

Quantum Science for Energy Healers: A Practical Guide

Workbook : Week 4 Answers

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Topic P: Review of Week 3

Summarize the major concepts from week 3:

1. Lasers are highly focused beams of light and are unique in that the beams are monochromatic, coherent and collimated. It is because of these properties that we can use them to make holograms.
2. Holograms are virtual images which shift in orientation as one moves around the 3D image. Moreover, each piece of the hologram carries all the information needed to replicate the entire image
3. Our sense organs receive information and may actually function at a quantum level in this regard. Our perception of the world around us is created by the brain and is probably a holographic image in order for us to navigate, and communicate with others in this realm.
4. Intuitive gifts may be information from another quantum level beyond the normal range of the average person's perceptions.

Topic R: What is a transformer?

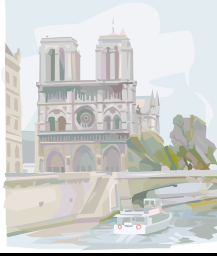
R:1 Key Words:

Transformer: a device used to increase or decrease voltage in alternating current devices.

R:2 Question to ponder:

R:2.1 Why might the transformer present a metaphor for the heart chakra?

When we stand in unconditional love for our clients, our heart chakra is open and we are connected to the Divine as open channels. This state is also associated with specific brain wave frequency (alpha,) and a slower heart frequency. The two together may work to establish a vibratory pattern throughout the body which establishes or predisposes us to act as step down transformers for divine energy on a quantum level and thus facilitate the flow of energy from our hands to the client.



Topic S: What are vortices?

S:1 Key words

Spiral: a natural shape that forms when the flow of a fluid substance such as air or water is disturbed or blocked.

Fibonacci sequence: A mathematical sequence wherein any number in the series is the sum of the two previous numbers. The series begins with 0, 1, 1, 2, 3, 5, 8, 13, 21, 34 and so on.

Golden spiral: A spiral wherein the turns fit the Divine proportion. The cochlea of the inner ear and the muscles of the heart conform to this ratio.

Vortex: a shape in nature that gathers energies of wind and water and draws them toward its center.

Divine proportion: a ratio wherein the whole is to the larger in the exact same proportion as the larger is to the smaller. Also known as Phi it has the value of 1: 1.1618

S:2.Question to ponder

S:2.1. Describe some examples of the Golden spiral in nature:

The patterns of unfolding leaves, muscles of the heart, the shapes of galaxies, hurricanes, unfolding of an embryo.

S:2.2 Where might we apply some of the principles of vortices and spirals in our Healing Touch practice.?

Spinning of the chakras, builds a flow of energy which speeds up the vortex nature of our chakras and draws the universal energy in more rapidly. This energy is dispersed through our chakra system and through the heart chakra the flow is reversed and pours out of our palm chakras in an opening spiral vortex and into the client's field. This energy then induces their chakras to spin more rapidly and as they gain momentum, the client is able to take in more energy and thus optimize their own energetic health.

Topic T: How are chakras and cyclotrons similar?

T:1 Key words

Cyclotron: A spiral channel which uses magnets to accelerate the electrically charged particles released from the source so that they are travelling at very high speeds when they collide with the target particles.

quantum vortex: a vortex which operates on the quantum level wherein information and events occur at faster than light speeds



superconductor: A superconductor is an element or metallic alloy which, when cooled to near absolute zero (-273 degrees Celsius) loses all electrical resistance. In addition, superconductors exhibit the Meissner effect in which they cancel all magnetic flux inside, becoming perfectly diamagnetic (discovered in 1933). In this case, the magnetic field lines actually travel around the cooled superconductor. It is this property of superconductors which is frequently used in magnetic levitation experiments. (see image above!)

T:2.1 Compare and contrast the basic principles of a chakra, vortex and cyclotron and comment on the implications for Healing Touch techniques.

