The Body Electric: Electromagnetism and the Foundation of Life Robert O. Becker MD, and Gary Selden. Quill Books, William Morrow and Co., Inc. 1985.

Provides a history of the battle between the proponents of the Elan Vital and Biochemical interpretation of physiological systems. Book is divided into 4 parts; Part 1 discusses studies in the regeneration of limbs in salamanders, frogs, and human beings. Parts 2 and 3 deal with bone fracture healing, new types of cancer research, and the hope of human regeneration, including heart and spinal cord. Part 4 deals with the electrical aspects of pain, healing, growth, consciousness, and the nature of life. Becker discovered a weak DC electrical current running through the sheaths of nerves. The presence of a weak negative DC electrical potential was shown essential in limb regeneration. Becker found that measurable voltage differences were associated with acupuncture points, and that electrical energy flows through the "meridians" of Chinese teaching. Tests done with the Superconducting Quantum Interference Devise (SQUID) show small AC magnetic fields associated with the heart, and DC fields associated with the brain. Becker showed that a specific DC wave configuration corresponds to every act of consciousness, emotion, and intellect.

In his book *The Body Electric: Electromagnetism and the Foundation of Life*, ⁱ orthopedic surgeon Robert O. Becker [1923-2008] champions the importance of vitalism; i.e. biologically based, as opposed to chemically based electromagnetism. Based on his experimental work, he presents a number of interesting hypotheses.

He notes that healing of fractures occurs in presence of complex electrical activity and suggests an invisible template must exist for limbs to build themselves. He discovered that we appear to have two nervous systems; a central nervous system (CNS) composed of nerves, and a perineural nervous system (PNS), surrounding the nerves. Intermittent electrical impulses travel down a nerve fiber, while a continuous DC electrical signal travels thru the nerve sheath. In the skin, there are direct nerve to epithelial cell attachments called neuro-epidermal junctions (NEJs), which are crucial for healing. Perineural cells (the PNS) and NEJs make up the physical structures which guide the healing properties inherent in DNA.

Becker found that measurable direct current (DC) voltage differences were associated with acupuncture points, that electrical energy flows through the Chinese meridians, and that the NEJ junctions connect to the meridians. It is these NEJs that create the minute direct current of injury required for healing.

ⁱ Free pdf download of Becker's *Body Electric* is offered: offer is unverified: http://free-pdf-ebook.com/2008/10/09/the-body-electric-dr-becker/