoking on a variety of health conditions.⁸⁸ The relationship holds even after adjustment for biomedical risk factors. The relationship, even in

controlled, prospective studies, appears to be robust and causal.

Support groups have been associated with classic findings in controlled studies of cancer and heart patients:

- The reduction of psychological distress, increased NK cell activity, increased NK cell phenotypes, and significantly increased life expectancy in melanoma patients.⁸⁹

- Significantly increased life expectancy in women with metastatic breast cancer.⁹⁰

- Decrease in number of recurrent myocardial infarcts.⁹¹

- Reversing the effects of heart disease.⁹²

However, a sobering note was provided during the Society of Behavioral Medicine Meetings in New Orleans in 1997 when Vicki Hodgeson presented her study showing that cancer support groups may harm some women who claim their relationships suffered and they were more nervous as a result of the groups. Support groups aren't for everyone and adequate leadership is critical.

5. The Healing Force of Love. What's love got to do with it? One of the most astonishing results came from an Israeli study of 10,000 married men who participated in a five-year prospective study.⁹³ Many factors were measured, including medical and psychosocial factors. The best predictor of whether the men would develop angina pectoris was the question, "Does your wife show you her love?" The felt love of a wife apparently balanced out the risk, even in the presence of high risk factors.

The results of a remarkable natural experiment in post World War II in Germany was carried out by a British Nutritionist, Elsie Widdowson, and published in the Lancet in 1951.⁹⁴ She observed that children in two orphanages had very different growth rates, even though they received the same rations. At one, named Vogelnest, where children's growth was accelerated, the matron was kindly and beloved by the children. At the other, Bienenhaus, where the children did poorly, the matron, Fraulein Schwarz, was a strict disciplinarian. There was a small group who were Fraulein Schwarz's favorites and they were growing somewhat better. The kindly matron at Vogelnest left, and Fraulein Schwarz

was sent there. At that time rations were increased in both places. But the Vogelnest children began to fall behind their Bienenhaus contemporaries in spite of better food, while the Bienenhaus children began to grow. This is one of many studies showing that children who are warmly cared for simply grow better.

What do people expect from their health care professionals? Above all they want compassion, sympathy and understanding. They also want information and to feel better. But they want information and better feeling delivered with compassion, sympathy and understanding. And when this happens, studies show a consistently beneficial effect—speed of recovery, less pain medication, and fewer postoperative complications.⁹⁵

Many people, in the most dire of circumstances, keep themselves alive with love the memories of love. Viktor Frankl, the great German psychiatrist, was kept alive in the hideous and brutal conditions of a concentration camp by a vision of his wife. He writes, "Occasionally, I looked at the sky, where the stars were fading and the pink light of the morning was beginning to spread behind a dark bank of clouds. But

my mind clung to my wife's image, imagining it with an uncanny acuteness. I heard her answering me, saw her smile, her frank and encouraging look. Real or not, her look was then more luminous than the sun which was beginning to rise... Had I known then that my wife was dead, I think that I would still have given myself, undisturbed by the knowledge, to my contemplation of her image, and that my mental conversation with her would have been just as vivid and just as satisfying. Set like a seal upon the heart, love is as strong as death."⁹⁶

Spirituality is already embedded in the practice of healthcare. The essence of our spiritual work and the healing process is the bond we share in relationship with one another. The research is overwhelming: human bonds are medicine. Imagine the rise in the stock prices of any pharmaceutical company that could mimic even a modicum of the success rate of love and prayer and touch and community. And then imagine how medicine, any medicine, might be practiced if the bonds were common, commonly acknowledged, and commonly respected. Teilhard de Chardin, the great mystic, scientist, and Jesuit priest, tied these ideas together

in some magnificent words: "Love is the free and imaginative outpouring of the spirit over all unexplored paths. It links those who love in bonds that unite but do not confound, causing them to discover in their mutual contact an exaltation capable, incomparably more than any arrogance of solitude, of arousing in the heart of their being all that they possess of uniqueness and creative power."

Teilhard also said, "Someday, after we have mastered the winds, the waves, the tides and gravity, we shall harness for God the energies of love. Then for the second time in the history of the world, we will have discovered fire."

Chapter Six
Dean Ornish:
Love As Healer

Dean Ornish, M.D., is one of America's best-known medical authorities. His groundbreaking experiments led to the development of diet- and exercise-based therapies for cardiac patients, and earned him international renown. He is the author of *Eat More, Weigh Less* (Harper, 1997), and several other books. He is the founder and president of the Preventive Medicine Research Institute in Sausalito, California. The material in this chapter is based on an interview in *the American Journal of Cardiology* (August 1st, 2002 issue) and in his best-seller *Love and Survival*, and was condensed by me, and approved by Dean Ornish as a chapter in my anthology *The Heart of Healing*. The following summary is from that book:

Love and intimacy are at a root of what makes us sick and what makes us well, what causes sadness and what brings happiness, what makes us suffer and what

leads to healing. If a new drug had the same impact, virtually every doctor in the country would be recommending it for their patients. It would be malpractice not to prescribe it—yet, with few exceptions, we doctors do not learn much about the healing power of love, intimacy, and transformation in our medical training. Rather, these ideas are often ignored or even denigrated.

It has become increasingly clear to even the most skeptical physicians why diet is important. Why exercise is important. Why stopping smoking is important. But love and intimacy? Opening your heart? And what is emotional and spiritual transformation?

I am a scientist. I believe in the value of science as a powerful means of gaining greater understanding of the world we live in. Science can help us sort out truth from fiction, hype from reality, what works from what doesn't work, for whom, and under what circumstances. Although I respect the ways and power of science, I also understand its limitations as well. What is most meaningful often cannot be measured. What is verifiable may not necessarily be what is most

important. As the British scientist Denis Burkitt once wrote, "Not everything that counts can be counted."

We may not yet have the tools to measure what is most meaningful to people, but the value of those experiences is not diminished by our inability to quantify them. We can listen, we can learn, and we can benefit greatly from those who have had these experiences. When we gather together to tell and listen to each other's stories, the sense of community and the recognition of shared experiences can be profoundly healing.

As recently as May 1997, an article in the Journal of the American Medical Association reviewed all of the known risk factors for coronary heart disease. While listing esoteric factors such as apolipoprotein E isoforms, cholesteryl ester transfer protein, and lecithin-cholesterol acyl transferase, it did not even mention emotional stress or other psychosocial factors, much less spiritual ones.⁹⁷

How did we get to a point in medicine where interventions such as radioactive stents, coronary angioplasty, and bypass surgery are considered conventional, whereas eating vegetables, walking,

meditating, and participating in support groups are considered radical?

I'm not against the use of statins, stents, bypass surgery, or anything that works in the short run as a way of temporizing, but we also have to deal with the underlying issues involved in being human. Doctors are missing the opportunity to be of greater service to people, and being reduced to technicians. Because of this, many patients are voting with their feet, and going to alternative practitioners.

Why? Because whatever the alternative modality—massage, acupuncture, chiropractic, therapeutic touch—what they all have in common is that they touch people. Practitioners spend time with their patients, and listen to them. Practitioners talk about these issues as part of their overall approach.

There is a fundamental basic human need for a sense of love, connection, community, and intimacy, and this is so often unfulfilled in a typical doctor-patient interaction. More money is spent out of pocket by patients today for alternative interventions than for conventional ones—even though there is little science to prove their efficacy—because alternative

practitioners often fulfill patients' basic human needs. If conventional doctors don't address those needs, the medical profession is in danger because our patients are going to find alternative practitioners who do.

Healing and curing are not the same. Curing is when the physical disease gets measurably better. Healing is a process of becoming whole. Even the words "heal" and "whole" and "holy" come from the same root. Returning healing to medicine is like returning justice to law.

In my work with people who have heart disease, both healing and curing often occur. When the emotional heart and the spiritual heart begin to open, the physical heart often follows. But healing may occur even when curing is not possible. We can move closer to wholeness even when the physical illness does not improve.

The heart is a pump that needs to be addressed on a physical level, but our hearts are more than just pumps. A true physician is more than just a plumber, technician, or mechanic. We also have an emotional heart, a psychological heart, and a spiritual heart.

Our language reflects that understanding. We yearn for our sweethearts, not our sweetpumps. Poets and musicians and artists and writers and mystics throughout the ages have described those who have an open heart or a closed heart; a warm heart or a cold heart; a compassionate heart or an uncaring heart. Love heals. These are metaphors, a reflection of our deeper wisdom, not just figures of speech.

When I lecture at scientific meetings, hospitals, or medical schools, I always start by providing the scientific data as a way of establishing credibility. I show objective evidence from our randomized controlled trials that the progression of heart disease often can be reversed by changing lifestyle. Then I talk about what most interests me: the emotional, psychosocial, and spiritual dimensions of "opening your heart."

In the process of healing, you reach a place of wholeness and deep inner peace from which you can deal with illness with much less fear and suffering and much greater clarity and compassion. While curing is wonderful when it occurs, healing is often the most meaningful because it takes you to a place of greater

freedom from suffering. When healing occurs, people often become more peaceful, centered, happy, and joyful.

That which seems the most "soft" approach to wellness—love, intimacy, and meaning—is, in reality, the most powerful. This part of my work is the least well understood and yet perhaps the most important. There is a deep spiritual hunger in our culture. There has been a radical shift in our society in the past fifty years, and we are only now beginning to appreciate the deep spiritual hunger that has emerged.

The real epidemic in our culture is not only physical heart disease, but also what I call emotional and spiritual heart disease—that is, the profound feelings of loneliness, isolation, alienation, and depression that are so prevalent in our culture with the breakdown of the social structures that used to provide us with a sense of connection and community. It is, to me, a root of the illness, cynicism, and violence in our society.

The healing power of love and relationships has been documented in an increasing number of well-designed scientific studies involving hundreds of thousands of

people throughout the world. When you feel loved, nurtured, cared for, supported, and intimate, you are much more likely to be happier and healthier. You have a much lower risk of getting sick and, if you do, a much greater chance of surviving.

During the past twenty years of conducting research, I have become increasingly aware of the importance of love and intimacy and knew there were many studies documenting their power. Not until I systematically reviewed the scientific literature for this book did I realize just how extensive and rich is this field of study.

Studies Show: Intimacy Promotes Wellbeing

While some studies measure the number or structure of social relationships, I believe that it is your perception of the quality of those relationships—how you feel about them—that is most important.⁹⁸ As two distinguished researchers wrote recently, “Social support reflects loving and caring relationships in people’s lives.... Simple ratings of feeling loved may be as effective, if not more effective, in assessing social support than more comprehensive instruments that quantify network size, structure, and function.”⁹⁹

At Yale, for example, scientists studied 119 men and 40 women who were undergoing coronary angiography, an X-ray movie that shows the degree of blockages in coronary arteries. Those who felt the most loved and supported had substantially less blockage in the arteries of their hearts.¹⁰⁰ The researchers found that feelings of being loved and emotionally supported were more important predictors of the severity of coronary artery blockages than was the number of relationships a person had. Equally important, this effect was independent of diet, smoking, exercise, cholesterol, family history (genetics), and other standard risk factors.

A study of 131 women in Sweden also found that the availability of deep emotional relationships was associated with less coronary artery blockage as measured by computer-analyzed coronary angiography. As in the Yale study, this finding remained true even when controlling for age, hypertension, smoking, diabetes, cholesterol, educational level, menopausal status, and other factors that might have influenced the extent of disease.¹⁰¹

Similarly, researchers from Case Western Reserve University in Cleveland studied almost ten thousand married men with no prior history of angina (chest pain). Men who had high levels of risk factors such as elevated cholesterol, high blood pressure, age, diabetes, and electrocardiogram abnormalities were over twenty times more likely to develop new angina during the next five years.

However, those who answered, "yes" to the simple question, "Does your wife show you her love?" had significantly less angina even when they had high levels of these risk factors. Men who had these risk factors but did not have a wife who showed her love had substantially increased angina—almost twice as much. The greater the cholesterol and blood pressure and the greater the anxiety and stress, the more important was the love of the spouse in buffering against these harmful effects.

As the researchers wrote, "The wife's love and support is an important balancing factor which apparently reduces the risk of angina pectoris even in the presence of high risk factors."¹⁰² The researchers also found that those men who also had anxiety and

family problems, especially conflicts with their wives and children, had even more chest pain.

In a related study, these researchers studied almost 8,500 men with no history or symptoms of duodenal ulcer. These men were given questionnaires before they developed ulcers, so their responses were not influenced by knowing they had this disease.

Over the next five years, 254 of these men developed ulcers. Those who had reported a low level of perceived love and support from their wives when they entered the study had over twice as many ulcers as the other men. Those men who answered, "My wife does not love me" had almost three times as many ulcers as those who said their wives showed their love and support. This factor was more strongly associated with ulcers than smoking, age, blood pressure, job stress, or other factors. Men who also had anxiety and family problems had more ulcers.¹⁰³

When I reviewed the scientific literature, I was amazed to find what a powerful difference love and relationships make on the incidence of disease and premature death from virtually all causes. It may be hard to believe that something as simple as talking

with friends, feeling close to your parents, sharing feelings openly, or making yourself vulnerable to others in order to enhance intimacy can make such a powerful difference in your health and well-being, but study after study indicates that they often do. It's easy to make fun of these ideas—talking about your feelings in a group, opening your heart to others, practicing yoga, meditation, or prayer to rediscover inner sources of peace, joy, and well-being—but look at what a powerful difference they can make in our survival!

In the Tecumseh Community Health Study, almost three thousand men and women were studied for nine to twelve years. After adjustments for age and a variety of risk factors for mortality, men reporting higher levels of social relationships and activities were significantly less likely to die during the follow-up period. Relationships included the number of friends, how close they felt to their relatives, group activities, and so on. When these social relationships were broken or decreased, disease rates increased two to three times as much during the succeeding ten-to-twelve-year

period, including heart disease, strokes, cancer, arthritis, and lung diseases.¹⁰⁴

The results of a University of Texas study indicate that lack of group participation and absence of strength and comfort from religion had independent and additive effects. Those studied who neither had regular group participation nor drew strength and comfort from their religion were more than seven times more likely to die six months after surgery.¹⁰⁵ Seven times! Even though I am unaware of any factor in medicine that causes a sevenfold difference in mortality only six months after open-heart surgery, how many surgeons even ask their patients these two questions in assessing the risk of cardiac surgery?

Love promotes survival. Both nurturing and being nurtured are life-affirming. Anything that takes you outside of yourself promotes healing—in profound ways that can be measured—independent of other known factors such as diet and exercise. There is a strong scientific basis documenting that these ideas matter—across all ages from infants to the most elderly, in all parts of the world, in all strata of life.

Creating Intimacy

Sharing feelings rather than attacking or criticizing makes it easier for others to listen; listening leads to empathy; empathy leads to compassion; compassion increases intimacy; intimacy is healing.

We ask everyone to resist the natural inclination to give advice on how to solve the problem (unless someone specifically asks for it) and, instead, to focus on feeling and expressing his or her own emotions and experiences. Remember: The problem we are trying to solve is a lack of intimacy, not the kid on drugs or the boss at work. The lack of intimacy can be solved even when the other problems cannot.

This process takes courage and practice. It is unfamiliar to many people precisely because the experience of intimacy is so rare and precious in our culture. Although many of our research participants were initially skeptical—and sometimes even hostile—to the group support process, most later said that they found the group support to be the most meaningful, helpful, and powerful part of their experience.

As we have seen, increasing scientific evidence documents the healing benefits of opening your heart.

Many studies have shown that self-disclosure—that is, talking or even writing about your feelings to others—improves physical health, enhances immune function, reduces cardiovascular reactivity, decreases absentee rates, and may even prolong life.

Much of this important work has been conducted by James Pennebaker and his colleagues.¹⁰⁶¹⁰⁷ While disclosure of facts is helpful, disclosure of feelings is much more powerful.¹⁰⁸ The researchers also found that disclosure of traumatic or painful experiences had a more powerful benefit on health and healing than talking or writing about superficial events, even if in the short run the person felt worse. They found that the greater the degree of disclosure, the more benefits they measured. These benefits persisted over time. The benefits were particularly striking in those who talked about upsetting or traumatic experiences they had not previously discussed with others in detail.

What I try to do with patients, just as in my own life, is to help patients use the experience of suffering as a doorway to help transform their lives in ways that can make it richer and more meaningful. When most people think about my work, they think about diet,

which is important, but to me it's the least interesting aspect of the work.

The experience of suffering comes in many forms, whether physical, or the deeper suffering which is harder to measure and yet ultimately more meaningful to people—their loneliness, depression, powerlessness, unhappiness, anxiety, fear, worry, sense of being cut off, sense of helplessness or hopeless, or a lack of meaning in their lives. All of these things I experienced to the nth degree when I was in college.

I've had patients say to me, "Having a heart attack was the best thing that ever happened to me." I would say, "That sounds crazy. What do you mean?" They'd respond, "Because that's what it took to get my attention—to begin making these changes I probably never would have done otherwise—that have made my life so much more rich, peaceful, joyful, and meaningful."

Part of the value of science is to help raise the level of awareness for people so that they don't have to suffer as much to gain insight. Awareness is the first step in healing. They don't have to wait until they get a heart attack to begin taking these ideas seriously and making them part of their lives.

Altruism Has Healing Power

Do you want to be Mother Teresa or Donald Trump? Do you choose to help only yourself or do you choose to help others?

Trick question. Fortunately, you don't have to choose.

When you help others, you also help yourself. Seen from that perspective, helping others—being unselfish—is the most “selfish” of all activities, for that is what helps to free us from our loneliness and isolation and suffering.

Compassion, altruism, and service—like confession, forgiveness, and redemption—are part of almost all religious and spiritual traditions as well as many secular ones. We are hardwired to help each other. This has helped us survive as a species for the past several hundred thousand years.

The Tecumseh Community Health Study found that activities involving regular volunteer work were among the most powerful predictors of reduced mortality rates. Those who volunteered to help others at least once a week were two and a half times less likely to die during the study as those who never volunteered.

In other words, those who helped others lived longer themselves.¹⁰⁹

Studies of volunteers have shown that not only do they tend to live longer, but also they often feel better, sometimes reporting a sudden burst of endorphins similar to a "runner's high" while helping others. This good feeling that comes from helping others is a subset of a larger context: Anything that helps us freely choose to transcend the boundaries of separateness is joyful. When you volunteer, you have a choice. When you are pressured or coerced to meet someone else's needs, the joy of helping and the health benefits are compromised or even counterproductive.

At its best, making love is an ecstatic experience when two lovers merge as one, opening their hearts to each other and melting the boundaries that separate them. After my first sexual experience as a teenager, however, I remember thinking, "Is that it? That's all?" There was a brief physiological release but hardly an ecstatic experience. Only much later in life, when I learned to make love with an open heart, did I begin to understand how joyful it could be. There is a growing interest in tantra and other

approaches that help couples learn to combine sexuality and spirituality.

The ecstasy that comes from melting the boundaries between self and other is also part of most religious and spiritual traditions. While there are many pathways to experiencing God or the Self, praying with an open heart is one of the most powerful and joyful. Someone might choose to live a celibate life as a monk or a nun or a swami or a priest out of repression or fear of one's sexual impulses, but at its highest form they might renounce worldly relationships because the feelings of ecstasy and freedom that come from merging with God, with the Self, are so much more powerful even than merging with one's beloved mate.

