### WBAN wireless body networks

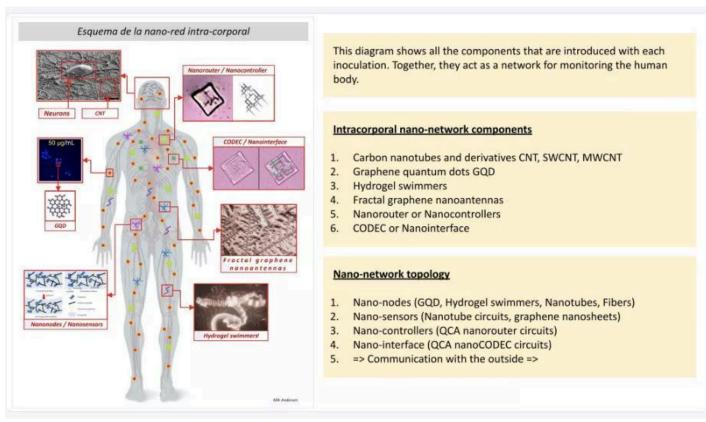
THE CONNECTION BETWEEN COVID-19 VACCINES, BLOOD NANOTECHNOLOGY AND THE 5G NETWORK

An overview of the IEEE 802.15.6 standard

https://ieeexplore.ieee.org/

Save Us Now (Mark Steele) comments on wireless body network technology in a video: <a href="https://">https://</a>

Intra-body nano network - the nano network in the human body was presented by Mik Andersen at the link: <a href="https://www.">https://www.</a>



The evidence for graphene in covid-19 vaccines is in chapter 5 of the book REPORT ON THE VACCINATION OF ADULTS WITH VACCINES AGAINST COVID-19 Part 2, September 30, 2023, located at:

https://drive.google.

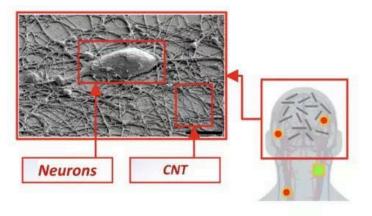
https://anamihalceamdphd.

A meta-study demonstrating the great harm of graphene oxide, which forms graphene tubes, sheets or dots, can be found at:

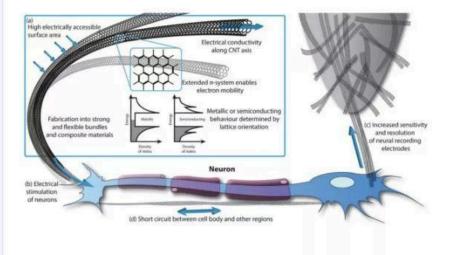
https://drive.google.

Dr. Ana Maria Mihalcea found the self-establishing nano network due to mRNA covid-19 vacination. The book on vaccine nanotechnology is located at:

#### Carbon nanotubes in the brain

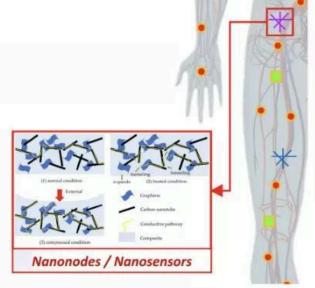


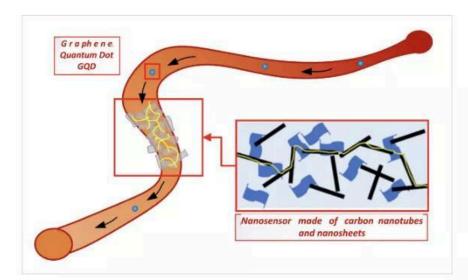
- Carbon nanotubes generate a mesh over the natural neuronal network, which makes it possible to infer the synapse and interfere in its functioning using the appropriate stimuli.
- New connection routes between neurons are also generated, which means that the natural networks are no longer used in favor of the new structure, allowing neuromodulation, neurostimulation, and monitoring of the individual's neuronal activity.



- This diagram shows how the nanotubes act as electrodes with which the neurons are stimulated.
- Since the graphene with which the CNTs are formed is a superconductor, it serves as an artificial axon.
- It shouldn't be omitted that the network of CNTs together with hydrogels can form circuits with which to obtain and propagate the signal from the neurons.

