

Advances in science creating superhumans

Experts meet here to discuss the enhancing of human bodies through technology

BY TANIA TAN

RUNNING faster than a speeding bullet or leaping tall buildings in a single bound is still the stuff of comic books, but advances in science have already created superhumans.

Current technology, for example, has made possible "G-suits" that prevent jet fighter pilots from losing consciousness by slowing blood flow to the legs during G-force manoeuvres; and cholesterol-lowering drugs called statins which could also increase a person's lifespan.

It is only a matter of time before science can successfully prolong lifespans by reducing wear

and tear on the body, explained Professor Edison Liu, executive director of the Genome Institute of Singapore.

A panel of experts gathered here recently to discuss the future of biomechanical enhancements, particularly those involving implanting machines in humans.

Most would consider extreme the work of British scientist Kevin Warwick, who first implanted a chip into nerve fibres of his arm in 2002 as part of his quest to become a cyborg — part human, part machine. But technology has already led to devices like tiny camera pills, swallowed by patients so doctors have a travelling scope inside the body.

"Bioengineering can be used to enhance the five senses," said another speaker, Professor Lye Kin Mun, deputy executive director for the Institute for Infocomm Research. Gigapixel cameras, for example, which allow imaging several kilometres away, could

be implanted in the eye, he said.

"But the implantation technology is still primitive...We are still years away."

The duo were among four well-known researchers here for a discussion held at the National Library building, part of a series entitled *Body Parts: The Science Of Human Reconstruction*.

But like many areas of modern science, such work comes with ethical baggage, said the experts.

Prof Liu told *The Straits Times* that rather than hinder progress, ethical debate could serve to temper research by ensuring that scientists worked towards benefiting mankind.

"The issue of enhancement versus unfair advantage is not a problem for scientists alone," he said.

"These issues involve all members of society and should be discussed seriously."

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