On one level, we are separate from everyone and everything, the self with a small "s." You are your self, and I am my self. On another level, though, we are part of something larger that connects us all—the universal Self, by any other name: God, Buddha, Spirit, Allah, whatever.

Even to give a name is to limit it. When God was revealed to Moses, he asked, "When I tell the people that the God of their fathers has sent me, they will

ask his name. What shall I tell them?" And God said, "I am what I am. Tell them I am has sent you."¹¹⁰

The vision of unity consciousness and oneness is found in virtually all cultures and all religions. God or the Self is described as omniscient, omnipresent, and omnipotent. As described in the Old Testament, "The Lord is One." If God is everywhere, omnipresent, One, then we are not separate from God.

What we experience as different names and forms is God or the Self in varying disguises, manifesting in different ways. All divisions are man-made. The word yoga is Sanskrit for "union." A central precept in Hinduism is "Thou art that... The universe is nothing but Brahman."¹¹¹ According to Jesus, "The kingdom of God is within you."¹¹² Buddha taught, "You are all Buddhas. There is nothing that you need to achieve. Just open your eyes."¹¹³ The Arabian prophet Muhammad, founder of Islam, wrote, "Wherever you turn is God's face... Whoever knows himself knows God."¹¹⁴ Albert Einstein, the greatest scientist of the twentieth century, wrote, "The true value of a human being can be found in the degree to which he has attained liberation from the [separate] self."¹¹⁵ This experience is sometimes

described as Oneness or at other times as complete emptiness, void; more precisely, as both. This paradox—everything and nothing—is at the heart of the transcendent experience, “an immediate, nondual insight that transcends conceptualization.”¹¹⁶ For it is our concepts of how we think things are that often keep us from seeing and experiencing how they really are.

By analogy, Swami Satchidananda describes the one light in a movie projector manifesting as an entire universe of people, places, and dramas on the movie screen. When we can maintain this double vision—seeing the different names and forms while remembering it’s just a movie and seeing the one light behind the many images—then we can more fully enjoy the movie without getting lost in it, without forgetting who we really are.

Although this experience of Oneness lies beyond the intellect, it can be directly experienced. Compassion naturally flows when the divisions that separate us from each other begin to fade.

Compassion helps to free us from anger. Anger itself is often a manifestation of the misperception that we are separate and only separate.

The Intimacy of Touch

What is the largest organ in your body? Your skin. We all know that a loving touch feels good, but did you know it can also affect your health and even your survival?

Intimacy is healing. Touching is intimate. Lack of human contact can lead to profound isolation and illness—and even death.

A number of studies are now showing the benefits of touch in newborns. At the Touch Research Institute in Miami, premature babies given three loving massages a day for ten days gained weight forty-seven percent faster and left the hospital six days sooner, saving \$10,000 each.¹¹⁷

Despite this, we do not touch each other very much in the United States when compared with other parts of the world. Psychologist Sidney Jourard observed and recorded how many times couples in cafés casually touched each other in an hour. The highest rates were in Puerto Rico (180 times per hour) and Paris (110 times per hour). Guess how many times per hour couples touched each other in the United States? Twice! (In London, it was zero. They never touched.) He also

found that French parents and children touched each other three times more frequently than did American parents and children.¹¹⁸

Again, awareness is the first step in healing. When we understand the healing power of touching, we can look for ways of increasing our contact with other people while respecting their boundaries. Give someone a pat on the back or a hug when they've done a good job—or even when they haven't. Get a massage or manicure or shampoo. Shake hands when you see a colleague. Hold hands with your beloved—and don't forget to kiss.

Therapeutic touch is a type of massage that also combines the intention of the person to help or heal while in a meditative state. It was pioneered by Dolores Krieger and is increasingly taught and used by nurses and other health practitioners. Therapeutic touch also can be practiced by simply placing your hands near someone rather than on them. The goal is to “rebalance energy” and to stimulate a person's own natural intrinsic healing responses. One of the leading practitioners and researchers of therapeutic touch is Janet Quinn, who described it this way:

"Therapeutic touch, at its core, is the offering of unconditional love and compassion... We're here for service. We're here to love other people... The most fundamental longing of the human heart is for union with the Divine."¹¹⁹

Beyond your feelings and your body and your thoughts and your mind is the Self that witnesses all of this. While this Self is beyond the mind's capacity to experience it, you can feel this Self in your heart as love: "Love comes from God, and everyone who loves is begotten by God and knows God; those who don't love, don't know God; for God is love." (1 John 4:7)

When we realize that, this awareness creates tremendous freedom in making different choices. We can choose to live with an open heart, a love that can include everyone and everything. We are intimate with all things as all things. In that timeless moment, wherever we go, we find only our own kith and kin in a thousand and one disguises. We end where we started, with love and survival. Let's give the epilogue to the Sufi poet Rumi, who lived in the thirteenth century when he wrote:

There is a community of the spirit.

Join it, and feel the delight
of walking in the noisy street,
and being the noise..
Why do you stay in prison
when the door is so wide open?
Move outside the tangle of fear-thinking.
Live in silence.
Flow down and down in always
widening rings of being.

Chapter Seven
Sandra Ingerman:
Medicine for the Earth

Sandra Ingerman is the author of the best-selling classic *Soul Retrieval* (Harper, 1991), *Medicine for the Earth* (Three Rivers, 2001), *Welcome Home* (Harper, 1994) and *A Fall to Grace* (Moon Tree Rising, 1997). She teaches workshops in shamanism worldwide, and is a licensed marriage and family therapist and professional mental health counselor. She is recognized for bridging ancient cross-cultural healing methods into modern culture and adapting them to the needs of our times. She has done a series of remarkable experiments showing that environmental pollution can be reversed using spiritual methods. I met with her during her travels, and worked with her to produce the following summary of her work for inclusion in my anthology *The Heart of Healing*:

For tens of thousands of years people around the world have been practicing shamanism. Although the

word "shaman" is a Siberian word referring to a spiritual healer, shamanism has been practiced not just in Siberia but in parts of Asia, parts of Europe, Australia, Africa, and native North and South America.

Shamans have taken on the role of healer, doctor, priest, psychotherapist, mystic and storyteller in tribal communities.

One of the most common ceremonies performed by shamans is the shamanic journey. During a journey a shaman goes into an altered state of consciousness, usually by listening to some form of percussion. This altered state allows the shaman's soul to take flight, journeying outside of time and space into what Carlos Castaneda termed "non-ordinary reality."

Through these journeys the shaman has access to invisible worlds, where there are helping spirits. The spirits typically take the form of guardian animal spirits which some call power animals, and human spiritual teachers who are willing to share information and healing help.

In traditional shamanic cultures, there were one or a few people in a community acting in the role of the shaman and journeying on behalf of the community.

Today we are seeing a revival of shamanism, but the form is much different than that of a tribal culture. We see people from all walks of life learning shamanic practices.

The shamanic journey is a method of direct revelation. It gives people access to spiritual guidance without the need for an outside authority figure. There is an obvious need for this in our culture today.

One of the basic principles in shamanism is that everything that exists is alive and has a spirit. Shamanism teaches us about the interconnectedness with the earth and all of life. Back in the 1940s and 1950s, quantum physicists discovered that there is a field of energy that connects all life. Shamans and quantum physicists both speak of a web of life.

Living in a technological culture affords us many benefits. In many ways that I am sure you can relate to, technology has cut us off from the web of life, and from experiencing our connection with nature and its cycles and rhythms.

As we moved from a people that honored the spiritual worlds and the cycles of nature, we started to only

trust the rational and scientific mind which believes that only what you can see, feel, hear, taste, and smell in our ordinary world exists.

Through the socialization process we were taught to believe that the invisible and spiritual worlds are merely part of our imagination.

At this point a spell was cast upon us, having us believe that the spiritual worlds are in our imagination, that we are separate from each other, other living beings, and nature, and that amassing material wealth is the only way to happiness.

This spell has created physical and emotional illness in our world today. The meaning of life has been lost, creating a deep sense of despair in many people. Antidepressants have taken the place of meaningful and passion-filled lives.

As we no longer connect with the cycles of nature, we are out of harmony and balance with the rhythm of life, we are no longer flowing with the river of life. This has created a stress, which manifests as emotional and physical illness.

The cure for all this is to re-establish our connection with the field of energy that unites us all, and to bring back spiritual practices into our lives.

I started practicing shamanic journeying and healing in 1980. In the practice of shamanism we look at the spiritual aspect of illness. Classically a shaman might diagnose an illness as power loss, soul loss, or a client might have a spiritual intrusion or harmful energy in him or her. Through the guidance of my helping spirits, I learned how to bridge the classic method of soul retrieval into a modern day culture to help people heal from trauma.

From a shamanic point of view whenever we suffer an emotional or physical trauma there is the possibility that a part of our soul or essence leaves our body and goes into non-ordinary reality where it waits to be recovered.

In psychology we talk about this as dissociation; in shamanism we call this soul loss. Soul loss is how we survive pain and shock. The psyche has this brilliant self-protection mechanism; we "go away" while pain is occurring so that we don't have to experience the full impact of the pain. If I were going to be in a head-on

car collision, the very last place that I would want to be at the point of impact is in my body.

Today, causes of soul loss might be any kind of emotional or physical abuse, wartime stress, or being in a physical disaster like an earthquake, hurricane, or fire. Another cause might be surgery. I often hear people complain that they have not been the same since being under anesthesia. Other causes might be being in an accident, or experiencing a traumatic separation like divorce, or the death of a loved one. Anything that causes shock could cause soul loss.

Some of the more common symptoms of soul loss include dissociation, post-traumatic stress syndrome, chronic depression, addictions, illness such as immune deficiency problems, and the inability to get over the grief of a divorce or death of a loved one.

Looking at soul loss and addictions is interesting. When, on a conscious or unconscious level we don't feel filled up with our own soul, we often look to the external world to fill us up. Some people use drugs, substances, food, relationships, or work to try to fill up empty feelings. Some of us think that by collecting

more material wealth or material objects we will feel filled up.

The drive in the world today to collect and gather material wealth and objects is a clear symptom of soul loss on a mass level. When we look at how political decisions are made, for financial reasons, without honoring their effects on animals, plant life, or our environment, one has to wonder how dissociated we must be to put money over life.

Creating Intentionally

Part of the evolution of the work has to do with how we tell our clients healing stories. Oftentimes we are unaware of how much power the imagination has to heal. A good healer can tell stories that stimulate a person's imagination to heal.

People don't need bad news, or to hear stories that plant seeds of fear. People need stories that plant seeds of hope, inspiration, and love. These are the stories that heal. Learning how to share healing words and stories is what I most emphasize in teaching soul retrieval today. If we can inspire people with what gifts might return to their lives, this creates the possibility for positive change to occur.

When a person goes to a doctor, a psychotherapist, a shamanic practitioner, or another alternative practitioner, they are going for a cure for their problem. Over time, I started to realize that there is a difference between healing and curing.

For a cure to hold, healing must take place. After there is an alleviation of symptoms, it is important for the client to look at what is needed to restore harmony into his or her life. Disharmony causes disease and harmony creates health. This does not mean the client should blame himself for being ill or having a problem. Blame and judgment only adds to more disharmonies.

But it is important to look at how to create change in our lives that supports the benefits we receive through different healing modalities. I call this "life after healing." If we only do the spiritual curing work, we just give a spiritual aspirin without long-term results.

One part of healing is helping people reprioritize their lives. We need to work with all aspects of what is needed to have a healthy life: diet, exercise, aligning oneself with the cycles of rhythms of nature,

and looking at our relationships, to name just a few. It is important to add daily spiritual practices such as meditation or shamanic journeying to help alleviate stress, create harmony and balance, and provide a way to receive personal direct guidance.

There is another piece of the puzzle that is not always talked about. When a client is physically ill or emotionally depressed it takes a lot of energy to go about the day. To run errands when you are not feeling well—either emotionally or physically—takes a lot of energy.

When you are “cured” of the illness, this means that you have a lot more energy available to you. Many people today end up taking that energy and unconsciously creating another illness, trauma or drama with it. We are not taught how to use our creative energy in positive ways. In school we were trained to obey rules and fit into society. You may have been taught that there are only select creative people on the planet—and that doesn’t include you.

We are completely unaware of how much creative potential we all hold to create a positive present and future for the world and ourselves. To accomplish this

we must retrieve our God-given gift of imagination, and be able to dream a new world for ourselves into being.

In my own work with people I try to get them to take small steps into using their creativity. I ask clients, "How do you want to use the creative energy that is returned to you during your soul retrieval, in a positive way?" It might be something as simple as taking a class, or taking more walks out into nature. If people come up with overwhelming goals, they become paralyzed.

If all the mystical traditions are correct, which I think they are, we are a merely a reflection of the creative force of the universe. This means that we have the potential to manifest a positive world, which contains beauty, harmony, love and abundance. It is crucial at this time on the planet for all of us to learn about our creative potential. This takes using our imaginations and the recognition that we are spirits in a body that came to learn to manifest beauty on the planet, as the Creator did in creating our world.

We live in a time when people look to medications and outside authority figures to change their lives.

The truth is that the only person who can change your life is you. And this is not a burden. This is one of the joys you came here to experience when you chose as a spirit to take a body to learn how to manifest form in the world. We have just forgotten our own soul's purpose.

During the time I was focusing on teaching clients how to use their creative potential, I had an experience working with someone that took the principle of creativity to another level.

On a hot fall day in New Mexico, Mary came to see me. By looking at her one could see that she was obviously quite ill. When we started to talk, she shared with me that she had advanced AIDS.

I told her that I would do what I could to help her. Death, in our culture is often seen as a failure. But death is oftentimes the next step in our healing process. In shamanism, death is not seen as an end, but rather a transition.

Looking at how far Mary was in her illness, I knew that the next step in her healing process could be life and the next step could be death. In bringing back lost soul parts for her I knew I would bring enough of

herself "home" so that her soul could choose the next step.

One piece of information that came up in our conversation was that AIDS was the third life-threatening illness that she had experienced in her life.

As I journeyed, I found myself in a surrealistic scene. My helping spirits were obviously exaggerating the scene to make a point. I found myself in a suburban neighborhood that was depicted like a cartoon. The sky was bright blue with a bright yellow sun with eyes and a smile shining down on everything. The cars were very bright colors and they all had faces and smiling. The trees were swaying and singing. The birds were singing loudly. The houses all had smiling faces and were singing and swaying. I was seeing life in all its vibrancy.

There was Mary at about the age of three, on a tricycle, riding down the street—with no expression on her face. There was such a difference in how she looked, compared to the life around her.

This is the message my helping spirit then imparted to me: "Mary's illness is due to apathy and the cure is

passion. Her lesson in this lifetime is what happens when another life-form in your body has more passion to live than you do. It thrives—and you do not.”

Mary did die about six months later. But I felt as though she left me with an incredible message to share with the world. For I do not see our modern day culture embracing life with passion. Most of us just try and survive and get through the day. Is one of the reasons we are seeing such strong bacterial and viral infections today that these life forms want to live more than we do? It seems that they have a faster learning curve than we do and are learning to thrive no matter what medications we come up with to destroy them. The true antidote is to find what brings meaning into our lives.

Shamanism has been a practice that evolved from hunting and gathering communities. It was important to have a shaman who could divine food sources as well as heal members in the community.

Today I teach people, after a shamanic healing session, to journey for themselves to get personal spiritual guidance on how to make changes in their lives that will support their healing. We all know

that plants and trees grow from seeds. The seed gives the plant and tree the information needed to grow and adapt to stay healthy. We all have a seed of light within us that has all the information we need to heal. Shamanic journeying is one way for clients to tap into their knowledge within.

I don't have clients go to their helping spirits and ask what they should do. This would be giving their spiritual authority away and would not honor the client's own inherent wisdom. Rather, I have clients contact their helping spirits to receive guidance that gets the client using his own wisdom and creative energy.

Medicine for the Earth

When we have worked on our own process for a time it is important to learn how we can be of service to all life on the planet.

The timing on this will differ from individual to individual. Some people need more time to heal inner wounds than others do.

Rivers have always reminded me of the magic of life. My love for rivers led me to wonder whether it is possible to reverse river pollution, which led to an

interest on a broader level in the reversal of all environmental pollution.

In 1978 I graduated with a bachelor's degree in biology, specializing in Marine Biology, from San Francisco State University. My curiosity about the question of reversing river pollution led me to apply for a master's degree in biology. My thesis proposal was to be on reversing the pollution in our world's rivers.

At that time I realized I did not want to stay in the field of science, and instead enrolled at the California Institute of Integral Studies where I pursued my master's in counseling psychology.

Although my path through the 1980s and 1990s was devoted to teaching shamanism, I personally used shamanism to explore reversing environmental pollution through the use of spiritual methods.

One of the most important messages I was to receive over my twenty years of journeying on this issue was this: It is who we become that changes the world and our environment—not what we do. Harmony within will create harmony without. The true work is learning how to change our thoughts, attitudes, and belief systems.

A change in our inner environment will be reflected in the outer world.

It is time to bridge science with spirituality to address our environmental problems today. All spiritual traditions teach that everything that manifests on the physical level begins on the spiritual level. As we bring daily spiritual practices into our life, which change our inner environment, the change will be reflected back to us in the outer world.

Besides working with my own shamanic journeys, I started researching miracles. Stories that come from the Bible, the Kabbalah, and from various Taoist, Hindu, yogic, alchemical, Egyptian, and shamanic works, show that miracles were once an everyday occurrence. I researched different spiritual traditions to give me clues as to how miracles were performed by ancient cultures, mystics, and saints. As I read about miracles, a formula of elements that seem to be part of all miracles began to form. The formula that came to me is hologram. The elements cannot be taken separately but combined with each other create transmutation. The definition of transmutation I am using is the ability to change the nature of a

substance. The work of effecting environmental change is how to change toxic substances into neutral substances.

The formula I arrived at is intention + union + love + focus + concentration + harmony + imagination = transmutation. These elements all work together.

For all miracles to happen we must hold a strong intention of what we want to see happen. This involves concentration and also the ability to hold a focus on our goals.

All miracles involve union with a divine force. Union is the key element involved in the miracles of healing performed by Jesus or the great Indian gurus Sai Baba and Ammachi, and even the miraculous self healing of the modern day mystic Jack Schwarz, who while being tortured by the Nazis healed his wounds before their eyes. These are just a few examples of people who could perform miraculous healings. All of them teach that they are one with God or the divine while these miracles take place.

Love is an essential ingredient in all miracles as it is only love that heals. Techniques do not heal and they never have. When one creates sacred space that

contains the energy of love, healing just happens. The power of love and appreciation has unlimited potential to heal. Harmony within creates harmony without.

Imagination is another key in performing the miracle of transmutation in that we must be able to envision an environment that is pure and clean and which supports all of life. With our imagination, we have the ability to sculpt the world.

We have to be able to see, feel, hear, smell, and taste the world we are trying to create as if we have already created it.

Tools for Reversing Pollution

There are two levels I work with in teaching people how to reverse environmental pollution.