- Nanosensors can be formed in any part of the body, not only in the brain. Fundamentally, in the endothelium and the walls of blood vessels.
- These nanosensors don't have a predefined shape. Their organization is chaotic, although they form conductive routes to transmit electrical signals of potential differential. This happens when a GQD (graphene quantum dot) approaches the nanosensor.
- Since nanosensors can propagate signals, they transmit any potential difference as a signal.



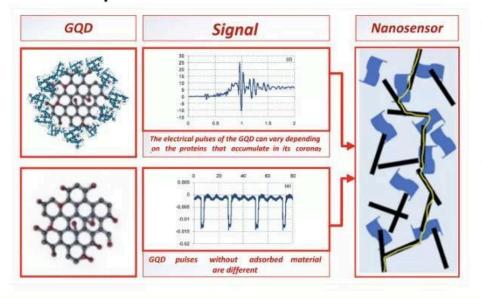


- Note how the nanosensors attach and conform to the artery wall and monitor the GQDs crossing it through the bloodstream.
- This model can be repeated throughout the body, circulatory system, and, probably, in the nervous system.



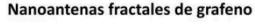
#### Graphene Quantum Dots (GQD)

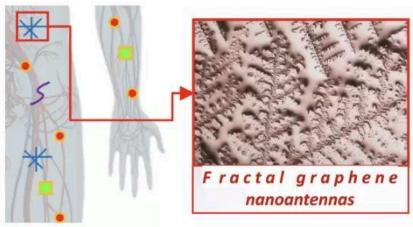
- Graphene quantum dots are micro-nanometer scale pieces of graphene or graphene oxide with circular, hexagonal, triangular... shapes that arise from the decomposition or oxidation of graphene nanosheets.
- The GQDs, far from being a defect in the network, play a fundamental role since their size allows them to function or operate as nano-antennas. But they also conduct through the circulatory system, arteries, veins, capillaries, acting as electrical markers, but also biological since they adsorb proteins and other components present in the blood.



- The electrical pulses emitted by the GQDs produce variations in the signal, alterations that are picked up by nanosensors and retransmitted to the rest of the nano-network for propagation and emission.
- It must be understood that these signals can be discerned and interpreted according to predefined mathematical patterns.

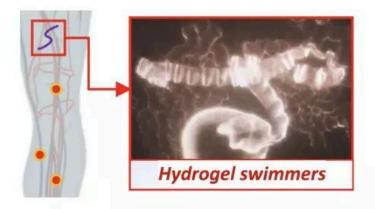
- Under certain conditions of temperature, pressure, and blood saturation, crystallization of graphene nanosheets can occur, forming fractals.
- Graphene fractals are the best nanoantennas in terms of capacity, bandwidth, frequency operating capacity, etc.
- When fixed to arterial and capillary walls, they enhance the propagation effect of the nano-network signals.





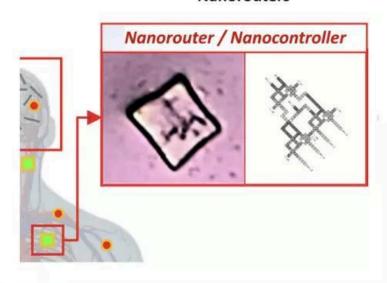
# Analysis of the intra-body network components

Hydrogel swimmers / nano-ribbons

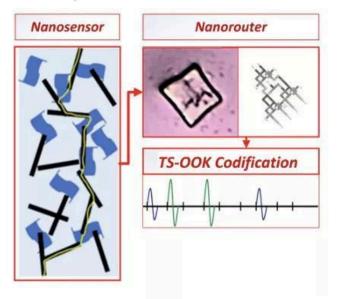


- Hydrogel swimmers are, in fact, ribbons of hydrogel and graphene, which can articulate to generate movement through the body's circulatory system.
- They can release drugs, but also propagate the nano-network signals to hard-to-reach areas where nanoantennas cannot
- They could play some role as biosensors.
   Some publications report this application.

#### **Nanorouters**



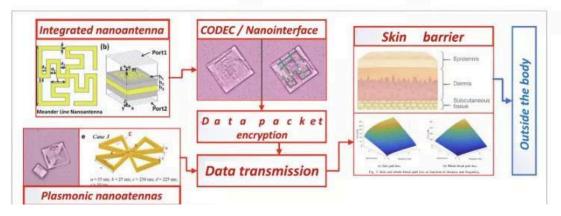
- It's almost certain that the nano-network operates with multiple nanorouters that are distributed throughout the body, fixing themselves in areas with preferential electrical activity. For example, the endothelium, heart, lungs, arteries...
- It's quite likely that each nanorouter has its own MAC addresses, stored in memory circuits, which would explain their dynamic operation.
- The ideal concept is for the nanorouters to be located close to the regions with nanosensors and nanoantennas in order to receive the electrical pulse signals.



