



## Smart Life Forum

Bruce Lipton, PhD

*The Biology of Belief: Unleashing the Power of  
Consciousness, Matter, and Miracles*

Cubberly Community Center  
4000 Middlefield Road, Room H1, Palo Alto, California

March 17, 2005 at 7:00 PM

**Future Speakers:**

- April 21, Parris Kidd, PhD  
*Recent Advances in Phospholipids and Omega-3 Fatty Acids for Brain Vitality*
- June 16, David Cowan, BA, CNC, CBT  
*Unlocking Wisdom of the Body via Electrophysiological Reactivity Using the QXCI or SCIO Biofeedback*
- July 21, Phillip Miller, MD  
*Coronary Artery Disease, Vascular Disease and Heart Attacks*

Speaker (Starts promptly at 7:30 pm)

Bruce H. Lipton received his Ph.D. at the University of Virginia in 1971. Dr. Lipton served as an Associate Professor at the University of Wisconsin's School of Medicine where his research on cloned human stem cells provided a radically new understanding of the

mechanisms controlling life. His breakthrough studies on the cell membrane, the “skin” of the cell, showed that the behavior and health of our cells are controlled by the environment, findings that were in direct contrast with prevailing dogma that life is controlled by genes.

Bruce resigned his tenured position to pursue independent research integrating quantum physics with cell biology. He returned to academia as a research scientist at Stanford University’s School of Medicine to test his hypotheses from 1987 to 1992. His new research revealed the biochemical pathways connecting the mind and body have provided insight into the molecular basis of consciousness and the future of human evolution.

Bruce’s revolutionary studies integrating conventional medical science, complementary medicine and spiritual healing have made him an internationally sought after lecturer. His new book, *The Biology of Belief : Unleashing the Power of Consciousness, Matter and Miracles*, is available now at [www.brucelipton.com](http://www.brucelipton.com) and soon available in bookstores.

## **Presentation**

Hold on to your hats—we are in for an amazing ride. Civilization is perched on the threshold of a radical paradigm shift. The recent results of the Human Genome Project have shattered one of Science’s fundamental core beliefs, the concept of genetic determinism. The profundity of this change in awareness is vast, for it will rewrite the nature of human civilization.

We have all been indoctrinated with the neo-Darwinian notion that genes control our lives. Everyday we are exposed to the news that some new gene has been identified that controls some aspect of our physiology and behavior. Cancer genes, Alzheimer genes, “happiness” genes, aging genes and addiction genes among many others, presumably control the character and quality of our lives. Since we do not choose our genes, and since we cannot change them, we perceive of ourselves as “victims” of heredity. Our health, behavior and fate are apparently out of our personal control, making us powerless in the unfoldment of our lives.

Unfortunately, our perception of being powerless leads to personal irresponsibility and a quest to find help from outside sources, especially from the pharmaceutical companies. The United States has become a drug-addicted nation whose citizens depend upon the chemicals of the pharmaceutical giants to put them to sleep, wake them up, avoid the

messages from their guiding emotions and symptoms and to take away the pain of their inevitable depression.

However, in the face of the mechanistic perception of life, the frontiers of science are revealing another reality. A reality that is not all that unfamiliar, for we have been apprised of it for thousands of years of human history. There is a mind and there is a body. The new science reveals that they are not only integrated and entangled, but that the mind has the power to control and create the life we experience. Bruce H. Lipton, Ph.D., personally experienced the reality of this awareness, first through his profession as a biomedical researcher and subsequently as a 'practitioner' of the new science.

Lipton's career as a biomedical research scientist began in 1967 when he started cloning stem cells, years before conventional science was aware of their importance in human health. While a tenured member of the University of Wisconsin's Medical School faculty, Lipton was involved with teaching each new crop of medical students the basic science of how cells work. Included in his lectures, Bruce faithfully passed on the knowledge of the Central Dogma, a foundational assumption underlying modern medicine.

First defined by Francis Crick, co-discoverer with James Watson of the DNA genetic code, the Central Dogma describes the flow of information that controls biology. Accordingly, information flows in a unidirectional path, starting from the source-DNA, it is then translated into an intermediate molecular form-RNA, and finally the coded RNA molecule serves as a template used to make Protein molecules. The DNA represents the genes and the resulting protein molecules provide for the physical body (structure) and its functions (behavior). Consequently, the "dogma" of conventional science holds that the character of our lives is defined by heredity. Genes rule!

