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Quantum Communication Between Brain and Cells: Hormonal Signaling and Photonic Interaction in Human Physiology

Divvi De Vendre

Email: *divvi.devendre[at]gmail.com*

Abstract: ***This article presents a speculative yet detailed overview of how the brain communicates with eukaryotic cells through a system involving DNA-attached hormones, G protein-coupled receptors, and biophotonic signaling. It explores the role of quantum entanglement and photon communication in enabling ultra-fast, error-checked communication across the body. Drawing from interdisciplinary sources, the paper discusses the significance of hormonal dimers, particularly as an example, progesterone and estradiol, in transmitting signals to the brain. It warns of disrupted hormonal communication contributing to flawed mRNA transcription, potentially resulting in cellular anomalies such as cancer. While conceptual, the discussion opens avenues for integrating quantum physics into cellular and molecular biology.***

Keywords: quantum biology, biophotons, hormone signaling, DNA communication, endocrine system

The brain, constantly exchanges information with trillions of cells throughout the body. For example;- the communication to and from the eukaryotic cells via the G protein-coupled receptors (GPCRs) to and from the attached hormones, to the cellular DNA; so that the gene can initiate mRNA synthesis within the cell nucleus so that it, the cell may service and construct the necessary molecules from atoms to repair, restructure or divide itself as a functioning part of the organ, gland or region in which it is located.

There are, an estimated 55 trillion eukaryotic cells within the human body, of many different types that serve the function and maintenance of those organs which constitute the body's organs and tissues

Our DNA attached hormones, have no other function, other than their two way communication between the eukaryotic cell and the brain, each hormone having its own specialised areas of communication. So that they can communicate and enable the necessary gene expression, and through that instruction, the gene may cause the construction of mRNA in the cell nucleus before sending it to the cytoplasm so that the cell can modify, repair or duplicate itself.

Previously, scientists considered such detailed communication between the brain and cells impossible, due to the huge number of cells and the amount of energy in the form of electrons and conduits required to achieve the high speed and specific, detailed information required by the cells to service, repair themselves and maintain our bodies.

However: Quantum mechanics allow two or more Photon particles, to exist in a shared state, regardless of how far apart they are. This is called entanglement, and has been one of the most debated elements of quantum physics since the theory was formulated in 1935. Photons have been shown to share information across distance, instantaneously through entanglement and without error**. Ref.1 Terahertz Photons**: These high-frequency photons interact with biological systems, particularly within neural pathways, influencing cellular functions and possibly enhancing neural recovery.

The concept, of biophotonic communication in the human body has not as yet been addressed, published research in recent years shows us that Photons or Bio-photons, those weightless and massless bundles creating this particle are present within all of our cells and are located in the nucleus of all eukaryotic cells, in the immediate vicinity of the G protein-coupled receptors through which the hormones fasten to the cellular DNA strand and have been shown clearly to be communication receptors and transmitters.

Ref 2. XiaoxuI SSN 2589-0042, A new means of energy supply driven by terahertz photons recovers related neural activity.

Physically, photons are known to travel to travel at the speed of light. However, their rotary binary communication system within their quantum network has been shown to communicate at least 10,000 times the speed of light and have been assumed to be instantaneous at any distance. That is the binary transmission speed between 0 and 1 within the quantum network, in or outside of our atmosphere. Without them we could not have been, conceived, born or exist.

Photon communication with the brain through the quantum network of the photons to the cell is clean and clear; as it is a self-testing communication regime. In that it has a duality, in which if both parts do not agree the communication is discarded.

This Paper, describes the communication process by which our body functions and maintains itself in its inter-relationship with these photons and DNA attached hormones, and demonstrates that all parts of our internal being; including our endocrine work together, and are responsive and interactive with each other and with our brain**. Ref 3.** The concept of biophotonic signaling in the human body and brain: rationale, problems and directions Ref**:-** ront. Syst. Neurosci., 23 June 2025Volume 19 - 2025

The Endocrine, is the system controlled by our brain to communicate through our hormones to and from our eukaryotic cells. Primarily, using photons and their quantum network, via the relevant DNA attached hormones in each cell nucleus to create gene expression in the form of rRNA within the cell nucleus, which in turn instructs and governs the function, operation, maintenance and repair of all of our eukaryotic cells and through them the wellbeing and proper operation, function and repair of the organs and glands, and their functions in the regions that they serve.

The Brain, beneath our consciousness: Functions continuously, throughout our lives as it communicates, adjusts repairs and manages, via our hormones, some estimated 55 trillion eukaryotic cells of at least 200 types and their variations. And through them, services our organs and glands. As well as communicating with some estimated 100 trillion of the smaller prokaryotic cells (sometimes mis-described as bacteria) which when signalled serves as a final defence against internal infection reforming as gram negative protective coating.

To understand how our hormones work, one must first understand that the primary function and roll of hormones attached to the cellular DNA is to communicate with the brain as to the cells condition and function of that part that it is responsible for; in the region, organ and/or gland that it serves and in turn, receives instruction from the brain as what the cell needs to do to maintain its function, divide, or repair itself in coordination with the local tissues needs to maintain homeostasis so that the cell may function correctly and serve its individual role as a part of the whole.

