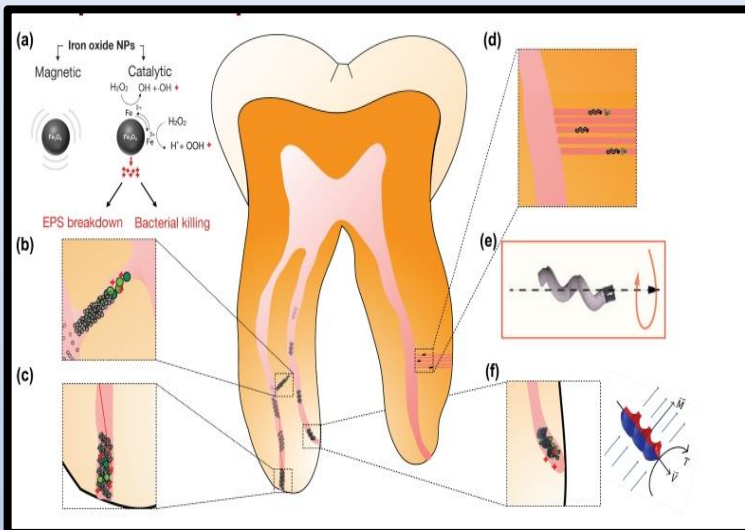
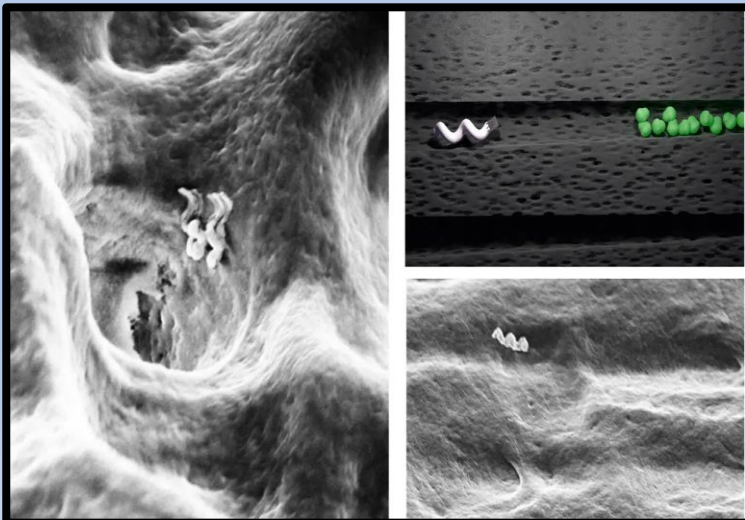
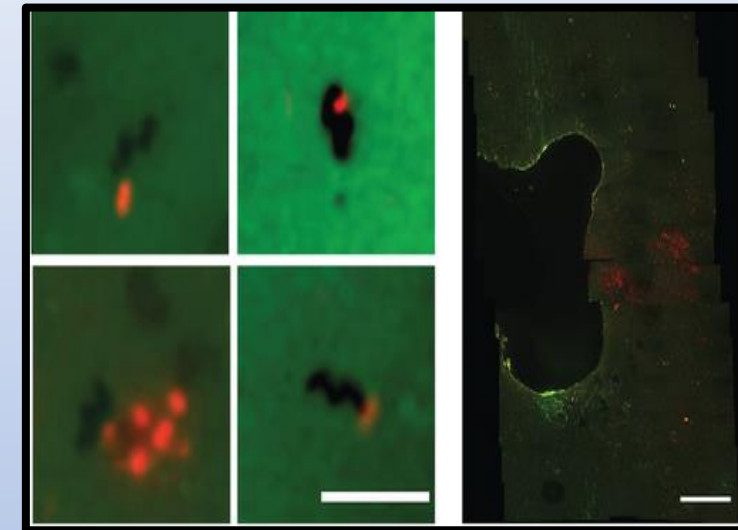


NANOBOTS: THE WONDER MACHINES IN ENDODONTICS?



- Nanorobotics refers to the hypothetical nanotechnology engineering discipline of designing and building nanorobots; devices ranging in size from 0.1 to 10 μm .
- Helical nanobots were constructed of silicon dioxide coated with iron that can be operated using a device that produces a low-intensity magnetic field.



- These nanobots can be administered into the cleaned central canal of a tooth samples which are immersed in deionized water.
- Then, their motions are monitored using a near-infrared imaging technique to produce heat which is a hyperthermia-based bactericidal method which helps to eradicate the surrounding pathogens.

Reference: Mobile nanobots used for root canal treatment. Debayan Dasgupta et al. Adv Healthc Mater. 2022 July

