

Jennifer Buergermeister © 2004

Who is Candace Pert?

By Jennifer Buergermeister © 2004

Not so long ago, a bit naughty and nice graduate student named Candace Pert shook the field of neuroscience when along with her colleagues, she discovered the strange behavior of opiate receptors in the brain. Since then, Pert has not only proven herself a brilliant, take no “bleep” scientist, but has become a key human component in the mind-body movement. She also traces her own evolution from competitive bench scientist to explorer of personal healing modalities. As many of us in the healing fields can understand, the death of her father, the end of her marriage, her resignation from the NIH, her embracing of the Christian faith, and her discovery of the healing power of dreams—all were, she says, life-shaping events.

Trained as a pharmacologist, Dr. Pert discovered the opiate receptor in 1972, the structure on the surface of a cell that allows it to admit outside substances, such as nutrients and hormones, and even viruses. A receptor has often been described as a chemical lock located on a cell, into which a particular chemical key uniquely fits, though it seems that receptors are far more fluid and amazingly more flirtatious than locks. A typical nerve cell has millions of receptors on its surface, dancing and vibrating, each anticipating its mate to wander by and bind to it. When the two join into one, it morphs and sends a message into the cell itself: a lover embraced into ecstasy.

"It was the killer experiment of my dreams," she said. "It didn't matter if you were a lab rat, a first lady, or a dope addict--everyone had the exact same mechanism in the brain for creating bliss."

"The study of the opiate receptor became so incredibly hot," said Pert, "that world-class scientists from all over were coming into the field. It became totally interdisciplinary." It was found that these little peptides were regulating our moods, hence Pert's book, ***Molecules of Emotions***.

"Your subconscious mind is really your body. Peptides are the biochemical correlate of emotion." Our neurotransmitters are everywhere all the time in the body. Thought and body are one where we have "bits of the brain floating around the body."

Pert herself, an iconoclastic female in the male fortress of science admits in her interviews that she is a bit emotional, controversial, flamboyant, flirtatious and bossy – a woman who meditates daily and is hangs out with Deepak Chopra, yet still writes in scientific journals about substances like chemoattractants and octapeptides

Now listen up, this is important. Why is it that you never get sick on vacation, or shall I say, a happy and fun vacation?

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Pert said she never gets sick when she goes skiing. "Because I love to ski and it makes me happy and excited. The peptide norepinephrine is the chemical that stimulates excitement, and the cold virus uses the same receptors." So the receptors make a decision for the good and whole of the mind/body/spirit. When you're happy, the receptors do not lock onto the virus. Instead they pick up the peptide. That's why, she said, depressed people get sick more often.

Emotion and memory are intertwined. "This means," said Pert, "that emotional memory is stored throughout the body." Emotions, ranging from anger to fear, sadness, joy, contentment, courage, pleasure, pain, awe, and bliss, engender a constellation of bodily changes, of which facial expressions are simply the most obvious. "And you can access emotional memory anywhere in the network." Repressed emotions and memories might actually be stored in receptors throughout the body.

Breathing deeply--as recommended in yoga and meditation--may alter the flow of peptides to release tension. "There is a wealth of data showing that changes in the rate and depth of breathing produce changes in the kind of peptides that are released from the brain stem." "Gut feelings" may be more than an idiom: the stomach is thickly laced with peptide receptors.

But Pert, in first marrying an immunologist, long ago broke with the rigid tradition of thinking that body and mind were separate. And at Georgetown, she and her department chairman, Neuroendocrinologist Michael Lumpkin once collaborated. They've found that AIDS symptoms and degeneration seem linked to a disruption of growth hormone, and possibly a misread in Peptide T.

"Whenever Peptide T research is at a pivotal point, it seems, meteorological weirdness strikes: ice storms, heat waves, hurricanes, earthquakes...and rainbows," she said. It sounds like Pert's work of Peptide T is like a balancing tug-of-war in nature.

Think of viruses as the peptides' nemesis and Candace Pert is the super hero. "I think this is all going to have a fabulous, happy ending. Let's say Peptide T really does block the virus, and somebody inside the system shows that it works. Somebody else stands up and says, 'We got the same result she did.' Then it will explode."

"...I've come to believe that science, at its very core, is a spiritual endeavor. Some of my best insights have come to me through what I can only call a mystical process. It's like having God whisper in your ear, which is exactly what happened on Maui. It's this inner voice that scientists must come to trust."

Candace is one of the leading scientists today in the exploration and explanation of our e-motional bodies. The inner voice Pert refers to may not be such an esoteric idiom after all. We truly are what we think.