The first level is the personal work we must do to learn how to transmute and transform the energy of our negative thoughts and feelings paying attention to the energy we are sending into our field. This does not mean we should not have negative thoughts and feelings. To do so would be to deny our humanness. But we can learn how to transform the energy of these feelings.

Words have power. Words are vibration. We can learn from the Hindu, Hebrew, and ancient Egyptian

traditions that teach when we say a word a vibration is sent up to the universe manifesting form back down on earth. "Abracadabra," the Aramaic "abra q ad habra," means, "I will create as I speak." We must become conscious of what we are creating for others and ourselves through the words we use. Almost all creation myths, of whatever culture, start with the world being created with a sound or a word.

We need to learn how to honor and be in a place of love and appreciation for nature and all of life. As we honor the earth, air, water, fire, and all the life forms that live in these elements, as well as honoring the cycles of the moon, stars, and seasons, we work in cooperation and collaboration with the spirit that lives in all things and the web of life. Among the Salish people of the Pacific Northwest, the word "skalatitude" is used to describe what life is like when true kinship with nature exists: "When people and nature are in perfect harmony, then magic and beauty are everywhere."

It is important to perceive ourselves as connected to one field of energy, the web of life. There is no us v. them. There is only one.

The second level of the work is to join together as community to perform ceremonies to transmute and transform the environmental pollution that does exist today. The hope is that as we learn how to honor our environment, we will stop polluting the elements that give us life.

In my Medicine for the Earth gatherings, I teach people how to transfigure or shapeshift into their own divinity to be in a place of harmony, and share spiritual light from this place of being. We also add toning as a way to stay in a transfigured state, using sound along with spiritual light to create healing. If one mystic in history could transmute toxins, it means we all have knowledge within us to tap into our divinity to do the same.

In former times we might have asked the spirits to clean up the pollution for us using the principle of divine intervention. I see this as a childlike approach, like saying, "Mommy, Daddy clean up my mess." Part of the evolution of consciousness today is for us to stand up and take a role of true partnership, working with an abundance of helping spirits to clean up our environment. One way shamanism is evolving

today is that it is asking practitioners to perceive their power as equal to the spirits and work in collaboration and partnership for healing others and the planet.

In my trainings we have been doing controlled experiments where we intentionally pollute deionized water (pure water with no minerals in it) with ammonium hydroxide, a common and dangerous pollutant in our environment. As ammonium hydroxide is a strong base it is easy to check its presence with pH strips and pH meters. In all the ceremonies we have performed we have been able to change the pH 1-3 points toward neutral. In all these experiments we used pH strips to test for changes.

In one ceremony we had ammonium hydroxide in water in one beaker and nitric acid in water in another beaker. The pH of the beaker with the nitric acid went up two pH points toward normal while water with ammonium hydroxide went down two pH points toward neutral. Both a physicist and a chemist confirmed these results.

Here is an analogy for pH change. Imagine a 1,000 square foot room with white wall-to-wall carpeting.

Now imagine that the carpet has a huge grape juice stain that covers the entire 1,000 square feet. The completely stained carpet corresponds to a pH of 11. If the pH changes from 11 to 10, 900 square feet have been cleaned. If the pH changes from 11 to 9, then 990 square feet of the carpet has been cleaned.

The time for the myth of one hero that saves us is over. I believe our descendants will read new myths of how communities of people gathered together to focus their spiritual energies to change the world.

Earth, air, water, and fire (as the sun) give us life. When you pollute that which gives you life, illness occurs. It's time for us to connect the dots why there are such high levels of cancer and other immune deficiency problems, especially among women and children, today. We have created an environment that no longer supports the feminine and innocent in our world.

Healing the Waters Within

After we began having success with changing the pH level of polluted water, I started inviting people into the middle of the circle along with the water. Since our bodies are mostly water, it only makes sense that

the same ceremony used to transmute toxins in the water can transmute illness in the body.

During one ceremony, a woman named Susan was one of the people in the middle. For the previous few years she had been suffering from debilitating lupus. She could barely walk and relied on a service dog in her life at home.

The day after we performed the transmutation ceremony she was hiking. That was a year ago—and she is still hiking away.

One of the reasons that shamanism continues to be practiced tens of thousands of years after it began is the spirits' ability to help evolve the work to address the needs of new cultures and new times.

Today, so much illness is being caused by chemical pollution that we can't keep using the same methods that were used thousands of years ago. Although I still teach and use some of the classic methods, I have begun offering new trainings teaching the use of spiritual light and sound for healing. Some quantum physicists state that in the future, the use of sound and light will be the main form of healing. I can see the trend moving in this direction.

I have been training practitioners to use their own divinity, as well as the light from the pure vibration and energy of the power of the universe, to share spiritual light and sound to stimulate a client's own healing ability. For you can never truly heal another person. As healers, we can only stimulate that golden seed of light within others that knows how to heal. As healers, we must perceive our clients as pure divine light to help raise their vibration. This is not to take away from the fact that the client perceives himself as suffering. But as a healer, if we perceive the client as divine and perfect, this lifts his own vibration and resonance so that he can heal.

I have also collected some extraordinary case studies of students who practice the journey of transfiguration into their own divinity, source, oneness on a regular basis. Health problems, relationship issues, and work issues are clearing up. As people are feeling one with the field of energy, a different resonance and frequency is set up within, getting people back in flow with the river of life.

I am encouraging practitioners to teach clients how to find this light, source, oneness inside of

themselves. In this way the client can keep up with raising the vibration, resonance, and sense of spiritual light within that the practitioner stimulated in their work together.

Once again, if one mystic in the world could transmute poisons and toxins, we can all do the same for the planet and ourselves. But we must perceive ourselves and all of life as pure divinity and light, and what we take in as divine and as light.

My next step in the world is to bring the work of honoring the environment and spiritual light to children. I predict this will be an emerging trend. For after all, our children are our future.

In closing, a good healer can heal with pure love. If a practitioner can create sacred space by being fully present, in his or her heart, and in a state of love and honoring the divine in everyone that walks into the office, healing just happens. Techniques don't heal; it is only love that heals.

Chapter Eight
Neale Donald Walsch:
Tomorrow's God in Action

Neale Donald Walsch is the author of fifteen books, and founder of the nonprofit Conversations With God Foundation. In 1992, after four failed marriages, poor health, spotty relationships with his children, and losing his job, he fired off an angry letter to God—and to his surprise, received an answer filled with profound truths. Those answers have touched the lives of millions of people through his books, the first of which was *Conversations With God* (Hampton Roads, 1995), and the most recent of which is *Tomorrow's God* (Atria, 2004). He recently created Humanity's Team, a worldwide grassroots movement to catalyze the emergence of a new form of spirituality on Earth. I met with Neale Donald Walsch in his home in Ashland, Oregon, for an extended interview, of which the chapter below is a condensation, and will appear in my anthology *Healing Our Planet, Healing Our Selves* in 2005.

In the last couple of years, a wave of shock and horror has gone through the hearts and minds of people all over the globe as they have witnessed innocent people being beheaded by extremists in the Middle East. We are compelled to ask, "What could cause human beings to do such a thing?"

We asked ourselves similar questions after the cataclysmic events of September 11, 2001. What state of mind could produce an action like flying a planeload of civilians into a building? On television, we saw crowds of people in the Middle East cheering and dancing in the streets in response. Our culture realized that the hijacking wasn't just the action of nineteen men. We sat in stunned silence as we realized that not only could this event occur, but that thousands of people could agree with it. A whole swath of humanity has collectively created a state of being that allows them to embrace mass murder with joy and celebration.

These events have prompted philosophers and spiritual leaders to ask us all, "What role, if any, do you think that you or your society have played in the creation of this extraordinary event?" Astute people

began to see that personal responsibility isn't just a concept without functional reality; there's a direct connection between the mental and spiritual health of the planet and the individual health of the people on it.

We are in a time of introspection, in which individuals have begun to see the connection between planetary health and vibrance, and the health of the human species; the views of individuals, assembled into a consciousness held by a large number of people, becomes our collectively created experience. Right now, you could walk down the street in many cities and not find a single person who understands that it is the most sacred beliefs of individuals in the world that create our collective behavior. The beliefs that humanity currently holds about itself are simply no longer viable and no longer serve us.

Where do we start? There are five fallacies about God, and five fallacies about life, that create dysfunction, violence, conflict, and a state of continuing turmoil on this planet. The five fallacies about God are:

1. Humans believe that God needs something.

2. Humans believe that God can fail to get what He needs.

3. Humans believe that God has separated them from Him because they have not given Him what He needs.

4. Humans believe that God still needs what He needs so badly that God now requires them, from their separated position, to give it to Him.

5. Humans believe that God will destroy them if they do not meet His requirements.

It's important to draw the connection between cause and effect, to show how a belief in this creates an outcome called that. The first fallacy, that God needs something, is a self-destructive belief. As soon as we construct a God who needs something in particular in order to be happy, in the absence of which He will be unhappy and send down His wrath, we set up a damaging idea of deity itself. The consequence of this belief is that it gives us human beings the moral authority to act in similar ways toward each other—and consider it normal.

We then construct our social conventions, our legal systems, our political realities, our economic models—

in fact the whole fabric of human interactions—based on the moral authority we gather from a God who behaves in this way. We allow ourselves to say, for instance, that, “If you don’t fulfill my needs in this relationship I will also punish and condemn you. It may even be perfectly okay to kill you, because sacred scripture authorizes me to do so.” Virtually every scripture—the Koran, the Bible, the Bhagavad Gita, and the Book of Mormon—talks about a God who not only becomes angry and kills people, but instructs all other humans to kill them as well. So just that one single idea, that God needs something to be happy, sends people running to the hills, trying to figure out, “What is it that God needs?”

Eight different people will provide eight different answers to that question. Who has it right? Once we’ve chosen one, we hope that we made the correct choice. Then, most dangerously, we turn around and call the other seven wrong, and decide what their punishment should be for being wrong. We look to the same misunderstandings and the same fallacious beliefs to determine that punishment as we did to discover our original idea of God. We pile fallacy upon fallacy,

error upon error, mistake upon mistake. We look to the same God we misunderstood in the first place to help us understand the answer to the question, "What shall we do with those who don't understand you?" Those outcomes can range anywhere from a simple admonition to something far more drastic, like crucifixion.

Every human construction, our entire global system, is based on fallacious fundamental beliefs that have no basis in ultimate reality. The five fallacies about life are:

1. Human beings are separate from each other.
2. There is not enough of what human beings need to be happy.
3. To get the stuff of which there is not enough, human beings must compete with each other.
4. Some human beings are better than other human beings.
5. It is appropriate for human beings to resolve severe differences created by all the other fallacies by killing each other.

These flawed perceptions began when we were in very primitive stages of development as a species. During

the earliest days of humanity's evolution, the world outside of us was largely outside of our understanding and comprehension. We simply saw what we saw. We did not know why things happened the way they did.

In those very early days we knew that there was something out there. What it was, we did not know. And with the first lightning bolt that struck, with the first peal of thunder, we were clear that it was more powerful than us. When we saw a volcano erupt, when we saw a shooting star, we said, "That's a lot bigger than me. I can't make something like that happen. What did make it happen?" Quite naturally, early humans came to the assumption that there was something in the universe larger than themselves. From there it was a very short leap to asking, "How can I please that force, so the rain will come and I can grow my crops? How can I control these effects I see in my exterior world? There must be some way."

What you think becomes your reality. That's true whether it's practiced in the year 2005, 21 B.C. or 2 million years ago. In this day and age, when the thinkers are of relatively high consciousness, this can be a plus, but the process can be a minus if the people

doing the thinking are just barely evolved enough to grapple with these ideas. So if our ancestors, when they saw fire in the sky, did a little dance, and the fire stopped, from that day on they connected their dance with the fire stopping.

I once gave a lecture at the Church of Today in Michigan. This church was in an old building with a tin roof, and it started to rain. Even with amplification, the congregation couldn't hear me. I watched all 1,400 faces look up at the roof when the rain began. It was 11 o'clock in the morning of an all-day retreat, and I realized I'd lost my audience.

I said—as loudly as I could—into my microphone, “The rain is really hard to hear over, isn't it?” Nods said, “Yes.” It was coming down in sheets. I jokingly said, “Not to worry, I'll make it stop.” At that moment it stopped. The whole audience was awed. After that they hung on every word I said.

That's how shamanism got started. No one back then had the consciousness to know any better, not even the shaman. He also thought, “This how it happens.” He was so convinced that his dance was making it rain, that the next five times he danced, four out of those five

times the rain began. Your thought creates your reality. The thought became the reality which became the thought which became the reality. That's how the cycle began. There was so much faith put in the healer, the medicine man, that he became effective by virtue of that first accident and the shared belief that arose from it. Eventually these attempts to control our exterior environment became mythologies, and the mythologies turned into religions. People believed that It, whatever It was, needed something in order to feel better. Since we humans needed things in order to be happy, we thought God must be the same way. We created God in the image and likeness of man.

We create God. And we're going to create a new God, tomorrow's God, right here on earth during the course of the next twenty-five years. We're going to create a less dysfunctional one. In my book *The New Revelations*, I invite you to take the Five Steps to Peace. In taking these steps, you:

1. Acknowledge that some of your old beliefs about God and about Life are no longer working.

2. Acknowledge that there is something you do not understand about God and about Life, the understanding of which will change everything.

3. Are willing for a new understanding of God and Life to now be brought forth, an understanding that could produce a new way of life on the earth.

4. Are courageous enough to explore and examine this new understanding, and, if it aligns with your inner truth and knowing, to enlarge your belief system to include it.

5. Live your life as a demonstration of your highest and grandest beliefs, rather than as a denial of them.

What religion needs now is what Sir John Templeton calls "Humility Theology." He defines this as "a theology that is willing to admit it does not have all the answers and is willing to live within the question." Our idea that we have all the answers—about God, about life, and about each other—is killing us. Yet fallibility is the one thing religious leaders can't admit to. The first of the Five Steps to Peace that I identify in my work is, "Some of our old beliefs aren't working." The second is, "We choose to acknowledge there is something we don't understand

about God and about life, the understanding of which could change everything." Can you imagine the pope saying that? In the same spirit that Martin Luther asked his congregation to tack The Ninety-Five Theses on church doors all over Europe in 1517, I invite you to copy the Five Steps to Peace out of this book, and tack them to the church doors.

Most of humanity is sleepwalking. People can be aroused out of that sleep. The process happens largely through the entertainment industry: books, songs, television, and motion pictures are key means by which people are participating in the great awakening. And that process is exponential. It's not a 1, 2, 3, 4 progression. It's a 2, 4, 8, 16, 32 progression as people influence each other.

The Conversations With God books have sold upwards of seven million copies in thirty-four languages. Those seven million people are talking to seven million more. So suddenly you're looking at fourteen, then twenty-eight million people who are impacted by these messages. That's not a small number of people. When you multiply that by the number of message centers, the Deepak Chopras, the Marianne Williamsons, you're

suddenly talking 100 or 150 million people. Pretty soon, we're approaching critical mass and all the dominos begin to fall.

Jean Houston uses the phrase "jump time." At jump time, humanity does not evolve in a slow, upward climb. It hits critical mass and then does a very rapid jump. As our consciousness changes, our institutions change. At jump time, we create a whole new cosmology that results in the construction of new collective realities around politics, economics, education, government. The way we live our lives, collectively, shifts and changes during jump time. It happens relatively quickly. Over a period of a decade or two we see enormous changes, and by the end of a quarter century—just twenty-five years—virtually everything is different.

The last great, true jump was the Renaissance. In a period of just twenty-five to thirty years, everything was different. Society's attitudes toward sexuality, our beliefs about God, science and society, everything changed, just like that. Many sociologists now agree that we are very close to the next jump time. Cosmologists refer to it as an evolutionary leap;

religionists call it a quickening of the spirit; I call it the Great Awakening.

How can you play a part in this? You do it by taking personal responsibility for making the people whose lives you touch aware that it is time to wake up. You choose to participate in the Great Awakening as an awakener. You embrace the personal intention of waking up as many people as you can. I've made that the intention of my life and I suspect that I've touched some seven million people in that process. It doesn't matter if you just touch a dozen, because your reach extends far beyond what you might imagine. I make this point more directly and more specifically in each of my books. In the most recent one, *Tomorrow's God*, I say it right in the Introduction:

"This book has come to tell you that you can change the course of humanity.

"You.

"Not only the people who run governments or own corporations or lead movements or write books or are influential for some other reason. Not only those people.

"You.

"You can change the course of human history.

"This is not an exaggeration. Please believe me.
This is not an exaggeration.

"This book calls you to that singular undertaking.
It invites you now to internalize the wisdom of both
ancient and contemporary masters found here; not merely
to hear it again, but now to receive it, to take it in,
to absorb it at the deepest level of your being, until
it becomes the essence of who you are at the cellular
level.

"Life will be inviting you over the years
immediately ahead to act and respond from this level of
Deep Knowing. What you place there now in terms of the
things you profoundly believe, and how far you spread
the messages found here through the living of your life
in a new way, will make all the difference in the world
to the world.

"Yet do not feel that you have to do all this by
yourself. Perhaps the most uplifting and exciting part
of the message that is brought to us in this book is
that now, none of us have to 'go it alone.' We have

teammates, and we can join them and call them to us, to rally around humanity's greatest cause: changing ourselves and changing our world."

I'm not the only one who is issuing calls like this. Happily, these calls are being issued from pulpits and from lecterns. Spiritual writers and spiritual messengers all over the world are echoing them. Even some politicians are beginning to say these words. We are beginning to create true mass movement. The idea that each of us is collectively responsible is gaining traction.

But these efforts cannot be undertaken simply at the level of behavior. If a leader suggests we need to change at the level of behavior, it is like putting a Band-Aid on an open wound. What people who are currently entrenched in the system need to understand is that the solution is not found at the level of behavior. The solution is found at the level of belief. Every behavior springs from—and is given birth by—a belief. If we trace a behavior back to the belief that sponsored it, and correct our belief, we have a chance to correct the behavior.

Try this simple exercise. Write a list of the last five disasters in your life. As candidly as you can, on the left side of a piece of paper, list the last five bad decisions you made, poor choices, walls you've walked into, major problems you've had.

Now draw a line down the middle. On the other side of the page, write down what you believed that caused you to do that. What belief was behind that choice or decision?

Now cross out the left hand side of the page. It is irrelevant. It's the right hand side of your page that not only sponsored these, but lesser behaviors; perhaps they didn't create catastrophes but they are not doing you any good. Go down that hall of mirrors to discover what belief sponsored this particular disaster, which belief sponsored that one. When we do this in workshops anywhere in the world, participants get huge "A-ha's" when they see the connections.

I've set up a global educational undertaking called Humanity's Team. The stated mission of Humanity's Team (www.HumanitysTeam.com) is simply to free humanity from the oppression of its beliefs—about God, about life, and about each other—in order to create a different

world and facilitate the Great Awakening. We've created New Spirituality study groups, and New Spirituality emotional support groups. Our first and primary program is education. The vision of Humanity's Team is to create workshops, seminars, and educational opportunities based on the New Spirituality. Jimmy Breslin, the New York Times columnist, wrote, "The civil are not organized, and the organized are not civil." Humanity's Team organizes the civil around principles upon which the largest number of people can honestly agree.

