

Farah Hoteit

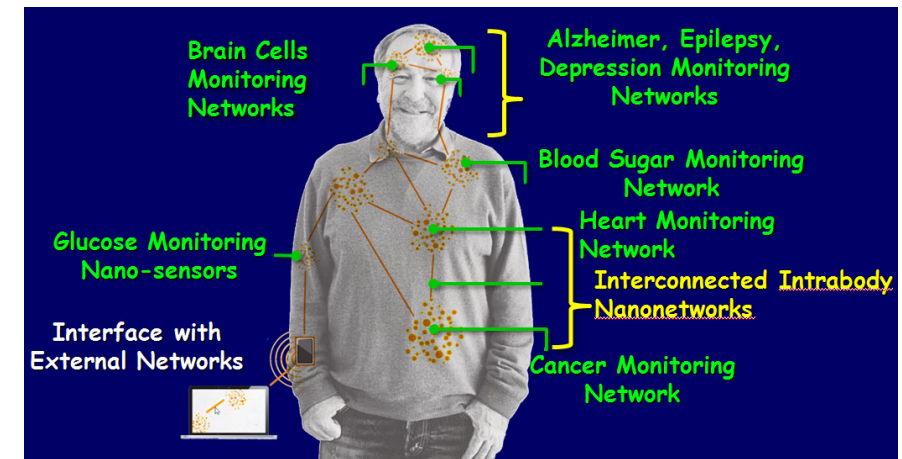
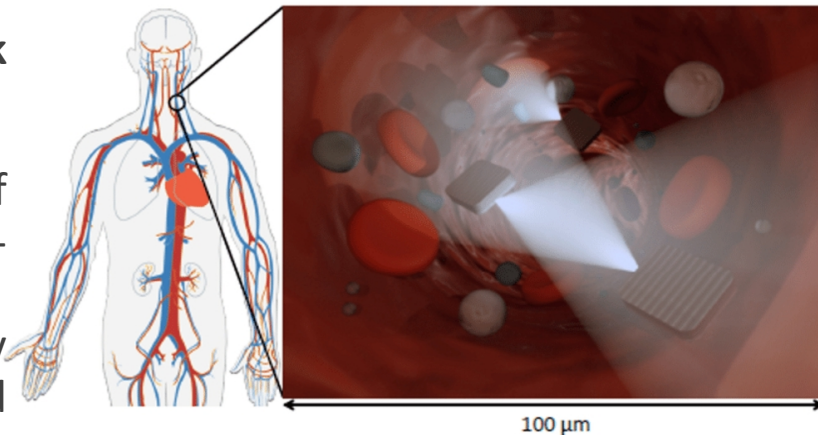
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Research interest : Electromagnetic sensor nanonetworks

PhD topic : Routing in ultra-dense wireless ad-hoc networks and
nanonetworks

Example about Nanonetwork application :

A Nanonetwork is a network of very small devices called nano-devices, which can be implemented in the human body and this gives the medical field huge knowledge about organs.



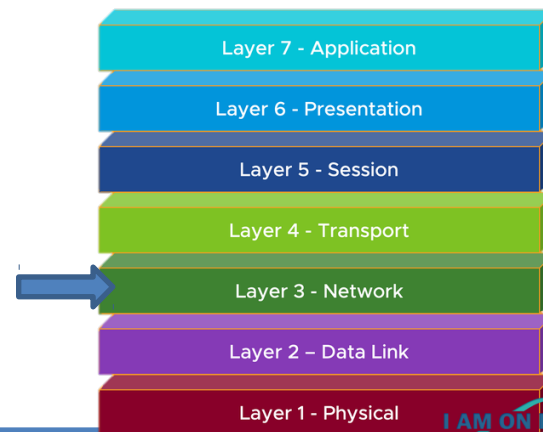
Intrabody Nanonetwork

PhD topic : Routing in ultra-dense wireless ad-hoc networks and nanonetworks

- My main focus is dense wireless networks. Wireless networks are continuously growing which cause them to be “dense”. Each device in the network is expected to have hundreds or thousands of neighbors.
- A particular type of dense wireless networks is nanonetworks. Nanonetworks are networks of nano-machines which communicate in the TeraHertz band.
- Traditional routing protocols do not scale in dense networks. Thus, my PhD consists in designing routing protocols for nanonetworks and for dense wireless ad-hoc networks in general.



Wireless networks



OSI model

