

Quantum Biology: Seminal Example of Applications

In additions to the array of discoveries identified when MCFIP pioneered the model for Quantum Biology,¹ the activities for inter and intracellular alignment have been added.

The following is provided for discussion:

Cell Alignment: For Explanation and Discussion	
TNF-Alpha: TGF- Alpha (Calnexin) Density (CD-4)	
Calcium – threonine – magnesium (BRCA1)	p16
Calcium – serine – magnesium (BRCA2)	p18
Calcium – cysteine - magnesium (BRCA3)	p19
TNF-Beta: TGF-Beta (Calmodulin) Motility (CD-8)	
Calcium – phenylalanine – magnesium (HRas)	p21
Calcium – tyrosine – magnesium (KRas)	p27
Calcium – tryptophan – magnesium (NRas)	p57
TNF-Gamma: TGF-Gamma [VEGF] (Calcineurin) Modulatory Enzyme (CD-25)	
Iron – serine – Manganese	
Iron – cysteine – Manganese	
Iron – threonine – Manganese	

These are examples of the "enzymes" that have evolved with various designations; e.g. AKT, mTOR, PTEN, NF-kB, and MYC.

The fact that excessive cell density as a result of BRCA-3 (vitamin C) overload can result in a spectrum of cancers as well as rheumatic arthritis only touches on the consequences in cellular physiology.

The following is provided for additional discussion with qualified computational biologists.

<https://www.mcfip.net/upload/BRCA1%20and%20BRCA2%20-%20Cell%20Density.pdf>

¹ [https://www.mcfip.net/upload/Quantum%20Biology%20MCFIP%20Discoveries%20\(1\).pdf](https://www.mcfip.net/upload/Quantum%20Biology%20MCFIP%20Discoveries%20(1).pdf)

Note: Outcomes from excessive cell density will depend upon viability of apoptosis, necroptosis and ferroptosis.²

The following are additional factors that must also be addressed.

- Ankylosing Spondylitis
- Arteries
- Blood Clotting
- Bone Density
- COPD
- Connective Tissue (ACL, ligaments, tendons, rotator cuff, etc.)
- Hair (Brittle)
- Microbiota³
- Plaque (APOE2 - 4 in brain and arteries)
- Sepsis⁴
- Food Chain (Tough - Dense) Meat and a source for additional vitamin C⁵

Note: The principles epigenetic inheritance as well as of biphasic activity must be considered.

² Details for elemental epigenetic constituents and cytokine sources can be discussed with computational biologists

³ <https://medicalxpress.com/news/2019-10-gut-instincts-clues-health-brain.html>

⁴ For discussion <https://medicalxpress.com/news/2019-10-links-vitamin-therapy-survival-sepsis.html>

⁵ For discussion --- Use in Fruit and Vegetables ---- Intake of Vitamin C