

SECRETS OF YOUR CELLS:

Science and Sacred

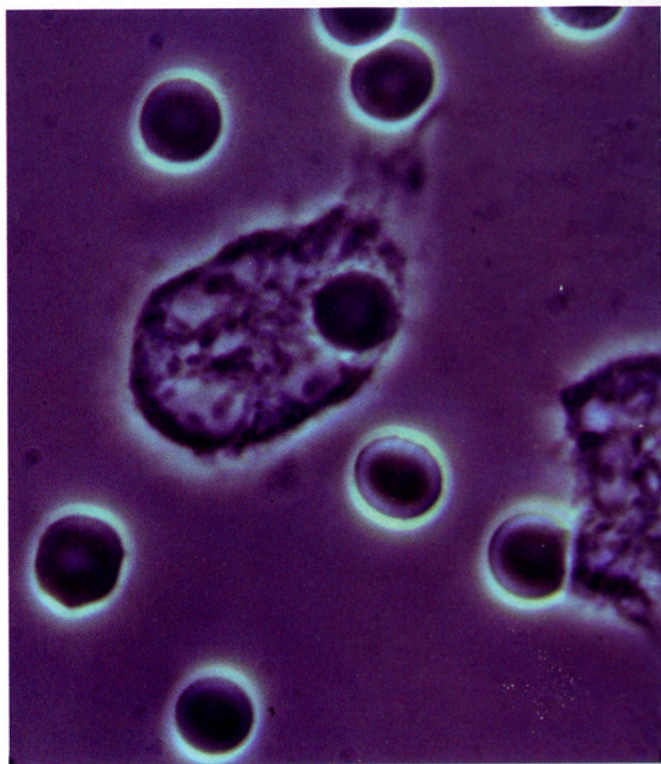
by **Sondra Barrett, PhD**

My new book *Secrets of Your Cells: Discovering Your Body's Inner Intelligence* brings together biomedical science and ancient wisdom traditions to provide practical strategies our cells have for healing and thriving. I didn't start my career as a scientist with an open mind; I was a hardcore academic medical researcher trained as a biochemist. Only what was measurable was real. So naturally I am often asked how did I change my perspective to calling myself a "cellular shaman" embracing the mysteries of life from a more mystical perspective.

Originally I believed that if we understood the molecules of the body we could fix anything. Better living through chemistry. Then I was awarded a post-doctoral fellowship in immunology-hematology at the University of California Medical School and learned about cells. Seeing cells under the microscope, I fell in love, watching them shimmer and move towards stray particles, recognizing potential danger. The more I studied them, the more I reconnected with something I had

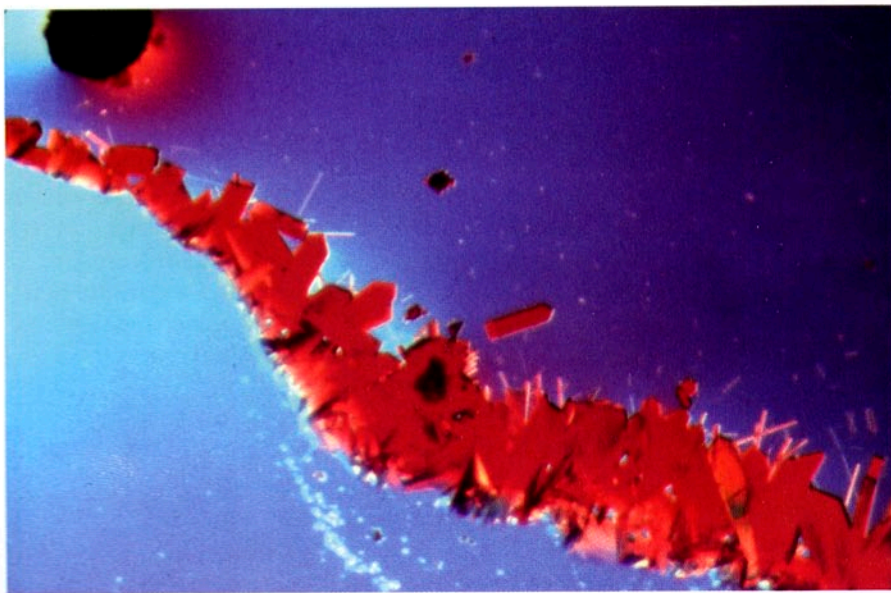
"INQUISITIVE, I
BEGAN PHOTOGRAPHING
SUBSTANCES THAT
ALTERED OUR BRAINS
AND CHEMICALS
WE REQUIRED FOR
LIFE."