Photons display both wave and particle characteristics, and behaving as waves in some phenomena, they are massless and uncharged. During exposure to sunlight, transmitted UV B photons are absorbed by the skin and are either kept as a part of our communication network or photolyze to 7-dehydrocholesterol to previtamin D3 which in turn is isomerized by the body's temperature to vitamin D3. Ref, 4. Holick MF. Sunlight, ultraviolet radiation, vitamin D During exposure to sunlight, the ultra-violet B photons enter the skin and photolyze 7-dehydrocholesterol to previtamin D3.

The quantum communication network, Photons have various polarisation states through which they are able to describe through the orientation of their electromagnetic oscillations. In other words, quantum communication is able to transmit the total detail, what it is that is that they transmitting. This property is crucial for optics, communications, and quantum information as it communicates between the brain and those DNA "attached" hormones in the eukaryotic cell which are fastened to the DNA strand, by way of and using the G protein-coupled receptors (GPCRs), also known as seven- (pass)-transmembrane domain receptors, which are located at the hormonal fastening positions on the DNA strand, and translate the photonic signals into bio-chemical instructions to and from the attached hormones so that instruction can be passed via the DNA through the relevant gene allowing it to create that instruction in the form of mRNA in the cell nucleus, to modify and/or repair the cell or cells, and in so doing; the region that they serve. Ref 4. (Photon translation. Biochemistry, G protein Coupled receptors July 30, 2023.) Biochemistry, G protein Coupled receptors July 30, 2023. Saba Rehman; Nader Rahimi; Manjari Dimri.

The hormones themselves are only attached to the DNA strand for approx., 72 hours and are continuously replaced by viable hormones. The depleted (no longer viable) hormones are ejected from the cell to be collected by the relevant hormone binding globulins which are capable of recognising a depleted hormone from a viable hormone. (A depleted hormone, Is a hormone that has only sufficient remaining electrons to maintain its molecular structure.)

To achieve full and proper communication with the brain and our quantum network of photons, each and every viable hormone must after its invitation and process to enter into the cell cytoplasm, via the relevant hormone receptor, must find and attach to a partner molecule in the cytoplasm (e.g., progesterone/estradiol) prior to going through due processes to pass through the wall of the cell's nucleus and then to position and attach correctly to the DNA strand via the G protein receptor. Ref, 5. Progesterone and Estradiol, fasten to DNA strand as a dimer and as a result manifestly increase their signalling and communication potential. Nature. 2015 Jul 16; 523(7560): 313–317.

Hormones and their Function

Serving the well-being and function of all of the trillions of cells and through them the wellbeing and function of our organs and glands, without the aid of photons as the communicators of would be impossible.

To enable communication via the G protein-coupled receptors and photon communication to and from the brain, the cell uses the electron potential generated by the dual fastened hormones (Dimers) attached to the DNA strand, to send and receive the translated quantum signal (one of which should be progesterone), which increases their electron potential when they enter the nucleus and attach to the DNA strand via the G Protein Coupled receptor.

However, if there is no progesterone available to the cell when it is needed, the nucleus can authorise the use of estradiol as a part of the fastening pair.

This alternative fastening, of an estradiol/estradiol homo dimer on the DNA strand, bought about by the lack of progesterone, though viable in much of its communication, can on occasion create poor and incomplete communication between the homo dimer and the brain in some areas of its signalling, resulting in the brain sending an incorrect and conflicting response in its mRNA instruction in the cell nucleus. Ref, 6 , https://doi.org/10.1016/j.reth.2021.01.005 (Conflicting metabolic alterations in cancer stem cells. **Ref, 7.** In Vivo. 2010 Jul-Aug; 24(4): 535–541. PMCID: PMC2953708 EMSID: UKMS32388 PMID: 20668321 Estradiol without the presence of Progesterone generates cancerous metabolites

The resulting response, from the brain, can and on occasion does create conflicting metabolites within the cell nucleus creating microlesions as the mRNA instruction is being

"assembled" and left uncapped, isolated and infected in the cell nucleus which and amongst other changes, creates the excessive production of estrogen receptors, then presenting as ER+ (an excessive number of estrogen receptors presenting on the infected cellular exterior walls) include, breast cancer, prostate cancer, thyroid cancer and pancreatic cancer to name a few. Ref, 8. Cellular responses to RNA damage. Science direct. Cell. Volume 188, Issue 4, 20 February2025, Pages 885-900 Jacqueline Cordes [1 3], Shubo Zhao [1 2 3], Carla M. Engel [1], Julian Stingele. **PMID** 20668321 discusses the effects of 17β-estradiol (E2) on cellular processes and its potential role in generating cancerous metabolites, particularly in the absence of Progesterone**.** Ref ,9. Nature 2015 Jul 16;523(7560):313-7. doi: 10.1038/nature14583. Epub 2015 Jul 8. **Progesterone receptor modulates ERα action in breast cancer.** Ref, 10. Data Brief. 2016 Feb 12;7:195–200. doi: 10.1016/j.dib.2016.02.015 **Observation of an E2 (Ubc9)-homodimer by crystallography**

This article, proposes a speculative model where quantum entanglement and photonic networks enable ultrafast, high-fidelity communication between the brain and trillions of eukaryotic cells. By exploring the role of DNA-bound hormones and their signaling through G protein-coupled receptors, it highlights a potential link between hormonal function and pathological outcomes such as cancer. While lacking experimental support, the ideas presented warrant further interdisciplinary exploration and may contribute to emerging conversations in quantum biology and systemic regulation.

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