I have a one-word definition for wellness: Peace. The degree to which you exhibit and experience peace—which is another word for love—is the essence of personal wellness. The same definition can be applied to planetary wellness. The degree to which the planet experiences being at peace is the degree to which it's well. The degree to which it lacks peace is the degree to which it lacks wellness. The world's environmental health, its economic health, its political health, its sociological health, and its spiritual health, are all a cumulative reflection of our collectively created

reality. Wellness equals peace on the planetary as well as on the individual level.

The place where individual health meets planetary health is the level of our individual beliefs, as well as the collective beliefs embraced by humanity. If we as nationalities, as religious groups, as political parties, have the courage to examine the most sacred of our beliefs, we will discover the source of our behavior. Considering the possibility that there may be another way to hold reality is the key to the golden door of peace on this planet.

Chapter Nine

Barbara Marx Hubbard: The Global Evolutionary Context for Health

I went to a birthday party in December of 2004. It was a most unusual birthday party. Among the hosts sponsoring the event were Neale Donald Walsch, author of the *Conversations With God* series, Jean Houston, author of *Jump Time* and other books, and Gary Zukav, author of *Seat of the Soul* and other books.

150 guests gathered in the University Club of Santa Barbara, California, to honor the seventy-fifth birthday of Barbara Marx Hubbard. Co-founder of the World Future Society, author of *Emergence* and many other books, and one of the pre-eminent futurists of the twentieth century, Hubbard has long been one of the clearest and loudest voices helping our society envision the next steps in its path.

I had the privilege of interviewing her a number of times before the event, and co-creating with her a written summary of her core ideas, which will appear in published form in 2005. Not only has she thought very clearly about the

social and cultural Mind-body-spirit trends of the last half-century and where they are taking us; she has articulated them in a uniquely powerful way. The following excerpts from that piece give a marvelous and hopeful picture of the future, without ducking the very difficult problems that face humankind today:

The universe works in spirals. One such spiral is the story of evolution. It begins in the void, the mind of God, and the field of all possibilities. The first turn on the spiral is the Big Bang, the formation of the universe. The second turn on the spiral is the formation of matter, and then Earth. The third turn is the formation of life. The fourth turn is the formation of animal life. The fifth turn is the formation of human life.

The sixth major turn on the spiral is, I believe, the formation of a universal human life. The planetary crisis we find ourselves in today is, in fact, the transition from one stage of human evolution to the next.

We are currently near the end of a forty-thousand-year period of individuation and separation from

nature. In the myth of the Garden of Eden, the "fall from grace" can be understood as the separation of humans from nature, and the origin of self-consciousness. "Leaving the garden" is a metaphor for separation from the state of being embedded in spirit, the unconscious children of God. For the last forty thousand years, our human journey has been toward the development of civilization. Today, with the advent of science and technology, we have gained the powers that we used to attribute to our gods.

The year 1945 was a significant marker. When the U.S. dropped the atomic bomb on Japan, it signified the handwriting on the wall. It was a signal to all of humanity that if we continue in the illusion of separation from nature, from each other, and from the deeper patterns of creation, we are capable of destroying our planetary life-support systems, and killing the human species altogether. Discovering that we had these powers in 1945 marked another turn on the spiral.

Each decade of planetary evolution during this sixth turn of the spiral has produced noteworthy events that have transformed our world. In the 1950s, it was the

discovery of DNA, the development of television, of computers, and of contraceptives. The 1960s brought the Apollo program, making us a universal species, at least physically. That decade also witnessed the beginning of the human potential movement, as well as the rapid awakening of the women of our species, plus an urgent new awareness of the fragility of our planetary environment.

A spiral has both an inner ring and an outer ring. The outer ring is planetary evolution. The inner ring is personal evolution. Starting around the year 2000, the acceleration of social and planetary change increased. We entered what Ervin Laszlo calls a "macro shift," in which the whole civilization is under stress. The process of individual self-evolution began accelerating rapidly. But individual psycho-spiritual evolution is proceeding much faster than social evolution. Despite our personal growth, as a society we're not yet transforming the educational system, the political system, or the economic system. While creative solutions to social problems can be found everywhere, they are not yet connected. There are many innovations here and there, but they haven't added up

to systemic change. This is producing an entire civilization and environment tilted out of balance. The disequilibrium is accelerating. It shows up in the eruption of violence between groups and cultures, environmental upheavals, and in the form of economic and political inequity.

As individuals, we have varying degrees of awareness of this acceleration. To some, it takes the form of confusion, desperation, frustration, or alienation. But for many others, it has taken the form of an awakening of spirit within. From this perspective it feels like humans are bringing the gods home. We are awakening to a profound desire to participate in the process of creation, to restore the Earth, to heal the terrible inequities we see, to free people to be themselves, and to explore the universe. The inner ring on the evolutionary spiral contains all the individual stories that are part of the planetary story.

Many of us hear an inner voice giving us guidance from our higher self. We may call that presence by many different names—the voice of the Higher Self, the inner guide, the Christ. If we give that inner voice

our full attention, if we recognize it as our deep Self, then a momentous evolutionary change occurs. Gradually we find that we are no longer a local personality seeing the divine. Rather we become an incarnation of the divine, educating the local personality. I call this "the shift from ego to essence."

Between the inner ring of self-evolution, and the outer ring of social evolution, there is a third ring that I think of as *vocational evolution*. Each of us has, within us, a genius code, just like we have a genetic code. The genius code is the blueprint for your unique creativity. As the situation on Earth becomes increasingly interactive, as we increasingly experience our interconnectivity in the form of pain and danger—as well as potential—inner vocational stirrings are waking up. This doesn't mean that people are feeling called to be yet another ordinary "doctor, lawyer, or Indian chief."

These new vocations are often hybrids. They are *callings* rather than jobs and professions. They fill us with desire to give our best within the social whole. Our vocations are so unique to each person that

they can rarely be identified by a neat occupational label. Just as many of the new functions that people do today—biotechnician, telecommunication specialist, nanotechnologist, environmentalist, futurist, medical ethicist, desktop publisher—didn't exist in the 1950s, the job descriptions that reflect our emerging evolutionary vocations or callings are yet to be defined.

For me, finding my vocation began in 1966, when I started to catch the implications of this evolutionary potential. At the time, I had a very conventional social role. I was a wife, and the mother of five children. Yet in the midst of this settled reality I began to wake up to the magnitude of my vocation, which is to be a communicator of evolutionary potential. The way I heard the call was in these words: "Barbara, go tell the story of the birth of a Universal Humanity."

Vocation is a projection of the most authentic self. And that projection takes the form of projects. Our projects are projections of self. As the self evolves, and becomes more and more "we-sponsible," it incarnates its own identity in outer expression, rather than

projecting its sense of divine identity onto some outside person. We bring God home.

The creator within us wants to create a better world. Our projects can become the creator within expressing its unique creativity in relationship to self and social evolution. When we say, "Yes!" to our life's purpose and our calling, it actualizes potential in our environment to create our authentic vocation. Your growth depends on incarnating that greater Self, and then expressing that greater Self in the evolution and healing of our world. Those of us who are awakening find ourselves powerfully called into creative action.

When you say, "Yes!" to your inner calling, it's like falling in love. You fall in love with your intrinsic potential. Then you join your genius with that of others, in order to co-create. You develop a new form of love, one I call supra-sexual co-creation. The purpose of this new kind of love is not to reproduce the species; it's to evolve the Self and express that Self in the form of outer work. As we have fewer children and live longer lives, the drive to self-purpose is harnessed to express creative love. In

the old language, you're "one with the will of God." In the new language, you're "expressing the deeper pattern of creation in a personalized form."

As I've put more and more attention on that deep self, I've shifted my identity to that self. It now resides in the center of my being. If my local personalities have anxieties or get into distress, they turn to the essential self for healing. And that's the start of healing the world around you. If you can't identify with your own essence, you can't heal your local self, or the larger world. The blueprints for healing—for both the world and your local selves—are coded inside that greater essence. They are Evolutionary Codes. Jesus said, "If I be lifted up, all will be lifted up unto me." The "I" that's doing the lifting is that internal essence.

When you learn to shift your identity to the essential self, the wisdom for healing your local self is present. When you place your attention within the essential self, you feel warm, you feel whole, and you feel at peace. You feel loved and loving. You feel all the qualities of being that you might desperately

seek outside yourself as a local self trapped in the illusion of separateness.

The embodiment of personal selfhood, and collective social transformation, is leading us to a quantum shift that has only been envisioned by the mystics and seers of humanity. They have revealed to us such images as "the new heavens and the new Earth," Paradise, or the New Jerusalem. As we combine an evolved consciousness—what we might call a Christ Consciousness or God Consciousness—with the new technologies—nanotech, biotech, quantum computing, genetic medicine, space colonization and others—the end result is a species so powerful that our entire physical world—including our bodies—can be transformed.

Right now we're in a global crisis, an emergency filled with terrible and dangerous symptoms: violence, environmental destruction, proliferation of weapons of mass destruction, dire poverty and the suffering of billions. It can either be an apocalyptic crisis of destruction; or it can become a crisis of birth—a beginning rather than an end. If we can get through the planetary crisis quickly enough so that we don't destroy our own life-support system, or blow ourselves

up, then we can see immense possibilities for a positive future. If we combine our higher consciousness with our new and evolutionary capacities, both social and technological, we can jump to the next stage of human evolution. We can become what I think of as a Universal Humanity—a new civilization co-created by Universal Humans, humans connected through the heart to the whole of life, humans awakening from within to the impulse of self and social evolution, bringing the gods home as our own developmental potential to evolve.

The transition to the future human is full of emergencies. We could destroy our own life-support system within the lifetime of living generations. In the same time frame, we see emergent potentials—innovations and creative solutions—everywhere, in every field and function. The emerging innovations are quantum capacities—like tapping into zero point energy, radical life extension, and the enhancement of intelligence—that bypass the entire old system. But we can't jump to the quantum capacities without facing the emergencies and the emergence. You can't send a newborn to university. The baby has to breathe first.

We need to develop a whole system approach to the whole system crisis. We need to apply the best that we know about social networking, design science, non-linear and synergistic processes, collective envisioning, intention, mass resonance events, the maturation of the mass media to communicate our growth potential, and much more. All of this is in the works. In the same twenty to thirty years in which we could destroy ourselves, we could experience a shift of consciousness and connectivity to the positive, which would send us in the direction of a future that matches the aspirations of the human spirit.

Most of the problems we are facing on Earth are the critical hygienic conditions of a planetary species undergoing the crisis of our birth to the next stage of evolution. Solving our immediate problems is vital, but is not our end goal, any more than the goal of the newborn baby is to breathe, nurse, and eliminate. Certainly, unless the baby learns to breathe, nurse, and eliminate, it will die, just as if we don't handle our emergencies, we won't make it either. But handling our emergencies is simply a natural stage in our learning curve toward becoming a universal humanity

applying our spiritual, social, scientific, and technological capacities harmoniously.

The growth path once we leave the emergency room requires a new step in personal evolution. As an individual human being creates a deeper self-identity, and incarnates that fully, that person's outer projects reflect the shift. Carl Jung calls this "the continuing incarnation of the Self." The evolutionary process we are going through is the securing of that divine identity internally. We heal the local self, which then becomes transparent to the impulse of the essential self that is guided by the deeper processes of creation. The beauty of operating from within is that you're already rewarded, you're already at peace, and you're already fulfilled! You are Self-rewarded. Your external projects simply reveal the expression of your deeper Self.

Before I realized this, no matter how hard I worked as a good egoic personality, following the commands of my essential self, but separated from it, I was always late, I was always behind, I was always incomplete. So I tried harder to follow the higher guidance—the ego is insatiable. Yet it cannot succeed when in a state of

separation from the source of its being. I felt I was failing to transform anything. The ego is never fulfilled, even if you achieve great things. The next day, it requires a new goal. Successful people often feel this pressure even more acutely than unsuccessful ones!

I had to stop my efforts, and allow my attention to be in accord with my guidance. I keep a journal, and write in it frequently. Whenever I'd feel this guidance, I'd put double brackets around the words I was writing. When I looked back at those journals—all 152 volumes of them—I realized that what was common to all the highlighted passages was a feeling tone of peace, wholeness, oneness, joy, and wisdom. I started to put my attention each day on the *feeling* of receiving guidance, not on the specific guidance itself.

You have a highly sophisticated biofeedback mechanism in your own body. When you reside in this essential self, the whole biochemistry of your body changes. Endorphins flow. You are at peace, as the design of your deeper life purpose starts to unfold in social action. You perform actions with what Joseph

Chilton Pearce calls "unconflicted behavior," as the life purpose of your essential self begins to flow. Within that essential self are evolutionary codes, dormant potentials that are actualized naturally as you express the creativity of the essential self. When you join in co-creation with other people who are also tapping into the inner self, you experience a feeling of joy and ease and rightness as those shared codes unfold gracefully and effortlessly. You get over your own self-consciousness; you get past the boundaries of your egoic self, exhausted by its efforts to act separate from the greater flow. As the ego comes to rest in the vibrational field of the higher self, it loses its illusion of separation, which is the source of most human problems anyway. Depression and physical illness can be interpreted as signals that we're not accessing the deep codes of our creative selves. Cancer can be interpreted as the body's effort to grow, but without a plan. Misfortune can be a way of nudging you into paying attention.

My experience is that we are giving birth to a universal human within ourselves. This universal human has a conception, at the time of our first unitive

experiences. It has a gestation period. You know it's happening when you suddenly get turned on, and you can't live your old life anymore. You can't go back to your old ideas, your old teachers, your old books. Then the universal human has a birth period, when the ego realizes it can't tolerate being separate from source anymore. The ego makes a fateful choice to invite the essential self, the guide, the inner voice to come in the whole way and to take dominion within the household of selves.

Sometimes I forget all this and go at life the old way, and it's hopeless; it's simply impossible. I remind myself not to do anything when I feel reactive and separated from my own essential self. When the local self resonates with our own essence, this essence penetrates body and mind utterly.

This gestation has happened on a collective scale through the great religions. While their founders brought forth their higher selves, their followers could not. They became mired in dogmatic separation. For this reason, the organized religions cannot lead us across the great divide to the next stage of evolution. Only individuals can do that, through inner evolution.

When this inner incarnation occurs, social action emerges spontaneously, naturally and creatively. The universe finds ways to support the fulfillment of these individual actions, because they fit the emerging new pattern.

On the spiral, more and more human beings are becoming unwilling to operate as separated egos seeking the divine. We're unwilling because it does not work, it is painful, and it causes dis-ease, depression, and alienation. It's not that we become idealistic; it's simply that the old way does not work for us. Around the year 2000, more and more people became unwilling to operate as separated egos seeking the divine. The deepest wellspring of evolution is pushing us in this direction.

There's organic cohesion between the individual social actions performed in this way. Rather than being isolated endeavors, they possess an organic unity. Nature has been forming whole systems for billions of years, and is pressing through us to form a whole system out of us, instead of contending parts. So when we identify with the inner self and reside in there, and let the biochemical shift occur that makes

this our natural state, then our outer expression begins to conform to that organic pattern.

How can you do this each day? The first priority is to pay attention to those flashes of knowing. Focus on that experience. Let that Self into your heart and solar plexus, until you begin to feel peace and joy, oneness and wholeness, throughout your body.

Once that happens, your local self begins to resonate with the vibration of your higher self. That higher self is potently attractive; for the local self it's like spending time with a master, a guru, a great teacher. This isn't you temporarily taking on the personality of a master, whose presence helps you reorganize your energy into a more elevated constellation. This teacher's message is a perfect fit, entirely customized for you. It is You!

It's uniquely you as an expression of universal creativity. It's the creator within as you. When the local self resonates with that, you experience the bliss of union. The longer your personality stays in the "rose chamber of union"; the longer you let your local self be "off duty," not getting anything done;

not rushing about, the more it falls in love with the essential self. That's the first level of resonance.

The second level of resonance occurs after you stabilize the experience of the local self being one with the essential self. It occurs where two or more such beings are gathered, resonating with each other in a co-creative pattern. This is the next stage of sexuality; Nature's purpose, as you shift from procreation to co-creation, is to get you to join your genius with another. The union is explosive; it gives rise to the next level of potential in both partners, the level of divine work. Work has a whole different flavor when you do it as part of the unfolding implicate order of nature.

In this young stage, your best course is to draw people into small groups where you all can stabilize in the experience. Jesus told us not to go forth alone, but to go in twos. I believe that he said this because it takes two or more gathered in the name of the Self to "hold the morphic field" and to express the reality of the universal process of creation that resides at the heart of each person. If you harmonize with your essential self, then go out into the world ready for

action alone, you face a dissonance so great that unless you are an accomplished master of the very highest order, like Gandhi or Nelson Mandela or Mother Teresa, you quickly lose your resonance amid the dissonance of the world.

We need an image of ourselves at the next stage of evolution that is attractive enough to move us toward it. One of my life's purposes is to articulate a vision of our future collective possibility that is so compelling that it irresistibly calls to us to throw off the shackles of our old consciousness, and be attracted toward it.

As we synergize and connect the elements that are creative and positive in every field, a vision of the new world takes shape. It's one in which individual genius is unlocked, and we become self-evolving, self-governing, self-authorizing, and infinitely creative. In this new world, the Universal Human might have continuity of consciousness through many physical bodies. The resurrected body of Jesus might be a prototype, a model, for everyone else. Our bodies might become so sensitive to thought that we can materialize and dematerialize at will.

I believe that we can completely restore our planetary environment. I believe that we will develop renewable and eventually zero point energy systems, which will liberate us from an economic model based on scarcity. I believe that we will develop the skills required to heal virtually every disease. I believe that we will learn to live and work in space, becoming an Earth-space species. I believe that we will voyage beyond our own solar system, eventually becoming a true universal species. I believe that we will find we are not alone in the universe. I think we'll find that, in a literal sense, "mother" Earth is giving birth to a universal species. That birth process is the next turn in the spiral, beyond the transition that we are in now, and toward a universal species. The following huge step will be to discover that we are not alone, as we contact other universal species.

Yet the first higher life form we meet has to be ourselves. The first encounter has to be with our own kind, the Universal Human. When we finally see that image of ourselves, not displaced into a vision of life after death, or a vision of the risen Christ, but a

vision of the risen humanity, then we will be ready for the next steps in our maturation.

We are in the midst of a vast social shift. It doesn't always seem like it; the November 2004 presidential election in the U.S. looked like a national endorsement of the same old paradigm.

Hubbard, Houston and other futurists believe, however, that dramatic social change is brewing just below the surface. The apparent transcendence of the old paradigm is simply a mask, protecting the new culture as it grows. Paul Ray, another brilliant futurist and co-author of *The Cultural Creatives*, was asked at a seminar I attended why, if we're in the middle of a cultural shift, as he believes, it isn't obvious from media reports. The answer he gives is interesting. He says that old paradigm media are set up to notice old paradigm phenomena. They are simply unable to recognize new paradigm events. New paradigm ideas and occurrences pass below their radar. Consider a system of lenses, arranged to form a telescope. If you're holding a telescope, you might get very good at scanning the horizon in all directions, and noticing every item on the horizon or far away. But the same instrument is useless for noticing

what is right up close to you. If you try and use that arrangement of lenses to look for tiny objects right near you, the same instrument that is so effective in noticing distant objects now impedes you, and you are unable to see them. This is why the media usually misses large social trends until they are upon us. Yet they are occurring, all the same.

