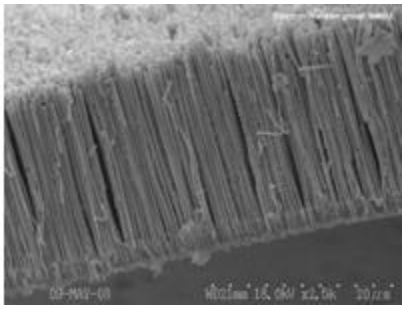
Future Technology

Tech talk: part II

The Future of Medical Technology



Scientists are trying to use nanotechnology to make very tiny chips, electrical conductors and logic gates. Using nanotechnology, chips can be built up one atom at a time and hence there would be no wastage of space, enabling much smaller devices to be built. Using this technology, logic gates will be composed of just a few atoms and electrical conductors (called nanowires) will be merely an atom thick and a data bit will be represented by the presence or absence of an electron.

Humanizing NANOCOMPUTERS

Scientists aim to use nanotechnology to create Nano robots that will serve as antibodies that can be programmed. This will help to protect humans against pathogenic bacteria and viruses that keep mutating rendering many remedies ineffective against new strains. Nano robots would overcome this problem by reprogramming selectively to destroy the new pathogens. Nano robots are predicted to be part of the future of human medicine.

- **SPRAY-ON NANO COMPUTERS**

Consider that research is being done at the Edinburgh University to create "spray-on computers the size of a grain of sand" that will transform information technology. The research team aims to achieve this goal within four years.
When these Nano computers are sprayed on to the chests of coronary patients, the tiny cells record a patient's health and transmit information back to a hospital computer. This would enable doctors to monitor heart patients who are living at home.

W hat is Nanotechnology?

H ow can it benefit you in the future?

E lectric conductors will be how thick in the future?

N ano Technology will provide what benefits to heart patients?

Ethics Concerns?

Who do you think will be left out: Rich/Poor?

When will this be available? Are you Ready?

Do I really want a computer running around my body?... Do I want to live forever?

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What is Cloning?

Cloning is an umbrella term to describe different processes for duplicating biological material.

When the media report on cloning in the news, they are usually talking about only one type called "reproductive cloning". There are different types of cloning however, and cloning technologies can be used for other purposes besides producing the genetic twin of another organism.

A basic understanding of the different types of cloning is key to taking an informed stance on current public policy issues and making the best possible personal decisions.

Reproductive Cloning

Reproductive cloning is a technology used to generate an animal that has the same nuclear DNA as another currently or previously existing animal. Dolly was created by reproductive cloning technology.

Cloning Humans

Should humans be cloned? Physicians from the American Medical Association and scientists with the American Association for the Advancement of Science have issued formal public statements advising against human reproductive cloning. Currently, the U.S. Congress is considering the passage of legislation that could ban human cloning.

Due to the inefficiency of animal cloning (only about 1 or 2 viable offspring for every 100 experiments) and the lack of understanding about reproductive cloning, many scientists and physicians strongly believe that it would be unethical to attempt to clone humans. Not only do most attempts to clone mammals fail, about 30% of clones born alive are affected with "large offspring syndrome" and other debilitating conditions. Several cloned animals have died prematurely from infections and other complications.

The same problems would be expected in human cloning. In addition, scientists do not know how cloning could impact mental development. While factors such as intellect and mood may not be as important for a cow or a mouse, they are crucial for the development of healthy humans. With so many unknowns concerning reproductive cloning, the attempt to clone humans at this time is considered potentially dangerous and ethically irresponsible.

Would you consider the option of cloning for your medical security?
Are you concerned about the ethics of Cloning?
What other benefits could come from cloning?

Ethical Concerns of Cloning

The announcement of Dolly sparked widespread speculation about a human child being created using somatic cell nuclear transfer. Much of the perceived fear that greeted this announcement, centered on the misperception that a child or many children could be produced who would be identical to an already existing person. This fear is based on the idea of "genetic determinism" -- that genes alone determine all aspects of an individual -- and reflects the belief that a person's genes bear a simple relationship to the physical and psychological traits that compose that individual. Although genes play an essential role in the formation of physical and behavioral characteristics, each individual is, in fact, the result of a complex interaction between his or her genes and the environment within which he or she develops.

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Free Energy

I want my energy bill to come only once, not every month. So be it solar or electro-magnetic, please make it personal and portable with batteries that keep going and going.

Transporter

What kind of technology is required to scramble a person's atoms and send them for regrouping in foreign lands all in the blink of an eye? Imagine I could work in Tokyo and sleep in Paris.

Replicator Technology (Stuff for Free)

Every time I saw Captain Picard (Star Trek Next Generation) ordering his Earl Grey Tea or Councilor Troy getting a triple alien fudge dessert from one of those replicators on the Enterprise, it made me jealous. I imagine you could send the dirty dishes back to the void where they came from. BTW, a replicator is a device that uses transporter technology to dematerialize quantities of matter and then rematerialize that matter in another form.

The Cure

For *you name it*, any disease or malady. Just, the cure.

Fountain of Youth

I consider this as a no-brainer desire for future technology. The "Fountain of Youth" was a legendary spring that renders anyone who drinks of its waters permanently young. What is the real future technology that will extend our lives and keep us looking youthful without surgery?

Protective Force Field

To shield me from the sticks and stones that life can physically throw at me. No more car accidents or falling pianos to ruin my day. I am the king of the world!

Flying Cars

I want a smooth ride all the way and I hope it's a convertible. No traffic! No smog! No stupid bumper stickers! Maybe it will even fly itself!

The Time Machine

I have a few famous inventors I would love to meet in person and the idea of messing with the time-space continuum is exciting as well.

Cloning

Who wouldn't want a little me running around doing all of the dirty work. What if I go missing a limb? A clone could really come in handy. Me visit mom? I've got a clone for that.