

# **Biomedicine, Physics and Beyond: Consciousness in the Healing Sciences**

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The thesis of this talk is that the underlying assumptions prevalent in the biomedical sciences are outmoded because they ignore modern physics. Evidence based medicine is only as good as the 'evidence' on which it is based and current medical theories assume that because illness manifests in the physical body, its etiology must be traced to some form of matter. Believing that particulate matter is the ultimate cause of life, biomedical scientists ignore the implications of wave / particle duality for the way they are designing their experiments and interpreting the results. It ignores the fact that not only all cell membranes but also mitochondrial membranes and microtubules within cells generate bioelectric potentials that serve as signaling systems within and between cells. Sequencing technologies measure particulate matter aspects of DNA but not the electric current the strand conducts because to see this, the experiment must be designed to leave the strand intact, rather than separating it to measure base pairs. Because western medicine is reductionist (sees cause solely at the molecular level), it totally disregards the implications of emergent properties and the fact that organs, tissues and indeed, humans themselves, are more than the sum of their constituent parts. The fact that both relativity and quantum theory (regardless of interpretation) implicate the observer as an integral part of the observation implies that the healer is also not an objective observer. The talk will use cancer as an example of how the current biomedical paradigm is failing and discuss the de Broglie / Bohm interpretation of quantum theory as it relates to wholeness and consciousness. It will put forth a hypothesis for healing mechanisms of acupuncture and invite participants to begin a dialogue about the relevance of wholeness and consciousness as they relate to healing.