Chapter Ten
Eric Robins:
Future Cures: Fast, Cheap, Effective

Eric Robins, M.D. is a urologist with the Kaiser Permanente system in Southern California. He is also the co-author, with Stephen Co, of *Your Hands Can Heal You*, a best-selling guide to pranic healing. Although he practices in a mainstream medical community, he has worked out an innovative arrangement with Kaiser whereby he practices conventional medicine most of the time, but alternative medicine at certain periods and with carefully selected patients. The Kaiser system, studied as a model of cost-containment and innovation, has recently become increasingly interested in alternative medicine as examples and studies have shown its efficacy at treating conditions which have conventional medicine stumped.

Eric Robins is an example of a new breed of physicians, rigorously trained as conventional M.D.s but open to other therapies whenever they will benefit his patients—and managing to practice this combination within the existing American health care system. I wrote this article based on

drafts he sent me, and then edited a much longer version into the following brief form that nevertheless represents his key ideas.

Michelle, a bright, perky, 21-year-old woman, arrived in my office complaining of severe bladder pain. She had to urinate frequently and urgently. I did a complete medical workup but could find nothing out of the ordinary—by the standards of my profession there was nothing wrong with Michelle. Yet it was clear to me that Michelle's pain was real, and her physical symptoms were real. After I had finished looking in her bladder with a cystoscope and found everything to be normal, I ventured, "Sometimes women with your symptoms have a history of sexual abuse or molestation. Is this possible with you?" In the corner of her eye, the slightest of tears welled up. It turned out that Michelle had been sexually penetrated by an uncle almost daily from the age of three, till she was ten years old.

I asked Michelle to think back upon these memories and find a part of her body where they were strongest. She said she could feel them acutely in her lower

abdomen and pelvis. I asked her to rate them on a scale of 1 to 10, with 1 being the mildest and 10 being the most intense. Michelle rated her feelings at 10 out of a possible 10.

I then spent 45 minutes working with Michelle, using some of the simple yet powerful techniques I describe below. I then asked her to rate her level of discomfort. It was a 1—complete peace. I urged her to cast around in her body for the remnants of any of the disturbed feelings she had previously felt. She could not find them, no matter how hard she tried. The emotionally charged memories had been so thoroughly released that a physical shift had occurred in her body. Her bladder condition disappeared. In the three years since that office visit, it has never once returned.

How are such apparently miraculous healings possible?

Many years ago, treating patients was much more difficult for me. I am a urologist in the Los Angeles area. Urology is a surgical subspecialty, which means that I spend much of my time in the operating room. Despite this fact, urologists still see a significant

percentage of chronic and functional problems in the office. Patients with functional problems have real complaints and symptoms, yet physical exams, lab work and x-rays reveal no anatomic or "physical" findings. I've always believed that what these patients are feeling is real and genuine, and that the problems are not "just in their heads" as many physicians are prone to think.

Chronic problems are those conditions that patients have over long periods of time. To me, a chronic problem means that the body cannot heal itself. Taken together, chronic and functional problems make up about 70% of the cases that walk into a primary care doctor's office. Often, patients with these conditions get angry when I tell them that I cannot find the "cause" of their problem. After many years of urology practice, I found myself getting frustrated; I could dispense medications to treat the symptoms yet not be addressing the underlying cause.

When I first began to look for better ways to understand and treat chronic and functional problems, I had to look outside of the standard allopathic medical model. The reason I had to do this is because

allopathic medicine is based on the belief that the body needs medications or surgery to heal. If you are interested in ways to get the body to heal itself, you've stepped beyond the realm of allopathic medicine. As I studied several different types of alternative healing, I saw a common thread. Whether found in acupuncture or acupressure or homeopathy or energy healing, the common belief is that *the body tends to heal itself, and there is a healing energy that flows through the body that allows this to happen.* If this energy gets blocked—producing either a congestion of dirty, stagnant energy, or a depletion of energy—this predisposes the body to disease. All these systems, with their various techniques, try to re-establish flow of energy.

Early in my practice I noticed that I had a significant number of younger, sexually active women who would get recurrent urinary tract infections after intercourse. I rarely found an anatomic reason why this would be the case, despite doing a complete workup. I said to myself one day, "Many women are sexually active and are not getting urinary tract infections. So why do they recur in this sample of

patients? It is almost as if the body's healing energy is not getting down to the pelvic area; if it were, their immune system would know what to do to prevent the infection from getting started." With this thought in mind, I began a study of the body's healing energy.

I was fortunate at the time to come across a healing system called "Pranic Healing." Master Stephen Co, one of the senior Pranic healing instructors in the world, was living and teaching in the Los Angeles area. I was able to spend a great deal of time studying the technique with him, as well as with the Grand Master of the system, Choa Kok Sui. Pranic healing is a powerful and effective system of energy healing. It incorporates all sorts of energy-related techniques, including feng shui, kundalini-based meditation, higher clairvoyance, sexual alchemy, and financial manifestation. Grand Master Choa has great ability to take complex esoteric topics and boil them down to their practical essence.

I began to use Pranic healing with my patients. It produced a number of recoveries like Michelle's, and gained the notice of other staff members at my medical center. Master Co and I subsequently wrote a book on

self-healing entitled *Your Hands Can Heal You*. This book is a treasure of techniques that you can use to increase your vitality, your level of personal energy, and your health. As an example, one chapter teaches two simple yogic exercise routines that will literally double or triple a person's energy level. This is not like drinking a cup of coffee and getting a buzz for a couple of hours; the energy lasts the entire day. One of the biggest "complaints" that we get from folks who do these exercises is that their sex drive increases dramatically! The web site for Pranic healing is www.pranichealing.com, if you'd like to know more.

For the first couple of years that I was doing Pranic healing, I treated one to five patients a day in addition to my full-time urology schedule. When patients walked in the door, I used my hands to feel where the energy was out of balance in their bodies. I was able to sweep away the dirty, congested energy and subsequently pour some clean energy back.

Yet sometimes the treatment did not produce obvious results. Sometimes I would do a healing, fix the energetic defect and the patient would feel better. But they'd come back a week or two later with their

energy would be out of whack again, and their symptoms would have recurred. What factors were involved, I wondered, when people didn't heal as a result of the practice? Many of them were there because they hadn't been helped with a standard medical approach either, so they had run out of options. I began to wonder, *what might be causing the energetic defect to begin with?*

A principle of Pranic healing (and all other energy healing modalities) is that energetic changes precede physical changes. This means that before anything manifests physically, it is already present in the energy field. The work of Dr. Robert Becker elucidates this fact. Dr. Becker is an orthopedic surgeon who worked at New York University. He experimented with the use of electrical currents on bone healing. He did some interesting experiments on salamanders. If you sever the tail or the leg of a salamander it will regenerate a new one. Dr. Becker did an experiment in which he removed both the tail and the leg of a salamander. Then, when it began to regenerate a new tail, he scraped off some of the tail cells and moved them up to the area of the severed leg. The tail cells, whose DNA had already differentiated into tail

cells, changed—and began to grow into normal leg cells. The same thing happened when he took regenerating leg cells and brought them down to the tail.

How did these cells know how to change so as to grow into the appropriate organ? Some researchers speculated that nearby nerves gave the signal, but further research showed these nerves to be silent. Becker's work suggests the presence of a larger energetic template that directed the cells to grow and differentiate into what was needed at a particular site. Similarly, when you cut your finger, just enough cells grow to fill in the wound. The body "knows" when to stop.

One day I was hit with an intuitive flash. I realized that the biggest factor that causes blockage of the body's healing energy is emotional issues, particularly how these are stored in—and processed by—the body. Stress and negative emotions aren't in the head; they are stored as tensions in the body. You don't need a double-blind university study to convince yourself of this. If you think about the last time you were angry or scared or depressed, notice where you felt those emotions inside.

Stress and negative emotions are frequently stored in the smooth muscles. The smooth muscles are those muscles that function automatically, without our conscious control. If people store tension in the smooth muscles of the blood vessels going to the head, we might call this a migraine headache. If they store tension in the smooth muscles of the air passages of the lungs we might call that asthma. If they store tension in the smooth muscle of the intestinal tract, they might have symptoms like nausea or bloating, or diarrhea alternating with constipation, or abdominal cramping. We might call that Irritable Bowel Syndrome or IBS. IBS is the second leading cause of missed work in the US, and accounts for some 50% of all visits to gastrointestinal specialists.

Emotions and Our Innate Healing Ability

Emotions stored in the body also affect our immune systems. Bernie Siegel discovered that exceptional patients viewed their cancers as representing or being the result of a psychological or spiritual conflict in their lives. Those patients who were able to look at their cancers in this way and then sought to make whatever changes were necessary did much better. Dr. Paul Goodwin, a neural physicist at Alaska Pacific

University, says that wherever stress and negative emotions are stored in the body, they create a blockage of the flow of the body's healing energy. This might explain why chronic conditions persist. For instance, the stomach sheds all its old cells and produces a new lining every seven days. So how can ulcers continue to exist for long periods of time? Why shouldn't all ulcers be healed within a week? They might be, unless the body's healing energy is not getting to that part of the stomach.

I categorize emotions and their effects on the body in one of two main ways. First, there are *distinct traumas* that occur to people in their lives. Some of these might seem minor to an outsider looking in, but to the person who has experienced them they can have a big impact. Other times the traumas can be severe, including shocks like childhood abuse, rape, losing a parent or close friend, seeing or being involved in a serious accident, or war-time stress. These traumatic experiences are stored as memories inside our bodies at an unconscious level (some researchers say at a cellular level). Later on the unconscious mind will try to re-present these memories to our conscious minds

so we can deal with them and resolve them. But because these memories are so painful, a part of us resists feeling or re-experiencing the memory. *In order to keep these memories from coming to conscious awareness, the body has to clamp down internally.* This internal clamping causes tension in the smooth muscles or skeletal muscles and is responsible for many of the functional diseases that people present with, ranging from hypertension to migraine headaches to chronic back pain to IBS.

Many times, the initial traumas are so deeply buried inside the body that they cannot be easily accessed by the conscious mind. When I was going through therapy it took me six months to get in touch with my deeper emotional pain and with the early memories that caused it. Before that time, anytime I got close to the pain I'd either fall asleep or "check out" and disassociate.

Vast amounts of energy must be expended in order to keep painful emotions and memories held down in the body and outside of conscious awareness. In my opinion this energy drain is one of the leading causes of chronic fatigue syndrome, fibromyalgia, and multiple chemical sensitivity disorder. These diseases are very

real and the patients who have them are truly run down and depleted. The place to begin with these patients is by clearing any past emotional traumas so as to free up more energy for physical healing.

A second way to categorize emotions and their effect on the body is to *assess how early events shaped the way that we handle or process emotions*. One of the main functions of the unconscious mind is to keep us safe in our family while growing up. Often when we are young, events happen in our family that cause us to develop beliefs such as, "It's not okay to show our anger or anxiety." Showing these might upset our caretakers which would compromise our survival.

Harry, one of my clients, had chronic throat problems. Whenever a powerful emotion came up (either positive or negative) his throat would clamp down and get tight. He had three to four episodes of laryngitis a year during which he'd lose his voice. I did a session of hypnosis with him. We regressed the tight feeling in his throat, traveling all the way back in time to the first event he could recall. Harry was about 6 months old. He was crying inconsolably in the middle of the night and his father came to pick him up

and comfort him. But his crying persisted, and after about 30 minutes his sleep-deprived father got frustrated and put Harry back somewhat abruptly in his crib with a mild jar (perhaps letting him drop 2 inches down into the crib).

As a result of this seemingly minor event, Harry's unconscious mind developed several beliefs, one of which was, "It is not okay to express strong emotions like anger or fear." As I had Harry re-live several repetitions of the event, I had him get in touch with and express his anger towards his father. Next, I had him look at the event from a more adult perspective during which he could understand that his father hadn't meant him harm, and certainly didn't mean to instill a belief that engendered lifelong emotional stifling. He proceeded to have a real breakthrough at the unconscious body level in his beliefs about expressing his feelings. That was more than 18 months ago, and Harry has had no more problems with either laryngitis or sore throats.

This is more than academic theory. A model of how people abnormally process their emotions, and how to shift them, is responsible for the highest cure rate in

the world among patients with chronic musculoskeletal pain. It has been well documented in the books *Healing Back Pain*, and *The Mind-Body Prescription* by Dr. John Sarno. Interestingly, it is not our negative emotions that cause the problem—but rather our resistance to feeling these emotions. My friend and internationally known psychologist Gay Hendricks once said, “All emotions are gentle and short-lived, unless we resist feeling them.”

In Dr. Sarno’s academic experience, his patients have about an 88% rate of curing their severe musculoskeletal pain. An additional 10% of his patients are much improved. Many of his patients had been in pain for 20 to 30 years prior to seeing him. Many had already undergone surgery or epidural injections into their spinal columns.

The way that he gets this amazing cure rate is by encouraging his patients, when they have pain, to ask themselves, “I wonder what I am angry or anxious about?” Once they get in touch with their anger or anxiety, the goal is not to push these emotions away or to act them out, but rather to allow themselves to feel them fully. Gay Hendricks (www.hendricks.com)

describes this process of "putting non-judgmental awareness on what you are feeling" as "presencing."

Rapid Healing Techniques

We are blessed to have been born at a time where there are very good techniques and modalities available to help us quickly resolve these emotional issues.

There is a whole evolving field known as "Energy Psychology." The main belief behind this approach is that negative emotions are stored as disruptions in the body's energy system. If a person uses their fingers to hold or tap on certain energy points in the body while they are mentally focused on a traumatic memory or limiting belief or phobia, this clears the emotions out of the energy pathways, and the person experiences rapid and long-lasting relief.

At the outset of therapy I ask the client, "When you think of this problem, where do you feel it in your body?" Most folks feel emotions in their chest, solar plexus or throat, but others might feel it in their back, head or pelvis. I know that I am completely finished with the therapy if the person, when thinking about the original issue, can no longer feel the emotional pain in the body anymore. When this happens

it means that the problem is cleared out at the unconscious level. The result is usually permanent. For me, this is the gold standard for whether a psychological intervention works.

Two of the most effective energy therapies are Emotional Freedom Technique (EFT), and Tapas Acupressure Technique (TAT). I have used both extensively in my clinic—with phenomenally good results. I have personally used EFT to completely resolve a number of cases of Post Traumatic Stress Disorder (PTSD) for which there is generally no cure within the standard psychological paradigm. EFT can be applied very quickly in the clinical setting to relieve stress, and about 30% to 40% of the time can be used to improve physical pain. Dr. Joseph Mercola is a well-known physician with a huge practice in the Chicago area and one of the busiest “alternative healing” web sites on the Internet. His main emphasis is on finding natural ways for people to heal themselves, especially through diet and exercise. He, like many enlightened doctors, has seen the clear connection between stress and illness and espouses the regular use of EFT for many of his patients. With Michelle, the 21-year-old

woman with severe bladder pain with whom I started this story, I used TAT. If you are interested in checking out these modalities, the web sites are www.emofree.com (EFT) and www.unstressforsuccess.com (TAT).

Sometimes painful traumas are very deeply repressed and people are not consciously aware of their presence—they can't remember them. In this case it is helpful to make the assumption that *the presence of the disease presupposes the existence of repressed emotional issues or traumas*. So how do we access that repressed material?

Hypnosis can be tremendously effective. About 95% of hypnotists use a "progressive relaxation" technique that draws the client into a light trance, where they are receptive to direct suggestions. This type of hypnosis can be effective. However, with deep-seated issues or serious illnesses, I have found that a deeper level of trance, followed by regression back to the original root cause of the problem, is necessary.

Pushing Above Our Upper Limits

There is one last level to consider in healing. This is what Gay Hendricks refers to as the "upper limits" problem. We all have an unconscious limit to

how much positive energy we can handle coming at us from the world. If the energy begins to exceed this level, we will usually unconsciously sabotage ourselves so as to bring the energy back down again.

Almost everyone I've ever shared this with can relate to the upper limits problem. Right before a romantic three-day weekend, a fight breaks out between you and your partner. One of the children gets sick before a family trip. You obtain a much-needed vacation from work, and on the first day away from the office, you fall ill with the flu, and spend your vacation in bed.

For some people, having physical health and vitality, financial success, relationship intimacy, or a full social schedule all represent too much positive energy, and this calls for an unconscious sabotage. Agnes, a nurse I work with, grew up in a poor section of East Los Angeles, an area known for crime and gangs. She is smart, pretty, and friendly, but cannot seem to form a relationship with any man who doesn't have a criminal record or history of incarceration. I have often thought about why Agnes isn't able to get into a stable relationship with a nice guy, perhaps a professional of

some sort. After learning about the upper limits problem I could understand that being in a loving relationship with someone who has the ability for emotional intimacy and financial stability would represent too much positive energy for Agnes—it would make her feel uncomfortable. If you've ever heard the expression "water seeks its own level," what this means for my nurse friend is that she only feels chemistry for guys who will keep her energy level in her known comfort zone.

If we think of the upper limits problem in broader terms, we might say that everyone has a limit or *threshold* for how much "stuff" they can handle coming at them from their environment. A person raised in a dysfunctional environment tends to have a lower threshold than a person raised in a better home. Whenever we are pushed above our threshold we become stressed and anxious. We then try to deal with that stress through a variety of coping mechanisms learned during childhood. These include anger, depression, fear, substance abuse, overeating, plus others considered more healthy such as exercising, talking with friends, or isolation. Obviously it would be a

great idea to be able to raise our own stress threshold rather than trying to alter our external circumstances all of the time (which is what is advocated by most stress reduction workshops). Just imagine if you could raise your stress threshold so much that no matter what was happening at home or at work, and no matter how hectic life became, it couldn't make you anxious. Now the technology has arrived to be able to do just that.

A couple of decades ago, researchers decided to evaluate advanced yogis. We're talking about people who have meditated 6 hours a day for 15 years and who were amazingly relaxed, expansive, brilliant, and at peace in the most trying of circumstances. The researchers hooked these yogis up to EEG machines to find out what was going on with their brain waves during meditation. They made two distinct findings.

First, they found that these yogis were able to maintain conscious awareness while they slowed their brain waves from normal (waking) beta waves, down to alpha, then theta, and all the way down to delta patterns—theta is normally found only in REM sleep and delta is usually found only in deep, dreamless sleep. Second, they found that these yogis could think using

their whole brain, as opposed to most of us, who are predominantly either right-brained or left-brained.

At about that same time research was going on involving bi-aural beat technology. Bi-aural beat technology demonstrated that, if someone is wearing stereo headphones and 2 different frequencies are played, one in each ear (for example 400 hertz in the left ear, and 410 hertz in the right), that whatever the difference is between the two (in this case 10 hertz), the brain waves will be entrained to go to that frequency. So in simplistic terms what I'm saying is that by using stereo headphones, sound wave technology can be used to slow the brain waves down to the alpha or theta or delta range.