IMAGES: On the right,
human white blood
cell recognizing and
going after a blood cell
from another species.
Below, LSD.



lost—a sense of the sacred. They became more personally meaningful when children with leukemia asked me to show them the cells that made them sick.





Seeing living human cells under the microscope was one key that opened my mind and heart, meeting kids with cancer was another. My viewpoint further expanded when I saw an exhibit of brain chemicals photographed through a microscope. Artistic beauty in our molecules? Inquisitive, I began photographing substances that altered our brains and chemicals we required for life. LSD under the microscope looked like visionary art or a hallucinogenic landscape. Peyote, a sacred plant of the Huichols, looked like one of their yarn paintings. Niacin looked like a wheat field while vitamin B12 revealed its red pentagonal power. Minerals said to be associated with astrology showed microscopic forms corresponding to symbols of the four elements—air, water, fire and earth. For instance, air signs (Gemini, Libra, and Aquarius) had minerals that expressed only squares. Earth sign minerals showed rounded shapes. Microscopic patterns of the five chemical tastes were almost predictable – sweet table sugar was rounded, sour citric acid, angular and pointed, while bitter caffeine was prickly. In *Secrets of Your Cells* there is a color centerfold of some of this amazing inner beauty. The micrographs have always been part of my teaching, to serve as tangible touchstones to help people learn about how their invisible cells and molecules work.

When I began this photography I had no expectations of what the molecules would look like. I knew nothing about astrology, symbols, hallucinogens, or taste. So it was a great surprise and with much reluctance that as I discovered more about our cells and sacred traditions that I began to question whether our intuitive knowledge had roots in our chemistry. Did our words for taste have any origins in our biology? My journey into the molecular, scientific and spiritual dimensions of wine is explored in my earlier book *Wine's Hidden Beauty*.

As I explored healing traditions and sacred art, I detected trends or common threads of information that I freely interpreted as lessons coming from our cells. I have even risked my credibility in the scientific community by suggesting that our cellular architecture and design were visionary roots to the framework of spiritual traditions and healing practices. *Secrets of Your Cells* brings this science, art and speculation together. My intent for this book was to blend biomedical science and ancient wisdom traditions to provide a “medicine

bag” of useful cellular healing strategies. I also wanted people to be inspired by the amazing and vast knowledge of their trillions of cells. More than intellectual information, it offers practical ways to access the wisdom of your cells. In blending science and the sacred, the book explores what we may even consider as spiritual principles of life. Though based in biology, it is easy to see that your cells hold a sanctuary for the sacred energy of life; that they listen, embrace life, know themselves, cooperate, serve a purpose, use their senses to learn, and remember. Within the wisdom of your cells is the intelligence to know when and how to respond to danger, be attracted to novelty, to attach and let go.

IMAGES: Above, Vitamin B12. Bottom right, Libra.



MEET THE AUTHOR

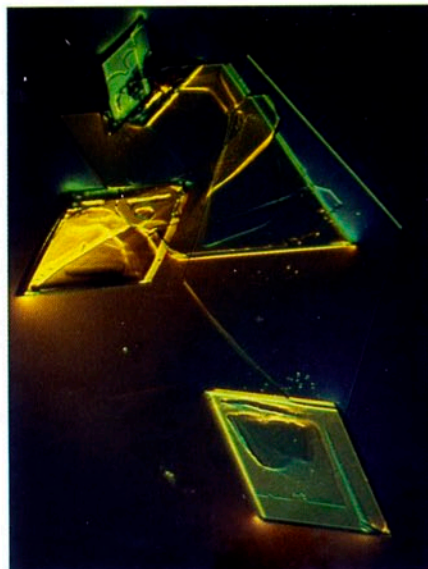
SONDRA BARRETT, PhD received her degree in biochemistry from the University of Illinois Medical School followed by a post-doctoral fellowship in immunology and hematology at the University of California Medical School (UCSF). While on the faculty at UCSF she engaged in basic cancer research, which led her to bridge medical science and healing strategies for children and adults with life-threatening illnesses. An award-winning photographer she delivers exciting interactive multimedia programs on cell “medicine,” shaping taste, wine, and sacred symbols of our cells.