While teaching the Central Dogma in his medical school classes, Lipton's cloned human cells began to reveal a completely different story of how life works. Rather than genes, the experiments revealed that it was the environment that was controlling the character of cells. Every cell contains a complete set of genes, enough information to make a whole human, so every cell is capable of expressing a full range of developmental potentials. By manipulating the environmental conditions within the culture dish, the same stem cells could be transformed to reveal radically different expressions. Cells dynamically adapt their structure (genes) and behavior to conform to their awareness or perception of the environment. The expression of life represents an adaptation to the organism's perceptions, and is not predefined by its genes. Simply, genes do not control biology!

To be a valid concept, the Central Dogma necessitates that genes be able to turn themselves “on and off,” as implied in the notion that a cancer gene can “turn itself on.” However, since the late 1980’s, science has recognized that genes are not “self-actualizing,” that gene activity is regulated by transcription factors that are in turn controlled by environmental signals. This new insight provided for one of today’s most important areas of scientific research, the field of epigenetics.

Epigenetics is a study of the molecular mechanisms by which environment controls gene activity. The DNA helix that comprises genes is covered, and consequently “hidden,” by a sleeve of regulatory proteins. The regulatory proteins attach to the genes because of their complimentary structure, something like a lock and a key, or a hand and a glove. When a regulatory protein’s shape (conformation) is altered it will detach from the DNA. Removal of the protein sleeve exposes the underlying gene. Once it is revealed, the gene’s coded nucleotide sequence is available to be “read” and copied into RNA.

Conformation of the regulatory proteins comprising the sleeve is modified by “signals” that either bind to or otherwise alter the electromagnetic charge of the protein molecule. The eliciting signals are by definition environmental stimuli. In contrast to the Primacy of DNA, science unambiguously acknowledges the validity of the Primacy of the Environment. Environmental (signals) factors are the “first cause” in determining biological expression and behavior.

Though convention still considers the nucleus to be the cell’s brain, Lipton reveals that the nucleus with its contained genes is actually the cell’s gonad, the organelle used in reproducing the cell or any of its protein parts. Where is the cell’s brain, the part of the cell that coordinates and integrates the cell’s physiology and behavior? Lipton’s research lead him from the nucleus to the cell’s membrane, its “skin.” The cell membrane, the plasmalemma, is the first organelle to appear in evolution and it is the only organelle common to every living organism. The membrane functions as an “information processor” that reads environmental information and then engages cytoplasmic responses.

The cell membrane is comprised of a crystalline bilayer of phospholipid molecules. The hydrophobic lipid nature of the membrane’s core, by definition, makes the membrane barrier a nonconductor, prohibiting the flow of charged molecules and ions from passing through the bounding layer. Since the lipids are not linked by conventional chemical bonds, they are “free-floating” in the membrane’s matrix. By definition, the cell membrane is a liquid crystal. However, protein molecules are directly incorporated into the lipid membrane. These proteins interact with environmental signals and enable the transport of ions and

molecules across the membrane barrier. Since the proteins only allow selected items to cross the barrier, the lipid membrane becomes a conductor...but not a conductor of “everything.” Finding itself in between a nonconductor and full conductor, the membrane operationally represents a semiconductor.

There are two fundamental classes of protein molecules found in the membrane: receptors and channels. Receptors serve as “gates” that respond to environmental signals, while the channels control the membrane’s permeability. These proteins collectively comprise molecular switches controlling biological functions. When incorporating the membrane’s proteins into our definition of the plasmalemma, the membrane becomes a liquid crystal semiconductor with gates and channels.

When Lipton first derived this membrane definition in 1985, he had just purchased his first Macintosh computer, and along with it, a book from Radio Shack entitled Understanding Your Microprocessor. In the book’s Introduction chapter he read a sentence that transformed his life: A computer chip is a crystal semiconductor with gates and channels. The membrane and the chip shared the same definition. In the first instant he was amused by the “coincidence” of the shared definitions, but a few milliseconds later it hit him big time. The cell membrane is an organic computer chip! Each cell is a “programmable” chip and its nucleus was a hard disk loaded with genetic software. However, his biggest “ah ha” was the realization that the programmer was the environment! The body is controlled by forces from the outside.