What is interesting about bringing someone's brain waves down to delta and then keeping them there for a while is that delta waves, although they are slow, contain tremendous amounts of energy. The waveforms are large. If you hold someone in delta for a while, you are forcing the brain to handle a lot more energy than it is used to. This forces the brain to develop new neural pathways to handle the increase in energy. It's like taking someone who doesn't exercise and

having a drill sergeant show up at their door every day to make them run two miles: they *have* to develop more muscular strength in their legs and better pulmonary and cardiovascular ability to be able to handle the exercise.

In order to handle the increased energy of being held in delta, the two sides of the brain are forced to improve their cross-hemispheric communication. This releases endorphins, so participants oftentimes feel euphoric after a session. As cross-hemispheric communication is increased, people begin to naturally think with both sides of their brain. A few months after I had started listening to this technology my wife and I got into a disagreement. I was looking at the problem from my usual logical perspective and my wife was being (in my opinion) overly emotional. Then suddenly I found myself seeing things from her perspective; I could see the problem from a whole-brain perspective and could understand exactly where she was coming from. Nothing remained to argue about.

The best source of this bi-aural technology that I've found is a company called Centerpointe Research Institute (www.centerpointe.com). They produced a

product called "The Holosync Solution" that will create the changes that I've delineated above. The Holosync tapes contain the bi-aural tones embedded underneath the soothing sounds of rainfall and crystal gongs. Since I've been listening to this technology my life has improved unimaginably as have the lives of several dozen of my friends and colleagues who are also listening. When patients come in wanting to relieve stress and anxiety, or when they ask for a very fast and effective way to get all the benefits of deep meditation I refer them to Holosync.

After using this technology for a relatively short period of time I observed that my own stress threshold markedly increased. I noticed that my busiest days at work, the ones that used to leave me tense, exhausted, and short-tempered, now had little effect. I also noticed that it was easier for me to share time with my family at home or on vacations; the increased energy generated by the fun and intimacy didn't push me over my threshold. I refer to this technology as "getting even with your past," since it is often a challenging childhood that lowers the threshold to begin with.

Another benefit of this technology is development of a "witness perspective." This means that you can develop the ability to step outside of yourself and witness your thoughts and emotions rather than being caught up in them. One of the main principles in *The Power of Now* by Eckhart Tolle is to be present in the now and to watch or observe your thoughts and emotional reactions to things. This process is extremely valuable although it can be difficult to do unless one has developed a witness perspective. In *The Dark Side of the Lightchasers*, author Debbie Ford talks about embracing our shadow and about coming to terms with and accepting all of the negative and disowned parts of ourselves in order to be whole again. Ford's explanations and processes are great and can be much faster and more easily implemented if one has developed a witness perspective.

We are blessed today with simple, inexpensive, accessible techniques that have the potential to revolutionize our sense of wellness, shift the patterns that trap us in chronic disease, and dramatically raise our thresholds of happiness.

Chapter eleven
Robert Dozor:
Integrative Clinic of the Future

Robert Dozor, M.D., earned his baccalaureate with honors from the University of Chicago in 1971. Medical School and Family Practice Residency training occurred at the University of California at San Francisco (UCSF) where he was named Assistant Clinical Professor of Family and Community Medicine in 1986. He co-founded one of the earliest medical ethics committees in the United States in 1984, and was the original editor of the proceedings of the American Balint Society. Dr. Dozor and his wife, Ellen Barnett M.D., Ph.D., opened the Integrative Medical Clinic of Santa Rosa (IMCSR) in 2001. I visited the IMCSR on several occasions, and worked with Dr. Dozor on a written structure to explain his work. I edited a much longer version of this piece to capture his main points.

As many as half the people in the U.S. and other
Western societies employ health or healing practices

that are outside the scope of "regular medicine." I knew before I went to medical school that there was more—much more—to healing than I would be taught for my M.D. Modern medicine is completely positivist, holding that scientific truth can only be gleaned by rigorous observation of nature, through mathematics and statistics. Integrative medicine respects this mode of knowing, but also ventures without apology into interpretation and meaning.

Conventional biomedicine brilliantly addresses acute and catastrophic illness, and strives for the finest in health care—yet fails to address the roots of illness and suffering. Biomedicine casts a deep shadow, and in this shadow, ancient healing wisdom has languished. It is time to remember the whole picture. The synthesis of these ways of knowing creates an expanded vision of healing possibilities. Full health is never achieved by technological means alone. The fruit of wholeness is healing, a dimension of experience more health-promoting than medical technology. Integrative medicine is the search for wholeness and healing in the context of biomedicine. Researcher David Reilly puts it this way: "In recent decades orthodox medicine's

successful focus on specific disease interventions has meant relative neglect of self healing and holism. [Yet] to ignore whole person factors is unscientific and less successful.”

I practice medicine at the Integrative Medical Clinic of Santa Rosa (IMCSR). Much of what I do is what I was trained as a family doctor to do, yet most of my patients also partake of “new medicine,” things that they didn’t teach me about in Medical school—Herbs, Chinese Medicine, Somatics, Nutrition, Meditation and much more. My practice setting includes: Chiropractic, Acupuncture, Naturopathy, Psychotherapy, Biofeedback, Massage, Feldenkrais, Hanna Somatics, and an herbal/nutritional formulary.

Personal experiences both in my own being and in moments of healing shared with patients inspired doubts about the foundational paradigm of biomedicine—the body as machine. One day, when I was a family practice resident, I was putting my infant son in the back seat of my car, and suffered an extremely painful back spasm. It turned out to be garden-variety lumbago, and it was “treated” the well-worn conventional way. Over the following few years the lumbago recurred, and I

came to view myself as having a "bad back." I knew in my bones that there had to be a better way of treatment. So I began experimenting with unconventional remedies: acupuncture, chiropractic, massage, somatics and Qi Gung. Today my back is usually pain-free and I've reclaimed my athleticism. My once "bad back" has been healed. This is one of countless direct experiences of healing that pass below the radar of clinical trials—yet the patient certainly knows that healing has occurred.

Traditionalists, Moderns and Post-Moderns

During my twenty years of family practice I have blindly groped the proverbial elephant of health and healing. Family Doctors are favored with a unique perspective to perceive the whole of it.

The majority of Westerners have evolved culturally from a "traditionalist"—basically Judeo-Christian—worldview, to the "modernist" worldview—that science and technology are steadily lifting the human condition from the shackles of superstition and ignorance. "Health" in this process morphs from being a gift of God (as a reward for avoiding sin) to an accomplishment of science and industry. In America, the spiritual

value of industriousness allows one to earn the grace of health. God help the uninsured!

Healthcare is the biggest industry in the United States, dwarfing the scale of the health enterprise of any other country. The immensity of the health enterprise reflects the value that Moderns have for health, but the distribution of resources within this enterprise reflects darker and more conflicted values. For example, huge amounts of money are spent vainly and painfully trying to keep dying people alive during the very last days of their lives. There is very little money for preventative medicine, yet plenty to treat chronic illness. Lifestyle drugs are booming. There is darkness in the huge profitability of the pharmaceutical industry.

A smaller group of Americans are in the process of culturally evolving from Moderns to Post-Moderns, who see science and technology as both fundamental to our lives, but also as a threat to the environment and society that needs taming. "Health" in this paradigm is transformed from an accomplishment of science and industry into a holistic vision of the oneness of Spirit, Mind, Body, Society and Environment. No one

can be truly well if others or the planet itself are suffering. Rather than pious industriousness, the driving spirit of healing is enlightenment and compassion. The post-modern health clinic may look like a spiritual retreat center.

The sheer economic momentum of the massive health care industry, which three decades ago overtook the defense industry as the largest sector, seems out of control. Yet healthcare as it is now implemented is not sustainable. The demographic wave of aging chronically ill adults is already in sight, threatening to capsize the system when it hits. And despite spending three times as many dollars per capita as Europeans, Americans have a shorter life span, poorer health and less satisfaction with our health care system. We know we're in crisis, and we correctly perceive a threat to our way of life and health.

Ironically, despite this massive and doomed orgy of spending, integrative healing practices have almost no place in the official system. They are truly preventative, and as such they save money that would be spent if patients became sick. Yet to health insurance companies, integrative healing practices appear to be

simply another expense. Why should an insurer pay out for care for someone who isn't sick, when they're already struggling to afford those who are? Moderns and Post-Moderns don't understand each other yet.

The Integrative Psychosomatic Network

The burgeoning basic science of Psycho-neuro-immunology (PNI) represents a scientific discipline that utilizes a holistic paradigm. One of the foremost of today's researchers, Candace Pert, says, "Since the 1980's, psychoneuroimmunology [has produced] findings that dismantle previously erected barriers between biological subsystems, bringing mental and emotional processes into the healing equation. Research on neuropeptides as informational substances continues to substantiate and elaborate the construct of an integrative psychosomatic network."

Neuropeptides, called neurotransmitters in the brain, are the substrate of consciousness. They interact with other kinds of cells—immune cells, gut cells, heart cells, maybe all cells. Their function is to coordinate. Neuropeptides can be viewed as "informational substances." Candace Pert says, "Information can be viewed as a unifying concept that

spans many levels of organization in living systems, including emotional, energetic, biochemical, molecular and genetic levels." Neuropeptides get around the body in complex patterns—sometimes flowing in blood vessels, sometimes triggering other cells to secrete other neuropeptides or other biological effectors, such as cytokines or hormones. All this can be accurately called "information flow."

The concept of an integrative psychosomatic network may prove as momentous to the next century as Darwin's monumental system of natural selection was to the last. It's the scientific foundation for the concept of "biological energy," which is central to all complementary and alternative healing systems. The "flow of informational molecules," is correlates with terms from alternative medicine such as bioenergy, qi, prana, healing force, kundalini and life-energy.

I find it a constant struggle to practice healing of the integrative psychosomatic network within the context of the illness-driven health care financing system. On the one hand, there are some insurance companies who cover integrative services such as mindfulness meditation, healing imagery, biofeedback,

self-hypnosis, and progressive relaxation training, but almost always with caveats, limitations and daily struggles with the authorization process. Conventional physicians tolerate these complementary modalities, because Herbert Benson and others have demonstrated the wide-ranging health-promoting effects of "the relaxation response" for anxiety, migraine, irritable bowel syndrome, insomnia and chronic pain.

I have lectured about these modalities to physicians. Responses have ranged from mild interest to boredom. Responses to the more ambitious possibilities of Mind-body-spirit medicine—such as treating heart disease, cancer and AIDS with meditation and visualization—are summarized by a comment I received on a feedback form: "He's gone off the deep end!"

Practicing Integrative Medicine in a Reductionist World

Integrative medicine has resisted the reduction of human life and health to the reactions of microbes and molecules. For example, the germ theory of disease—that infectious diseases are fundamentally caused by germs—is now appreciated as simplistic. According to common belief, the archetypal triumph of modern

scientific medicine has been the conquest of infectious disease by antibiotics and vaccines. The myth is that germs cause disease, and antibiotics kill germs. The fact that infectious diseases—such as tuberculosis, influenza and measles—were already dwindling before any antibiotics or vaccines were available—is ignored. The disappearance of these virulent diseases was more a result of septic systems and clean water, electric lights and modern heating systems, leading to cleaner household air, and abundant refrigerated food. These technologies reduced exposure to pathogens and, through enhanced nutrition, immune competence.

Antibiotics and other chemicals are conceived as “magic bullets,” targeting only the source of disease and leaving the rest of the body untouched, but such linear health models are simplistic and ultimately inadequate. Even conventional medicine is on a campaign to reign in the vast overuse of antibiotics. If our society had a social education plan to teach health, rather than selling pharmaceuticals, I believe our levels of wellness would take a dramatic upswing.

Abundant evidence demonstrates that emotions and mental states affect our immune cells. As Candace Pert

puts it: "The cellular agents of healing—immune cells—produce the same chemical messengers we conceive as regulating mood and emotions. Because these cells also receive input from neuropeptides, there can be no doubt regarding bi-directional communication between brain and body." The mind and the body are one. Healers must pay as much attention to a person's psyche and social situation as to their chemistry.

Why is such an eminently reasonable statement viewed as radical by most of my profession? Physicians dismiss the placebo effect, the discovery that when patients believe they are being given treatment, many get well—as a whimsical curiosity, and a confounding variable. Yet it demonstrates the healing power of belief; disparaging references to placebos provoked Herbert Benson to propose abandonment of the term, in favor of "remembered wellness."

It is clear that modern scientific medicine has developed valuable cures, banishing smallpox and polio, treating diabetes, rescuing acute coronary cases, mitigating a few of the many types of cancer, and treating people suffering from physical injuries. Nonetheless, modern medicine has contributed relatively

little to overall vitality and longevity. Americans, who have access to the most developed technology in the world, live neither longer nor healthier lives than Chinese, who don't. Cancer has been on the rise for a century; Alzheimer's dementia and other degenerative diseases are epidemic. Violence, a social plague, is pandemic. Scientific medicine will undoubtedly progress further, but the limits of its effectiveness and affordability appear evident, imminent, and inevitable.

There is good reason to expect that ancient medicine has valuable knowledge for us. Clearly, several thousand years of observation and practice have produced successful treatments. Tibetan medicine, for example, appears to have its own admirable successes. In his book *Health through Balance*, Yeshe Donden observes: "From my own experience I have found Tibetan medicine to be effective in certain cases of cancer... [and] to be extremely effective [for] hepatitis, certain types of mental disorders, ulcers, paralysis, gallstones, kidney stones, and arthritis." Western medicine does not have completely satisfying treatments for some of these conditions, and only marginally

effective treatment or expensive and painful treatment for others. Rationally, we could be healthier by using both types of medicine with regard only to what works, but conceptual prejudices among the public and the medical profession often impair pragmatism.

There is no paradigm for these two disparate medical systems to work together. Some people will seek Ayurvedic (either Tibetan or Indian), Chinese, or some other "alternative" medicine either for ideological or practical reasons, but there is a dense barrier of obscurity between the various practitioners, who rarely talk to each other, and seldom know or understand each other. For biological medicine to talk to Ayurveda requires a substantial effort of translation.

What is the role of "Complementary & Alternative Medicine" (CAM) in pragmatically bridging holistic approaches and mainstream medical literature? The work of Dean Ornish may be the most prominent example. He demonstrated that a program of a low-fat diet, meditation, support groups and exercise could reverse coronary artery disease—and quickly. Americans widely engage in many other alternative medical practices. Prayer is increasingly recognized as a valid healing

exercise. Many studies demonstrate that meditation is healing. There is growth in the intellectual basis of integrative medicine, even though the facilities to practice it in the real world are still in their infancy.

Having a holistic worldview doesn't easily or automatically transform the practice of medicine. Virtually everything about conventional medicine works in the service of reductionism. Every day I refer patients to a CAM modality, such as acupuncture. To do this, I have to assign diagnosis codes and procedure codes that make sense to health insurance carriers—and that are virtually irrelevant to Chinese medicine. I have to write circuitous reports and schmooze claims adjusters as I seek to cram round pegs into square holes. I have to endure the often snide and occasionally offensive comments of medical specialists when I refer patients to acupuncture, and I completely hide the fact that a lot of my Chinese medicine colleague's treatments will be herbal. I usually dare not explain what I am really thinking, and demand authorization of treatment based on orthodox bases such

as the National Institutes of Health's blessing of acupuncture.

This joke is wearing thin. Chinese medicine diagnoses are not congruent with the International Classification of Disease (ICD)-9 (or 10 for that matter!). Acupuncture procedure codes in the standard procedure book (CPT) are the American Medical Association's (AMA) idea of what Chinese medicine is. There is bold work being done developing an appropriate integrative medicine coding system, but the AMA writes the code books that insurance companies and government recognize!

The fact that there have been some clinical studies using Chinese medicine for conditions defined by the conventional diagnosis scheme is integrative, but cannot really bring us to healing and wholeness. Are all the world's medicines going to be reduced to new procedures in Western medicine? It's been fun to host a mediation class, and prescribe herbs and nutrition, but I still find myself stuck practicing reductionism. It's been enlightening to discover that PNI is congruent with Ayurveda, but if we don't do the hard

work of thinking holistically, then reductionism will prevail—at the expense of our health.

Scientific Foundations of Integrative Medicine

The placebo effect as well as acupuncture has been connected with the endogenous opioid (neuropeptide) system. The psychosomatic network corresponds to the “psychic channels and chakras,” or acupuncture’s meridians and points. Suddenly we’ve come full circle, with the dawning awareness that ancient medical systems like Ayurveda and Chinese medicine may have been “real” sciences! Their discipline was elaborate observation, description and experimentation with patterns of informational molecules.

Perhaps the most effective complementary modality is exercise. Dr. Terrie Wetle, Deputy Director of the National Institute on Aging, testified to a Senate committee that, “Americans would pay almost any price for a pill that contained all the benefits associated with exercise: increased life expectancy, improved mental health, and decreased disability. Scientific research has shown repeatedly that exercise can benefit both the body and mind.”

David Spiegel, a researcher at Stanford University, has shown that adding a support group to chemotherapy for Stage IV breast cancer patients not only helped these women be "less anxious and depressed... and cope more effectively," but he also found that "they lived twice as long as those who were not in the groups—an average of 18 months longer." Breast cancer patients in support groups can re-write their personal script, and inform their bodies with greater resilience. Other studies demonstrate that social factors are more powerful in reducing deaths from infectious disease than the availability of antimicrobial chemicals.

Meditation is the pinnacle of psychosomatic interventions. It has shown wide-ranging benefits in such diverse conditions as: cardiovascular disease, chronic pain, gastrointestinal distress, high blood pressure, headaches, anxiety and panic, cancer, sleep disturbance, job and family stress, HIV/AIDS, type A behavior, fatigue and skin disorders. When introducing meditation to my patients, I begin with the relationship between mind and the detrimental effects of chronic stress, which impairs neuroendocrine and immune system functions. Meditation—all by itself—may

offer more to the health of a modern American than all the pharmaceutical remedies put together.

The NIH issued an assessment of acupuncture, endorsing it for: "adult post-operative and chemotherapy nausea and vomiting, and postoperative dental pain." Moreover, NIH stated that acupuncture offered substantial benefit for: "addiction, stroke rehabilitation, headache, menstrual cramps, tennis elbow, fibromyalgia, myofascial pain, osteoarthritis, low back pain, carpal tunnel syndrome, and asthma." The statement concluded that: "There is sufficient evidence of acupuncture's value to expand its use into conventional medicine and to encourage further studies of its physiology and clinical value." Chiropractic is now the consensus "best practice" for back and neck pain.

Supplements and herbs can be highly effective at promoting health and fighting disease. Diet, exercise and meditation can unblock coronary arteries. And according to an independent insurance company study, insurers saved an average of \$17,000 per patient when compared to conventional approaches like angioplasties and heart bypass operations. Health is cost-effective.

The Integrative Medical Clinic of Santa Rosa

I personally reached a point in the mid-nineties, where I was both blessed and burdened with a vision of practicing medicine in the way that was as "right" as I could envision it. From this vision I became a Co-founder, along with Pam Koppel, of the Integrative Medical Clinic of Santa Rosa (IMCSR).