In techniques such as the spinal cleanse, spiral meditation and vertebral spirals, we are moving the electromagnetic fields of our palm chakras in a spiral manner which accelerates the movement of electromagnetic energy in the body and gradually creates a vortex to draw out congested energy and/or adds momentum to pre-existing chakra vortexes on the back. The chakras are energy vortexes penetrating the body and contain “still points” or zero points which parallel the energetic alignment of the spine. It is at the zero points wherein the incoming flow of the vortex stops and becomes an outgoing flow. The acceleration of ingoing energies in an open and properly functioning chakra is similar to the manner in which magnets are placed in the spiral of a cyclotron to accelerate the particles from the target to the source.

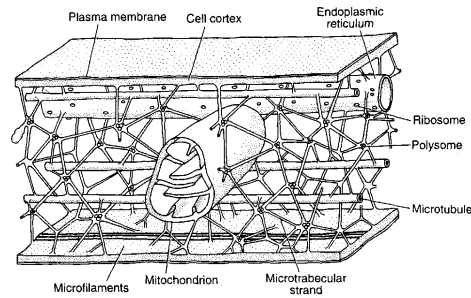


Fig. 5.11 The cytoskeleton and some other associated cytoplasmic organelles

Topic U: What is a biological cell?

U:1 Key words

Microtubules: helical, organo-crystalline molecules which compose a matrix within the cytoplasm of the cell. They are also intrinsic to the establishment of electrical poles within a cell.

Nucleus: central organelle of the cell which contains the DNA and regulates gene expression.

Mitochondria: cell organelles wherein glucose is metabolized into ATP

cell membrane: a phospholipid bilayer with an electrical potential which regulates what enters and leaves the cell.

cytoplasmic matrix: a labile gel held together with weak bonds and filled with fibers, tubes and filaments which disassociate when pressure is applied to form a sol and reassociate when the pressure is released.

integrins: molecules which are embedded in the cell membrane and link the cytoplasm with the outlying connective tissue and extracellular matrix.

tensegrity: a system or structure based on the the balance between tension and compression components. In biology, it is the rigid and elastic components of the cell membrane or the muscles, tendons and bones of the musculo-skeletal system.

piezoelectric effect: the property of a substance to generate electric fields when it is compressed or stretched.

U:2 Questions to Ponder (and a cool rock band!)

U:2.1 Outline what is meant by the “living matrix” model of cells and organisms ?

Older models of cells envision them as “bags” containing an electrolytic solution a few organelles, and enzymes. Instead, the cell is filled with a continuous networkd of fibers, tubes and filaments (many of these are helical molecules) which extend from inside the nucleus to the cell and beyond into the extracellular matrix and hence throughout the entire body.

U:2.2 What implications does the “living matrix” model have for energy medicine?

The presence of nuclear, cytoplasmic, and extracellular matrices linked via integrins makes our entire body a tensegrity system. It also indicates that we are comprised of a fully integrated network which is capable of transmitting all forms of energy—light, electrical, magnetic, mechanical (i.e. pressure and sound), and chemical—throughout the body such that information can flow from any one portion of the body to the DNA of all the cells and vice versa!! (our bodies are so amazing!!)

Topic V: Why are labyrinths, vortices and helices important?

V:1 Key words:

Labyrinth: a spiral, or variation of that involves the process of circling into center and then reversing one's path back to the entrance. It is in one sense a physical metaphor for going into one's core and returning to the material world and can be an effective meditation tool.

Helix: a spiral which extends through 3 dimensions

Collagen: a helical molecule that comprises up to 35% of our body's proteins. It is found in connective tissue and is the main component of tendons, ligaments, and bone. There are at least 29 types of collagen although 90% of the body is composed of 5 main types. Collagen plays a key role in the determination of cell phenotype, cell adhesion, tissue regulation and infrastructure, as well as, cell or matrix association / regulation roles.

Elastin: a helical protein molecule found in connective tissue that is elastic. Elastin serves an important function in arteries as a medium for pressure wave propagation to help blood flow and is particularly abundant in large elastic blood vessels such as the aorta. Elastin is also very important in the lungs, elastic ligaments, the skin, the bladder, elastic cartilage, and the intervertebral disc above the sacroiliac. Elastin helps skin to return to its original position when it is poked or pinched and is also an important load-bearing tissue in the bodies of mammals hence it is used in places where mechanical energy is required to be stored.