The membrane’s protein receptors provide “awareness” of environment signals (primary messages). The receptors activate protein channels, which in turn relay secondary messages that control the behavior of function-providing cytoplasmic proteins. Receptors are awareness of the environment and channels convey physical “sensations” throughout the cytoplasm. The term perception is defined as an “awareness of the environment through physical sensation.” Consequently, Lipton recognized that it was appropriate and accurate to refer to the receptor-channel protein complexes as molecular units of perception. Bruce’s research elucidated the mechanisms by which perception controls behavior (protein functions), selects genes (via regulatory protein functions) and can even lead to a rewriting of the genome. It is now estimated that the lives of far less than 5% of the population are negatively impacted by defective, less than optimal genes (birth defects). Ninety five percent or more of the population has the opportunity of enjoying a healthy, happy prosperous existence on this planet. Consequently, we cannot readily claim that we are “victims” of our genes. We must now own personal “responsibility” for the character of our lives, for the problems that beset the majority of us are controlled by our

own perceptions! The impact of this new awareness of how living systems work will alter our experience of life as much as the recognition of quantum mechanics altered and advanced the world of technology. We are on the verge of a most radical, and most wonderful upheaval of human civilization.

We are beginning to realize that transforming our lives is a lot easier than rewriting our genetic code or addicting ourselves to drugs. Our abilities and limitations reflect our perceptions of life, the cumulative awareness of who we are and the required strategies to survive in the world. These life-shaping perceptions were acquired through our developmental experiences. Experiences generate learned 'stimulus-response' patterns that are stored in our subconscious memory. The next time a previously experienced stimulus reappears, the receptor-channel complexes in our subconscious memory will provide a rapid life-saving reactive response, without having to relearn the behavior.

Nature designed the development of the nervous system to facilitate the information-laden process of human enculturation, the acquisition of language and interpersonal skills required to participate in society. Evolutionary adaptations wired the brain for accommodating an intensive burst of behavioral programming. The EEG activity of a child's brain between birth and six years of age primarily function in delta and theta activity. Essentially, a child is neurologically in a hypnotic "trance" through the first six years of its life. This specialized engineering feat of the nervous system enables the child to simply observe the societal patterns of its parents, siblings and peers and download them as behavioral programs into their own subconscious. The "trance" state enables a rapid and efficient process of acquiring the complex dynamics of social interaction so that we can become one with our culture.

During the first six years of life a child unconsciously acquires the behavioral repertoire needed to become a functional member of society. Parents are not only models for structuring a child's social behavior; they also serve as the mirror a child uses in characterizing their perception of self, their own personal individuality. While in the hypnogogic state, parental remarks regarding a child's personal traits, such as their abilities or disabilities, their worthiness, their deservability, or their being good or being bad, are all unconsciously downloaded as perceptual facts. These acquired beliefs constitute the 'central voice' that controls the fate of the body's cellular community. While the conscious mind may hold one's self in high regard, the more powerful unconscious mind may simultaneously engage in limiting, self-destructive behavior.

The insidious part of the autopilot mechanism is that subconscious behaviors are

programmed to engage without the control of, or the observation by, the conscious self. Since most of our behaviors (~85%) are under the control of the subconscious mind, we rarely observe them or much less know that they are even engaged. While your conscious mind perceives you are a good “driver,” the unconscious mind that has its hands on the wheel most of the time, may be driving you down the road to ruin.

As we become more conscious, and rely less on automated subconscious programs, we become the masters of our fates rather than the ‘victims’ of our programs. Conscious awareness can actively transform the character of our lives into ones filled with love, health and prosperity by its ability to rewrite limiting perceptions (beliefs) and self-sabotaging behaviors. A variety of highly effective new energy psychology modalities now enable rapid and profound reprogramming of limiting subconscious beliefs. The use of these new modalities provides a key to personal growth and transformation.

**Note to first and second time guests:**

Only first time guests pay no fee. After that there is a \$10 fee each time or membership for \$50 for the remainder of the year (10 months).