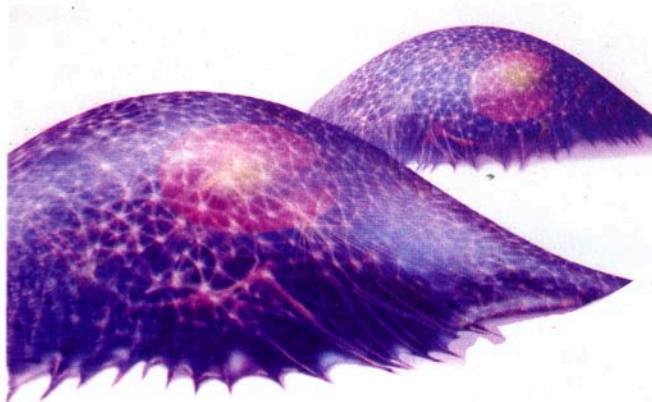
ON THE WEB

www.SondraBarrett.com

“LSD UNDER THE MICROSCOPE LOOKED LIKE VISIONARY ART OR A HALLUCINOGENIC LANDSCAPE.”

One of the most exciting revelations explained in depth in *Secrets* is the discovery of what I believe to be the most important part of our cells – the cytoskeleton. This architectural framework, a translucent, dynamic webbing constructed of strings and struts, tubes and microtubules, pervades the entire cell, from edge to edge, from outer membrane to our hidden genes; it is our inside responder, the cellular decision-maker. ►





While external membrane receptors receive and “listen” to our molecules, the fabric or “strings” of our cells manifest action. Northwestern University professor Albrecht-Buehler says that the **cytoskeleton**, essential for cell movement, direction and changing shape, all requirements for life, is the anatomical proof that **cells are intelligent**.

Cell biologists have long believed that a cell behaves the way it does because of genes, proteins, and signaling molecules. Yet pioneering scientists now show that by physically twisting, bending, and pushing the cells, mechanical forces help control which action a cell performs. Harvard scientist Dr. Donald Ingber’s groundbreaking studies showed that the cytoskeleton or webbing of the cell decides life or death. He discovered that the mechanical tension on the cell, pulling or releasing the strings, controls which genes are expressed, whether the cell reproduces, matures, or dies. The degree of tension on this webbing regulates the cell’s expression and destiny. Stretched taut triggers one genetic message and outcome; letting go of some tension initiates another message and result. Same genes, same internal intelligence—different future. Scientists Stuart Hameroff and Roger Penrose even suggest that the cytoskeleton structures called microtubules carry consciousness.

What’s so exciting to me about the cytoskeleton is it is the place in the cell where energy, sound and movement can exert an effect, where ancient healing practices may work biologically. Where yoga and the stretch activate and relax our cells. Where chanting and humming, dancing and drumming can exert their influences. Knowing

that our cells have an actual structure with the capacity to respond to tension, vibration, movement, or the energy of our thoughts, we can begin to understand how healing strategies work at a cellular level.

According to many sacred teachings, when we change our body’s posture we shift our consciousness (and the reverse is also true). Our potential changes. Here science supports an ancient claim: if we move our bodies in certain prescribed ways, like in yoga, tai chi, Magical Passes, we can alter how we feel and what we are able to do. Our cells change and shape-shift us. Here science meets spiritual practice.

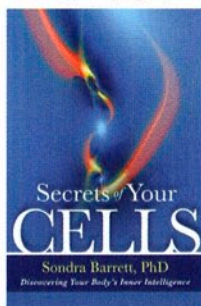
Only with personal experience can you find out if this is true. Strings vibrate. Pluck a guitar string, and the adjacent strings hum in response; the strings resonate with one



IMAGES: Top left, Cell matrix-cytoskeleton (with permission from Slim Films). Above, Caffeine.

“MINERALS SAID TO BE ASSOCIATED WITH ASTROLOGY SHOWED MICROSCOPIC FORMS CORRESPONDING TO SYMBOLS OF THE FOUR ELEMENTS – AIR, WATER, FIRE AND EARTH.”

SECRETS OF YOUR CELLS: Discovering Your Body’s Inner Intelligence by Sondra Barrett, PhD, published by Sounds True, paperback and eBook (281 pages).



another. Strings in our cells also vibrate to do their work. Coming into harmony with our cells takes on a whole new meaning when we know there is a resonating vibrating intelligence inside.

Secrets of Your Cells introduces you to your vast cellular life revealing how cells have powers for self-diagnosis, repair, and regeneration. And so then do you. They hold wisdom of ancient healing traditions and strategies that you can put to use for your own healing and thriving. They even reveal secrets about sacred geometry. In this book you will discover how cells communicate, how your thoughts and tensions influence cellular expression and learn to access your cell powers to make a difference in your life. Experiential cellular practices are included to help calm and align your sense of Self. *Secrets of Your Cells* reveals Life’s operating instructions through science and the sacred. As above, so below. 