Keratin: helical protein molecule which is composed of fibrous structural proteins. Keratin is the key structural material making up the outer layer of human skin as well as an integral component of hair and nails.

Actin: helical protein molecule and one of the three major components of the cytoskeleton. Actin participates in many important cellular processes including muscle contraction, cell motility, cell division and cytokinesis, vesicle and organelle movement, cell signaling, and the establishment and maintenance of cell junctions and cell shape.

Myosin: a group of helical protein molecules that make up part of our muscle fibers (including skeletal, cardiac, and smooth) and is important in actin binding, ATP hydrolysis (ATPase enzyme activity), and force transduction. Virtually all eukaryotic cells contain myosin

V:2. Questions to Ponder

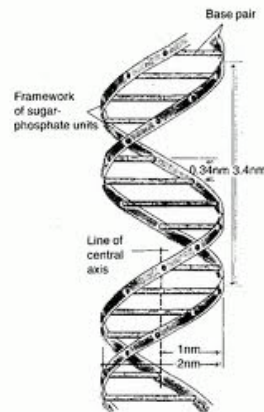
V:2.1 What might be the significance of helical structures in biological tissues with respect to Healing Touch or other types of energy medicine?

Helical molecules are key aspects of the organo-crystalline matrix of organisms and as such are capable of absorbing mechanical energy as in the piezoelectric effect so that information may be transferred throughout the organism itself. They also transmit other forms of energy such as electrical and magnetic. These molecules then are most likely the key components for the overall healing and restorative aspects of complementary therapies as work on any one part of the body will be transmitted throughout the organism.

V:2.1 What are some important applications of labyrinths and vortices in energy medicine?

The physical act of walking in a spiral builds a subtle but kinesthetically noticeable standing electromagnetic energy field. The more people use the labyrinth, the more tangible the field becomes. The materials used to build the labyrinth also help to stabilize the field.

Brugh Joy's Spiral Meditation technique. The initial outward spiral we draw with our hands is gathering in a spiral the energies of all the chakras in sequence, integrating them and at the same time building up an expanding outward spiral to expand our energy field and enable us to feel more integrated and connected to the universe. When we do the closing spiral we are then drawing universal energies back into our field and bodies so that we can rebuild, integrate and re-energize our energy fields and chakra system and at the same time remain connected to the universal field.



Topic W: What is DNA energetically?

Fig. 5.6: The double helix of the DNA.

W:1 Key words

Double helix: a spiral polymer of nucleic acids, held together by nucleotides which base pair together to form a double-stranded molecules of nucleic acids such as DNA and RNA.

base pairs: nucleic acids which encode genetic information in each of the helices of DNA. They are adenine, guanine, cytosine, and thymine. They also form bonds between the two helices in that adenine always bonds with thymine and guanine with cytosine . In this manner they give the double helix it's coiled structure.

W:2 Questions to Ponder

W:2.1. Outline some of the mechanisms for genetic expression

In general gene expression is regulated through changes in the number and type of interactions between molecules that collectively influence transcription of DNA. Regulation of gene expression refers to the control of the amount and timing of appearance of the functional product of a gene. Control of expression is vital to allow a cell to produce the gene products it needs when it needs them; in turn this gives cells the flexibility to adapt to a variable environment, external signals, damage to the cell, etc.

W:2.2 In what manner might Healing Touch affect genetic expression?

Vibrating electromagnetic fields influence protein functioning It is probable that certain vibrations are set up in the body and stimulate specific regions of the DNA molecule to produce specific proteins and/or protein conformations. Thus,we can affect change in our bodies and those of our clients with the nature of the energies we deliver to transmute DNA at the physical level. Also, because of the ability of the body to assimilate a variety of energies, many different approaches may be effective in determining which genes are expressed.