The seeds of this move were planted decades before, when I studied both Physics and Philosophy at the University of Chicago. I was fascinated by both science and philosophy. For six years after graduating, I split my time between studying Buddhism with a Tibetan Lama named Tarthang Rinpoche, and programming computers in a cardio-pulmonary research laboratory. Then I enrolled in medical school at the University of California at San Francisco.

I endured dismissive comments from my teachers, who felt that my intention to become a family doctor was quixotic. Nonetheless, I became one, and practiced conventionally for twelve years. Four things contributed to my breaking out of my family practice routine: botanical medicine, Naturopathy, meditation, and integrative medicine.

First, I intensively studied Western herbal medicine. Finding medicine in plants that I could find or grow and prepare myself was transformative. Most drugs prescribed have their origin in plants. And walking in the hills and finding valuable plants is one of life's supreme pleasures. Botanical medicine led me to study the broader field of Naturopathic medicine. I started teaching Meditation classes in my medical office, and introduced elements of other methods where I saw openings. A post-modern doctor can embrace technology, but look for true healing anywhere he or she can find it.

Putting together a healing center in which all these ideas can be turned into practice has been rewarding—and immensely difficult. We opened the doors of the IMCSR in August of 2001. The business has been in the red from the beginning. It started off losing some \$80,000 per month, and after two years the losses have been whittled down to about \$20,000 per month. That level of financial investment is not for the faint-hearted or under-funded.

There is a core group of two family physicians, two chiropractors, one acupuncturist, three somatic

therapists, one Naturopathic physician, one biofeedback practitioner, one Qi Gung practitioner, three massage therapists, two herbalists, one nutritionist and two psychotherapists. Two years before opening the clinic, we started envisioning a highly functioning, highly spirited team. Governing ourselves as a team, clinically democratic but fitting into a management structure, was difficult to implement. Compromises had to be made, and a number of practitioners resigned from the clinic in the early stages as we wrestled with difficult practical issues that challenged our ideals.

For example, I had envisioned relatively long visits with patients: one hour for a new patient and thirty minutes for a follow-up. We discovered that this ideal was not sustainable given our reimbursement rates by insurance companies. We now usually have twenty-minute follow-up sessions with the MDs.

We made a large investment in electronic medical record (EMR) technology. I expected EMR to so enhance efficiency that it would leave us more time to care for our patients, but other practitioners resented the technological intrusion of computers into the consulting room. Overall, however, the EMR has proven

to be a great tool for integrating different types of treatment, since all practitioners make their notes in the same patient record. The acupuncturist can see a glance what the M.D.'s diagnosis is; the Feldenkrais practitioner can determine when the patient last saw the chiropractor. But early on, the benefits were not so obvious, while the computer monitors were.

Our office has large and beautiful common spaces, accommodating lectures (maximum so far 120 people), movement classes, a waiting room, meditation space and library. The IMCSR also has a retail herbal formulary and kitchen. We compensate for the square footage used by common areas by employing interchangeable practice rooms, and a flexible system to allocate practitioners to rooms. This means that a chiropractor might be in three different rooms over the course of a week, still able to access all key information through the EMR computer system. This led to conflicts, as we discovered that practitioners can be territorial, wanting rooms for their own exclusive use.

Ultimately, the question is: What is the experience of our patients at IMCSR?

Patients tell us often that it is completely unlike the usual outpatient care setting. I have been able to help people here at IMCSR that I was never able to help before; I can get a consultation quickly from other practitioners.

One of our greatest clinical successes is with patients suffering from back pain. Back pain is the most expensive health care problem in the United States, when lost workdays are taken into account. The availability of physicians' diagnostics, prescriptions and trigger point shots, allied with chiropractic adjustments, acupuncture, somatics, massage, and physical therapy is extremely effective, and a quantum leap from conventional medical approaches.

We have a pain program at IMCSR called the Pain Rehabilitation and Education Program (PREP), which serves injured workers. It is perhaps our best effort yet in manifesting a team integrative approach. This program runs for twelve weeks, three days a week, three hours a day. It involves most of our practitioners. Roughly half of the program occurs in group sessions, and the other half is individual sessions. The program is individualized for each patient.

Larry Bailey, for instance, is a 56-year-old Vietnam veteran who came to us with chronic shoulder, neck and upper back pain from an old injury. He complained of severe pain. He was despondent; five years of conventional medical treatment had produced no improvement.

He was "totally skeptical" of alternative therapies to begin with, and expressed his opinions in direct and colorful language: "You can stick that aromatherapy where the sun don't shine." But at his last checkup, ten months after completing the PREP pain rehabilitation program, he reported his pain to be moderately better. He manages flares of pain with somatic awareness and Qi Gung, and he carries an aromatherapy kit around with him.

Another clinical success of Integrative Medicine is the treatment of hepatitis C. The hepatitis C virus is the largest cause of fibrosis, progressing to cirrhosis, liver failure, cancer and liver transplants. Conventional medical treatment is effective for some patients—but is very toxic and difficult for the body to tolerate. Chinese medicine, on the other hand, offers treatments that appear to prevent the process of

fibrosis and to enhance the tolerability of the treatments—as well as mitigate the symptoms of hepatitis. At IMCSR we use sound and rigorous criteria for selecting patients to be treated with Interferon and Ribovarin (definitely a minority) and offer everyone Chinese medicine. The integrative physician must be bilingual, thinking of molecules and qi in the same sentence.

We've also enjoyed success with a vexing cluster of overlapping syndromes: Chronic Fatigue Immunodeficiency Syndrome (CFIDS), Fibromyalgia, and Multiple Chemical Sensitivities. There are more patients with CFIDS in the US than have AIDS, and it is more disabling! There are no effective treatments for CFIDS in conventional medicine, although some symptoms can be mitigated a little. Through the combined application of Naturopathy, Somatics, Pharmaceuticals, Nutrition and Massage, we have taken patients who would be condemned to years of suffering under conventional medicine and often given them their lives back.

A few months ago, a forty-three-year-old woman called Marion Westbury came to see me. Fifteen months previously, she'd started having flu-like symptoms

which turned out to be fibromyalgia. She suffered from severe pain that affected her entire body. She experienced incapacitating fatigue. Needless to say, she had become depressed. She had been treated by her Family Doctor and a Rheumatologist. They had prescribed physical therapy, thyroid medication, Prozac and narcotic analgesics (time release morphine). Mary said that this treatment regimen "helped some."

We gave her an intensive evaluation at our clinic. We had her make nutritional changes. We gave her a course of acupuncture, massage, neuromuscular reeducation and energy medicine. Seven months later she noted, "I am so much better, I can't believe it. My energy level has increased. The pain in my lower body has diminished. I sleep better. I've had no headaches lately. My bowel movements have become regular again. I love the energy work with my practitioner, and I couldn't live without neuromuscular massage. I've begun taking walks again. Just wanting to get out and do something is huge! I feel more normal than I have in two years."

It is a constant struggle to remain true to my original intention of practicing medicine congruently

with the vision of interconnected wholeness. Much of what I am required to do is running a business, and a very hard business at that. Difficulties collecting money from patients and insurance companies has accounted for most of our revenue shortfalls. We've had to get good at this skill, which has nothing to do with medicine. The survival of our clinic is as dependent on our business savvy as our clinical acumen and caring hearts.

Are we in the midst of a fundamental shift in modern healing practices—or is integrative medicine a side branch that may soon either wither or be pruned? A huge body of important clinical information, previously branded as superstition, has suddenly become available to medicine. Mind-body-spirit approaches—previously dismissed by the medical establishment as “soft science” if not “pseudo-science”—now offer a way to restore people to high levels of wellness, at a fraction of a cost of conventional health care. As the established health care system implodes—a victim of patient demands, expensive exotic technology, and an aging population—establishments like the Integrative Medical Clinic, marrying modern scientific health care

with complementary and alternative methods, may offer a path that synergistically unleashes the full healing power of all available approaches.

Chapter Twelve

Principles of Quantum Medicine

What do all these Mind-body-spirit trends mean for the future shape of medicine? What effect is consciousness change having on our society, and how is it showing up in the practice of wellness today? What shape will future medical interactions take?

Studies like those mentioned earlier, indicating that DNA may be influenced by feelings and intentions, upend the whole mechanistic medical model of the twentieth century. They indicate that something is shifting as our thoughts and emotions shift, though it may be a long time before precise cause and effect relationships are established between states of being and DNA changes. Yet it is radical to conceive that the building blocks of our physical cells, and perhaps our behaviors, are mutable, that consciousness can change form at the molecular level.

Two thousand years ago, Jesus said, "Blessed are the peacemakers." Yet it is only in the last century that we have seen institutions emerge to study and develop the

skills to make peace. The League of Nations was a first faltering step on an international scale. The United Nations is far from perfect, yet has catalyzed peace in many regional conflicts which would be worse without UN intervention. Today, multinational corporations find ways in which to turn multiculturalism into a benefit, and spend millions of dollars on training and equipping their employees to understand and appreciate differences. A hundred years before, the corporate giants of the world—think railroad barons, sugar monopolies, the Dutch East India Company, Shell Oil, the Rockefellers, and the du Ponts, or Henry Ford's production lines—prized uniformity. Our social DNA is changing under the impact of changes in consciousness as surely as our physical DNA might do.

One strain of genetic research seeks beneficial effects by manipulating the composition of genes in the laboratory. Imagine a medicine of the future in which the laboratory in which your genes are being modified is your own mind, under the guidance of your own highest awareness of your good. And being modified daily, with every thought and every action you undertake. Imagine a virtuous cycle in which heart-focused intention produces benevolent DNA change, which reinforces heart-focused intention, which accelerates

DNA change. Where does the cycle stop? No one knows. In *Youthful Aging*, Norman Shealy, M.D., Ph.D., speculates that a human health span, using only the factors known today and not the fruits of future research, might extend to 140 years.¹²⁰ This figure seems completely outside the bounds of possibility to most medical practitioners today—perhaps as improbable as proposing to a Utah frontier surgeon in 1900 that, within a century, human life expectancy would almost double from the 42-year average that prevailed at the time..

The idea that our DNA can be reshaped by our feelings, thoughts and intentions when these are activated in a particular manner might be as axiomatic to the next generation of treatment professionals as today's understanding that Aspirin thins the blood. As this idea is researched and developed, an entirely new medicine is likely to take shape. This medicine will be completely different from today's medicine. Taken together with the many other discoveries of the efficacy of complementary and alternative medicine, it will shift personal and social wellbeing to an extent we can barely imagine today.

A typical medical visit today goes something like this. A patient makes an appointment, driven to the practitioner by some discrete ailment or complaint. The doctor listens,

asks questions, performs an examination, gives advice, and writes a prescription for that ailment.

If the ailment does not go away, or if it disappears but resurfaces in some other form, then further steps may be taken. Tests may be performed. Surgery or more powerful drugs may be prescribed. An escalation of treatment occurs, until the patient "responds."

The first doctor visit is relatively quick and cheap. By the time treatment escalates, for instance into chemotherapy and radiation for cancer, or insulin injections for diabetes, the solutions are neither quick nor cheap—and they may have severe consequences for the quality of life of the patient.

This is "back-loaded" treatment, with few of the costs on the front end of the treatment cycle, and a very high total cost in terms both of dollars and quality of life.

An integrative medical approach is quite different. There are more costs, and more attention, on the front end. During the first visit, attention is given to all aspects of the patient, to see how the presenting condition fits into the larger picture. Those larger picture issues are then addressed. If the patient's lifestyle can be shifted, perhaps given nudges by a number of different healing

modalities, then many of the medical problems that characterize poor ongoing lifestyle choices may be avoided. The diabetic, for instance, who embraces a diet designed for insulin balance, plus an exercise program, may not need all the costly later interventions that would have resulted from traditional medical treatment. The attention and costs of appropriate holistic intervention result in a much higher quality of life for the patient—and much lower costs over the whole treatment cycle.

There are, I believe, a number of interwoven and mutually reinforcing principles for treatment that can be derived from the emerging consensus of knowledge and experience collected in the paradigm of quantum wellness. Some of them are:

- **Magnify the Body's Inherent Self-Healing Powers First.**

Sometimes a person needs only a nudge in the right direction to get unstuck from a recurrent pattern and initiate the process of the body's restoration of homeostasis. The first thing a wellness counselor can do is look for those leverage points that might help the process get going. So rather than first looking for outside interventions, the guide of the future will look for the interventions inherent in the patient that the patient might not have seen or might not be

utilizing. In a landmark paper by Andrew Weil, M.D., and Ralph Snyderman, M.D., and published in the *Archives of Internal Medicine* in 2002, the authors conclude with a list of six reforms that build on the platform of sound science, yet also focus broadly on the well-being of patients. One of these reforms is to involve patients as active partners in their care, with an emphasis on teaching them the best way to improve their health.¹²¹

The doctor is with the patient one or two hours a year. The patient is with the patient the other 8,764 hours Who do you suppose has the most leverage over the patient's wellness on a daily basis? Recognizing the enormous healing powers of the body, and finding ways to engage them, presupposes an entirely different model from the classic image of the patient being fixed by a doctor or hospital. Several alternative therapies explicitly do not try and produce healing; instead, they look for the one log that is producing the jam, and shift that one. Once it is shifted, the rest of the jam takes care of itself and the body's full power comes to bear on re-creating homeostasis.

- **Being-Focused.** Our state of being might have as much to do with our health as the puncture wound in our arm. Larry Dossey recounts the story of doing his rounds in a

coronary care unit and asking patients (all men) why they were there. They had seemingly succumbed to sudden and unforeseen heart attacks. But the majority of answers they gave were based in their life-situations, not their medical histories. Typical responses were, "I couldn't stand to see my boss's face one more day" or, "I feel trapped in my marriage. I can't abide being with my wife" or, "My kids fight constantly. I would do anything to get away from their constant bickering." Our presenting symptoms may have a great deal more to do with our state of being than with our medical histories. They may hold keys to our wellness that can make or break our medical histories. To fix the medical problem, while leaving the soul unaddressed, at best defers the consequence.

Some practices—a rich social network, consistent spiritual practice, an authentic vocation, the ability to speak one's feelings, meditation—have been shown by research to build a more powerful sense of personal well-being. The physician of the future might first look for the practices that can most bolster the patient's soul, like James Dillard writing on his prescription pad, "Long talks with your Rabbi," before even starting work on the presenting condition.

• **Heart-Centered.** The *quality* of interaction might be as important, or more important, than the *content* of interaction. Simply being met by another human being, heart to heart, at the level of soul and emotion, can be a profoundly healing experience, as Jeanne Achterberg and Dean Ornish amply demonstrate above. This is the state that people in love find themselves in, and it triggers a cascade of powerful hormonal responses. If every medical encounter began with a heart-connection, and did not proceed until that connection had been established, the content of those encounters might be much more powerful. Weil and Snyderman put it this way: "Such changes will require far more meaningful patient-physician relationships...[that]...provide compassion, provide close attention to our patient's spiritual and emotional needs..."¹²² They redefine the traditional "bed-side manners."

One of the striking things about the Hearthmath studies cited earlier is that intention alone did not affect DNA. Only when intention was maintained, coupled with the ability to move the locus of consciousness to a serene, empowered, relaxed and open heart, was DNA affected. The Psalmist had the formula for genetic modification in a quantum universe exactly right when he declared, some four thousand years ago

(Psalm 37:4): "...take delight in the Lord, ... and he will give you your heart's desire." The medicine of the future might teach the techniques for moving into this delighted, heart-centered state as a primary intervention.

- **Start With Energy Medicine.** Energy medicine functions at the levels of the most basic building blocks of consciousness. As such, it is the place to *start* treatment, not a place to go once the remedies offered by allopathic medicine have been exhausted, as so many patients do. A summary of research prepared by the Institute of Hearthmath and entitled *Emotional Energetics, Intuition and Research* has this to say: "A number of highly respected scientists suggest that the interactions of electromagnetic fields within the brain's neural architecture are critical to the emergence of conscious awareness and cognitive and emotional experience. In essence, at their most fundamental levels, the mind and emotions may prove to be 'energetic systems' that we are only beginning to understand."¹²³ Energy systems underlie cellular architecture; they are the first place to start building a foundation for vibrant health. The medical encounter of the future might start with a prayer as certainly as the medical encounter of today starts with a clipboard and a white coat.

Energy medicine is not only the place to *start* treatment of a presenting condition; it is the place to start *before* there is a presenting condition. A person whose energy systems have been optimized and are functioning well has established a baseline of functioning that might make disease much harder to take root. Whatever the conditions of our lives, no matter what difficulties we are experiencing in our health, our relationships, our work, the techniques found in energy medicine can optimize entire systems in our bodies, minds, and emotional and spiritual realms. Because it breaks from a mechanistic model of cause and effect, energy medicine opens our minds, hearts and bodies to the possibilities of quantum change described earlier. Experiments tell us that energy is not localized in time or space; so we can pray for our own childhoods, we can pray for distant people, and we can pray for the wellness of our planet. Perhaps it is possible for each of us to have that perfect childhood on that perfect planet after all. This may be the most effective and benevolent place to start the healing journey.

- **Thrive Through Chaos.** People often have elaborate sets of reasons as to why they cannot be well. Brad Blanton, Ph.D., a psychotherapist who wrote *Radical Honesty: How To*

Transform Your Life by Telling the Truth and a number of other books, calls these our "tragic stories."¹²⁴ He explains how we get wrapped up in them, and neglect the very things that are healthy and serving us in our lives right now.

Tragic stories prevent us from seeking our full potential, let alone realizing it. In his new book *The Beethoven Factor*, Paul Pearsall, Ph.D., talks about how many great works of art, literature, and science have been produced despite the chaos in the personal lives of their creators.¹²⁵ Although he cites dozens of examples, he picks Beethoven as the archetypal creator of beauty amongst personal tragedy. Forsaking the traditional label of "survivors," he calls these people "thrivors," people who don't just make do, but go on to extraordinary accomplishment despite psychological, spiritual, and physical setbacks, tragic stories that any of them might used as a valid excuse to give up hope and accept a limited life. In a condensation of *The Beethoven Factor* that Dr. Pearsall graciously prepared for an anthology of mine, in a section entitled "A Thrivors' Hall of Fame,"¹²⁶ he assembled the following partial list of thrivors, some of them world-famous, others obscure:

Lance Armstrong: He thrived through cancer, to achieve unprecedented success in bike racing, and to inspire other cancer patients.

Poet William Carlos Williams: He suffered a severe stroke and subsequent emotional breakdown, only to later write great poetry and win the Pulitzer Prize for his work *Pictures from Brueghel*.

Nelson Mandela: He emerged from years of imprisonment and torture to become a leader for freedom, democracy, and the rights of the oppressed.

Pierre-Auguste Renoir: Unable to walk, and with fingers twisted by arthritis, he attached a paintbrush to his hand and painted some of the world's most memorable works, including (at age 76) "The Washerwoman."

Henri Matisse: Suffering from heart failure, gastrointestinal disease, and with his lungs failing, he placed paintbrushes on a long stick and painted from his bed. His style created an entirely new field with a unique combination of color and form.

Enrico Dandolo: While serving as a peace ambassador to Constantinople in 1172 A. D., he was blinded in both

eyes by the emperor's guards. Twenty-nine years later, and at age 94, he led Venice to victory over Constantinople, and at age 97 was appointed chief magistrate of Constantinople.

