Nanorobots

David Dionisopoulos- Biomedical Engineering –University of Rhode Island

Have you ever sat down and watched any sort of Sci-Fi movie or story where you wonder if some of the technology used is possible or impossible to create in the real world? In the world of nanotechnology, nanorobots are possible solution for curing ailments.

So what is exactly is a nanorobot? Nanorobots (nanobots, nanoids, nanites) is a small electromechanical device with an exterior made up of carbon atoms in a diamond shape structure (the smooth surface will prevent the immune system to attack these machines while they do their job) are used to interact with nanoscale objects or manipulate with nanoscale resolution. The maximum size of these robots usually range from 500-3000nm which is small enough to fit and work within capillaries of a human body. This will enable surgery to be more precise instead using the human hand.

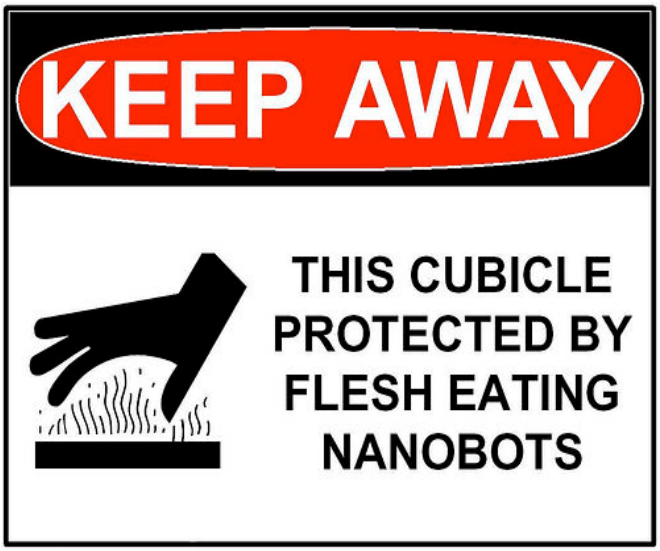
The name "nanobot" is known to come from a man named Eric Drexler. Years ago he wrote a book called Engines of Creation. In the book he had an idea that these nanobots were self replicating machines. The idea is good in a sense where they are able to replace the older machines on their own instead of going back to a clinic remove the machines to replace new ones.

Nanobots work by moving around their environment eating molecules to obtain energy which they get from glucose or oxygen inside. Nanobots are able to direct themselves towards certain cells by their glycolipid structures (which are carbohydrates attached lipids used to serve as markers for cellular recognition). Using this idea the nanobots can be designed and program to recognize these cells to destroy or treat them accordingly. This idea would help physicians to treat diseases effectively without any adverse side-effects.

Next you're probably wondering well what good are they. Nanobots are good for several things. They have the ability to repair vital tissue which may have been damaged by injury or disease, clean out blocked arteries from fatty build up, repair damaged blood vessels preventing someone from dying of internal bleeding, swim through the oceans and eat chemical pollutants , restore the our ecosystem, identify and treat cancerous tissues or cells which will replace chemotherapy. Something in the future that has given though is nanobots could have the potential to repair and spinal cord injury for the paralyzed which could replace stem cell research. Not only is that but another possible idea to actually repair organs such as the brain, or the heart. One of the most beneficial aspects about nanobots is that all of this can be done without invasive surgery. Not to mention the person as no awareness of the microscopic machines working inside themselves.

These bots are simply inserted using a syringe. Surgeons will program these minuscule machines depending on the type of task that is needed to be done. There are theories that these bots have a two-way communication system one is through acoustic signals and through sound waves where the external source could reprogram the bots. In the body there could be other bots stationed and report results from the nanobots passing by. Once the task has finished the body can naturally flushed away like the rest of the body's waste.

Of course the idea of nanobots is still a theoretical idea. If nanobots ever become possible, they won't be seen at least a few decades from now. Nanobots would be the next level of medical technology. Although with any technology still in the making there are possible dangers that still need to take into consideration. One is that if these self-replicating machines get out of hand, they could possibly take over mankind.



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