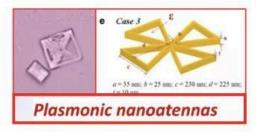
- When the nanorouter receives the signals, it manages to encode them into TS-OOK and route them as data packets for transmission. The TS-OOK signals have a binary pattern that is easy to interpret and transmit, which increases the data transmission capacity and the bandwidth that can be supported in the nano-network.
- The nanorouter doesn't need a processor to operate, as the QCA (quantum dot) architecture allows it to operate at a clock frequency, just as a computer processor would.
- In this way, signals are transmitted to the nearest nanorouter to optimize the nano-network and avoid signal saturation. For this reason, several of these components are envisaged, seated thanks to the hydrogel.

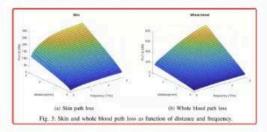
#### **Nanointerface**

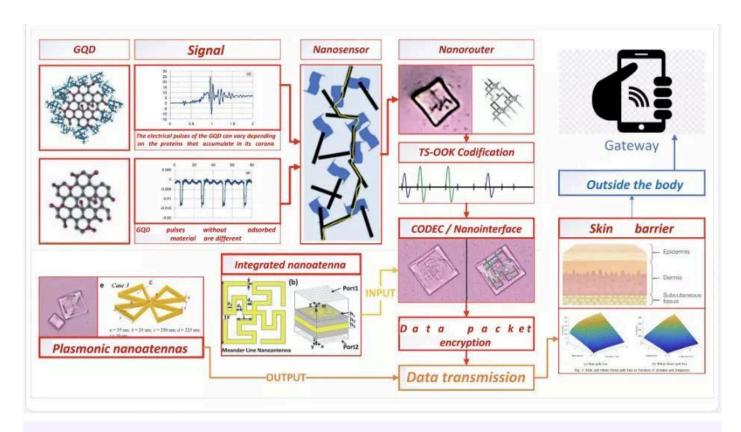
 The nanointerface is a more complex QCA circuit, which contains a nanoantenna for transmitting and receiving TS-OOK signals. With high probability, it has a CODEC to encrypt the data packets and retransmit them to the outside.

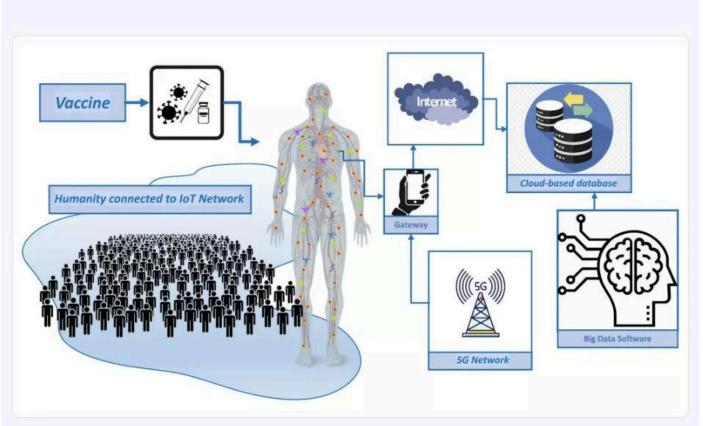


- The nanointerface, like the nanorouter, can be made up of several levels or layers, of which only
  the outermost one is visible under the microscope. This doesn't make it easy to find out its
  functions.
- The encryption of the data is understandable due to the sensitivity and privacy of the information to add layers of security to prevent bio-hacking.
- Alongside the CODEC QCA, plasmonic nanoantennas have been found, that serve to boost and repeat the emission of the nanointerface. This is important for transmitting encrypted data packets outside the body. To do so, the skin barrier (dermis, epidermis...) must be overcome.









The image above shows a mass vaccination with covid-19 hydrogel mRNA vaccines containing nano parts of the communication network inside the body, connecting to the 5G network, transferring data from the body to the mobile phone and from the phone to the Internet to a cloud data bank.