Sister Gertrud Morgan: She devoted her entire life to establishing and running an orphanage in New Orleans named Gentilly. When she was 65 years old, a hurricane destroyed her orphanage. She then returned to her interest in painting and went on to have her works displayed in museums around the world.

Ding Ling: (A pseudonym used by the Chinese novelist and radical feminist Kian Bingzhi.) She was imprisoned from the ages of 66 to 71, during the Cultural Revolution of the 1970s in China. Upon her release, she went on to write some of her most highly praised works. She wrote an inspiring novel describing her experience of banishment to China's northern wilderness.

Helen Keller: Blind, deaf, and mute from nineteen months old, she wrote and published (at age seventy-five) her book *Teacher* in honor of the woman who helped her thrive through her suffering.

Jesse J. Aaron: A descent of slaves with a Seminole Indian grandmother, he too worked at slave labor. Throughout his life he cared for his disabled wife and had to spend all of his meager funds on surgery to save his wife's sight. In poverty, he offered a definition of what I am calling the Beethoven Factor. He wrote, "It was then that the Spirit woke me up and said, 'Carve wood.'" He went on to become one of the most respected wood sculptors in the world.

The new model of wellness focuses on what's working in a patient's life, and what their potentials are, as well as treating the issues that trouble them. But the places of wellness will be the starting point, not the end point. I had a mentor, Bill Bahan, D.C., when I was taking my first classes in energy medicine in my late teens. One of his favorite sayings was, "What's right with you is the point. What's wrong with you is beside the point."¹²⁷

One of the great services that authors like Bernie Siegel, M.D., Elizabeth Kübler-Ross, Ph.D., and Stephen Levine have done is to shake up the idea, so prevalent in our medical institutions, that death indicates a failure. I remember talking to a high school grief counselor many years

ago about the exciting ideas in Bernie Siegel's book, *Love Medicine and Miracles*.¹²⁸ At the time he was consulting with a high school, doing grief work with students after a rash of suicides. "It is terrible for a client," he objected, "if they try all that touchy-feely stuff and it doesn't work."

Underlying his objection was the assumption that *living* meant that the "touchy-feely stuff" worked, and *dying* meant that it did not. Siegel and others have reintroduced into public consciousness the idea of a healed death.

My mother showed me this first-hand. She developed cancer in her left eye and her liver. She had some conventional medical treatments like radiation (chemotherapy was not indicated for her particular condition) and also tried alternative therapies like shark cartilage. She would have fit right into Paul Pearsall's book as a person whose life was often in chaos, usually self-created. That chaos regularly spilled over to negatively affect the lives of the people around her.

In the two years before she died, she sought to make amends. She traveled to visit many of the people she had grown up with and, in person, asked for forgiveness. Her father was still living, and she traveled half way across

the world to see him. She visited her sisters and her childhood friends. Layer by layer, all the heavy weights of a lifetime of resentment and anger dropped off her shoulders. In one of the last conversations I had with her, she agonized over a person she could not locate. She said, "There was a girl in my high school whose name was Helen Freund. I hated her, and she hated me. I've tried to track her down so I can say I'm sorry, but I can't find out where she lives now." She started to cry. I sat her on my knee, and said gently to her, "Mom, I think it's okay if you can't find Helen Freund. I'm sure she's forgiven you for whatever happened, and I know you've forgiven her."

My mother's heart and soul recovered, but her body did not. She eventually died. But she died at peace, and—in every way that mattered—she died healed. She and my father lived in my sister's spacious home for those last two years, surrounded by friends and family, and she died in the bed where she had slept much of her last few years. It was very early morning when she died, before dawn, but she started up just before the end. The people present thought they heard her say something like, "I see the light. Do you see the light?" Those were her last words.

When she died, she was honored by hundreds of people. The atmosphere leading up to her funeral was filled with grief, and the rest of the family had decided on an open casket affair, which hardly added to the sense of cheer. So to emphasize the joy she'd come to find in life, instead of the fact of her absence, I had a large screen TV set up next to the casket. On it, I played a continuous loop of video of her I'd taken a couple of years earlier. In the video, she was telling jokes, laughing uproariously, and waving her hands around to illustrate her points. I felt that the video was essential in order to balance the fact of her death with the magic of her life, and, as well as the tragic story of a lifeless corpse, present the vital spirit of a life fully lived.

The doctor of the future may not say, in hushed tones, "I lost a patient." The patient's ego and body might have died, and a medical ego which sees death as the enemy might indeed see a reflection of its own death in the death of another. But when, as Larry Dossey emphasizes, we understand the survival of consciousness beyond death, we see a change in the form, not in the spirit, and we can celebrate the continuation of that spirit even as we recognize the loss of a form.

Our lives are often messy, ambiguous, perplexing, and incomplete. Yet the doctor of the future will see, in every patient, in whatever state, the presence of that eternal consciousness. That becomes the starting point for every medical intervention, every journey back to wholeness, regardless of whether the body and ego survive. Even if they do survive, it is just for a limited season for, eventually, every body and every ego will die. If our medical model is not wrapped up in attachment to how long that period is, and instead focuses on what's vibrant, alive, and vital in the person right now, it has a far more promising starting point for creating wellness. Once we let go of our tragic stories, the ground of healing is open to us. We can thrive in the midst of chaos.

- **Scale Interventions.** In a *scaled* application of treatments, the most benevolent and least invasive therapy is used first. This approach supposes an escalation of interventions, using the simplest ones as the first line of treatment, and employing more drastic means only if the previous treatment is not effective—and using technological medicine only when and if it becomes absolutely necessary. If a patient learns to meditate, begins an adequate exercise program, and makes appropriate dietary shifts, many

associated problems can take care of themselves. Norman Shealy lists a number of conditions where innocuous, small-scale changes can reverse the course of diseases that are difficult, costly, and life-disruptive to treat with conventional means.¹²⁹ In the late nineteen-seventies, I was acquainted with an eccentric old doctor, Henry Wasserman, then professor of medical ethics at NYU. He was horrified at what he discovered in his profession. The most passionate thing he ever said to me in his raspy, cynical voice was, "I have learned enough in this job to give you one piece of solid advice: Never go near a hospital unless you are near the point of death."

An example of a small scale event is a self-administered, 40-second EFT routine. It takes virtually no time and involves virtually no risk, yet it holds the potential to produce big shifts. If the problem does not shift after small-scale interventions, it might be necessary to consider powerful drugs, or surgery. But those should be the last resort, not the first. Hippocrates advised us to "First, do no harm," and that is a good principle to start with in designing a non-invasive treatment regimen.

- **Perceive Healing as a Process, Not an Event.** Modern medicine has an underlying structure which perceives illness

as an event. The event starts with "symptoms," and ends with a "cure." Center stage in the event is the prescribing of a drug, or surgery. But most of health is not an event. It is a process. It is more like a river than like a rock. Lifestyle changes such as diet and exercise can address systemic problems, but they involve a change in life-process day after day after day. Joining a gym is an event, and events such as this are ones that Americans excel at. Going to a gym and working out three times a week for thirty minutes involves reshaping one's habits; it is part of the process of life. At this, we are less good. Going to church at Christmas time or on Sundays is an event. A daily prayer practice is a process that enfolds the entire rest of the day. It is in these regular daily choices that new quantum potentials are activated.

The Kaiser Permanente system now offers drug and alcohol counseling as part of its services; its trustees understand that if patients master their addictions, the later medical costs and consequences will be much less. Shifting to a *process* view of healing, with a daily flow of healthy choices, lowers the probability of catastrophic medical *events*.

• **Set a Human Pace.** We simply cannot relate effectively to other human beings at the fast pace of modern life. For the gifts of deep human connection to appear, we have to set aside our busy lives and slow down—at least for a time—in order to engage in the meaningful relationships that Weil, Achterberg, and Ornish advocate. Andrea Bialek, M.D., whose business card says “holistic gynecologist,” and who specializes in menopause, has a busy practice assisting women looking for alternatives to Hormone Replacement Therapy. She says, “A woman will say she has no sex drive, and I may suggest she and her husband go to a bed and breakfast and see what happens when they’re happy, healthy and relaxed.”¹³⁰ That lovemaking improves on vacation is a truism among marriage and family therapists. When a couple has no agenda for two or three days, no telephones, obligations, or children to deal with, and each person slows down to a pace where they can listen carefully, and speak meaningfully, they gradually match the pace of their mate, a new level of loving and healing becomes possible.

One day Angela, my eleven-year-old daughter, was trying to change the diaper of my two-year-old son, Alexander. “Lie down,” she commanded. Then, to me, “The baby won’t lie down. He never does anything I tell him to.”

"Darling," I told her, "Let's tell him slowly." So I got a soft cloth out of a closet and laid it out on the counter, while he watched. Then I said to Alexander, "Lie down, baby." I watched the meaning of my words gradually sink in, by observing the slow spread of comprehension across his face. When he eventually grasped the meaning of my communication, he lay down on the cloth, ready for a diaper change.

I've had similar experiences with other people. I live my life at a rapid intellectual clip. I love relating to other people who can keep up with my 100-mile-an-hour speech and ideas, speech which nonetheless seems pitifully slower than my thought processes. I particularly enjoy computer conferences—Asperger's syndrome afflicttees, unite!—because I don't have to monitor the faces of my colleagues there to try and determine whether or not they're following me; I can assume they are. I can tell in about four seconds, during a call to a technical support hotline, if I'm talking to another geek. I'll throw out some technical linguistic construct. Immediately, the tech recognizes he or she is talking to another aficionado, and the conversation moves into sixth gear.

This mode of being is completely inappropriate to child-rearing, though. It is one of the jobs of a parent to notice the pace at which a child comprehends, and match that pace. This is one of the disciplines that makes child-rearing such a joy for busy people; it forces them to downshift to second or first gear.

The same is true for the healing encounter. The client before me doesn't want to rattle off a list of symptoms for evaluation, and is not assessing me by how fast I can come up with a prescriptive solution. That person is suffering, and needs understanding and empathy. Tuning in to people to understand their affliction cannot be done at the same pace as drag racing.

The healing encounter of the future will be done at the pace of the Integrative Medical Clinic's Navigator, a wise and compassionate ear who can hear the patient's state of being, and then steer him or her in an appropriate direction, not the pace of the HMO physician, who has 12.7 minutes per patient. The actual therapy session might be quick—I'm happy going to a naturopath that listens to my symptoms and writes a prescription, and with a chiropractor who lays me on the table and makes four adjustments in as many minutes. But the initial encounter has to be conducted

at a pace which allows the evaluator to tune into the patient deeply and notice what's happening on every level with that person.

• **Understand Which Treatment Path is Appropriate.** Some conditions are obvious candidates for conventional medical treatment. Others are unlikely to respond to this approach. Trying to treat Chronic Fatigue Syndrome with allopathic medicine is misguided; trying to treat a gunshot wound with alternative medicine is foolhardy. In *Spontaneous Healing*, Andrew Weil offers this simple advice: "Do not seek help from a conventional doctor for a condition that conventional medicine cannot treat, and do not rely on alternative provider for a condition that conventional medicine can manage well."¹³¹ He makes the following distinctions in "what allopathic medicine can and cannot do for you:

CAN:

Manage trauma better than any other system of medicine.

Diagnose and treat many medical and surgical emergencies.

Treat acute bacterial infections with antibiotics.

Treat some parasitic and fungal infections.

Prevent many infectious diseases by immunization.

Diagnose complex medical problems.

Replace damaged hips and knees.

Get good results with cosmetic and reconstructive surgery.

Diagnose and correct hormonal deficiencies.

CANNOT:

Treat viral infections.

Cure most chronic degenerative diseases.

Effectively manage most kinds of mental illness.

Cure most forms of allergy or autoimmune disease.

Effectively manage psychosomatic illness.

Cure most forms of cancer.¹³²

This list needs updating in some respects. More and more conditions are being moved from the "allopathic" column to the "complementary and alternative medicine (CAM)" column as better research is published. For instance, conventional hormone replacement therapies have been shown to have negative side effects in the ten years since Weil penned this list (the National Women's Health Network calls hormone replacement "a triumph of marketing over science"¹³³), while alternative medicine, through exercise and diet-based approaches, plus supplementation if necessary, have been shown to stimulate the body's hormonal production and

balance. Shealy includes a third category that he calls "semi-orphan diseases," those for which conventional medicine is only partially effective. Among the conditions he lists are rheumatoid arthritis, lupus, multiple sclerosis, and chronic hepatitis.¹³⁴

If a provider and patient have these kinds of clear distinctions in mind, it becomes possible to seek appropriate treatment and avoid wasting time, money, and effort on inappropriate treatment. The new job of "Navigator" at Dr. Dozor's Integrative Medical Clinic is a specialist trained in helping patients (and practitioners) understand these distinctions. Such navigators could become a routine part of the beginning of any treatment plan.

Many holistic practitioners get patients who have not been helped by conventional medicine. Most of the chronic pain patients who show up at Dr. Dillard's practice or Dr. Dozor's integrative clinic have already gone through the medical mill, with little or no relief. I can see the reverse being true in a few years, as patients become more aware of the benefits of alternative medicine. Holistic treatment might be the first option they choose, not the last. In my mind's eye I see a cartoon of a patient walking into an M.D.'s office and saying, "Doc, I've tried everything

else; acupuncture, diet, exercise, meditation, herbs, Chinese medicine, therapy, massage, EFT, the lot. Now I'm ready for some drugs and surgery."

- **Treat Whole Systems.** The benefits of complementary and alternative medicine are becoming more apparent every year. The idea of treating whole systems in our bodies, not just organs, is becoming more obvious with every new piece of research.

The same analysis holds true as we scale up. We human beings exist in a whole system of Planet Earth, which must be healthy in order for our species thrive.

- **Understand the Global Context of Healing.** Fantastically healthy people on a dying planet will not thrive in the long run. A healthy planet full of dying people is no solution either. As a society, we have to wake up to the ways in which our personal health fits into the picture of global healing, and vice versa. This will lead to sustainable, rational approaches to health care, rather than medical systems that pay not attention to the waste and cost they incur.

- **Focus on Intentions, Not Outcomes.** The quantum experiments conducted thus far tell us that the quantum soup

has an infinite number of possibilities. Rather than get too attached to any one outcome, and cling neurotically to our preferred result, we can instead state our intentions clearly, then let go. The serenity prayer of AA is a powerful mantra of non-attachment: "God, grant me the serenity to accept the things I cannot change; courage to change the things I can; and wisdom to know the difference." It isn't whether you live or die in the end that counts, it's how healed your life is at any moment.

• **Discover What Triggers Your Quantum Field.** Years ago, I was part of a spiritual community in the Catskill Mountains of New York. Our community had a rigid lifestyle: meditations in the chapel before breakfast, study and classes in the morning, work in the afternoon, during which we rigorously practiced the spiritual principles we learned in the morning, and worship at night.

There was another spiritual community close by, founded by Swami Muktananda. One day I visited there. The Swami was not in residence, but I talked to the chief administrator. "What techniques does the Swami advocate?" I asked, as we swapped notes about how our two communities were structured. "Oh, he might tell a student that he is

forbidden to meditate at all," he replied. I was aghast. "Why would he say that?" I wondered.

"Perhaps the student has been meditating for hours each day for many years, and has become detached from the material world. But for another student, who has never meditated, he might have them sitting in lotus position for many hours each day."

The Swami was skilled at noticing peoples' habitual tendencies, and giving his students the opportunity to express their divinity in ways that were unfamiliar to them. What activates your process of soul-expression?

The answer is absolutely unique for you, and you have to figure out what is best for your particular constellation of body, mind, spirit, and heart. It may look very different from the culture's vision, or your own beliefs.

For instance, many of my friends belong to gyms, and they sometimes try to recruit me. But I used to belong to a gym, and I discovered something about myself. That something was that driving twenty minutes to a gym, dressing for exercise, working out, showering, and driving back, all collectively took about two hours. I just couldn't work that commitment into my day on a habitual basis. But what I could do is work out for twenty minutes a day at home. So I bought some

home exercise equipment like a rebounder, a weight machine, an ab wheel, and some free weights, and I use them regularly.

Working out at a gym fits well for many of my friends. My routine works for me. Once you set the intention of being healthy, you have to discover what it is that works for you.

For me, thirty minutes of meditation each morning before I work out is essential. For me, meditation is like a drug, or rather an antidote to the slothful, addictive, and intellectually lazy tendencies I have. It took me years to realize this.

I take a peculiar mix of supplements every day. They're the ones I notice work well with my physiology. I review the list and make changes every so often. My regimen might not work for you; yours might not work for me. Understanding our bodies and listening to their signals is a vital part of wellness.

What colors make you feel comfortable? What music soothes your heart? What images nourish your soul? What people do you have in your life who affirm the best in you? What events stimulate your creativity? Setting up our lives so that our highest potentials are continually affirmed by

our external environments, and so that our outer world echoes the best of our inner world, is an invitation to the quantum universe to dance with us. Eve Bruce, M.D., is a plastic surgeon who discovered indigenous healing during a trip to South America and was eventually initiated into the Yachak tribe as a shaman. She recently published a book called *Shaman, M.D.* She beautifully articulates the call and response of the quantum universe: "In our culture we seem to have many answers. When asked why we had an accident or a disease, or in the face of global climate change, we give many answers—faulty tools, faulty user, genetics, biochemical and anatomic mishaps, pollution, the shrinking ozone layer. Yet these are answers to the question how, not why. 'Why' questions lead to a message. What is the message? What is spirit telling us through the language of our physical existence? How can we connect more fully to our physical existence and begin to hear God? The answers are within ourselves. We need only to ask, open up to the answers, and pay attention."¹³⁵

Once you state your intentions, once you invite the quantum universe into a conversation about your wellbeing, listen intently for the answers. Find the mix that is just right for you. Don't be too swayed by the latest fads, but

tune in to the whispers of the soul and the storehouse of advice it contains.

- **Allow for the X Factor.** I used to write an operations plan for a \$10 million book publishing and distribution company each year. It was a famous exercise within the company, involving every employee. The result was a 150 page operating manual that told everyone what everybody else was doing. But I also had a section called "The X Factor" with a couple of blank pages behind it. "You never know what's going to come up," I told curious and skeptical enquirers, "and while you can plan for every conceivable eventuality, there will always be occurrences you did not foresee." Quantum healing is a lot like that. You state your intentions, you fuel them with passion, and then you wait upon the universe to see what X Factors it throws your way.

Medicine, wellness, and healing look very different in a quantum world than they did in the mechanistic and reductionist world that preceded it. Studies are now confirming the possibility that we can heal, change, and grow at levels of causality far below the stratum of concrete reality represented by DNA. They are opening up a

whole new potential realm of influence, in which the intangible energy of our thoughts and emotions can affect the tangible physical universe itself.

Each new discovery is another indication of how important consciousness is for healing. We are learning to see our cells and our bodies as malleable, influenced by every thought and feeling that flows through us. Knowing this, we can choose to take responsibility for the quality of thought and feeling which we host, and choose those which radiate benevolence, goodwill, vibrance, and wellness. Doing this, we positively affect not just our own wellbeing, but that of the entire world of which we are a part.

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