

## Half man, half machine

British professor hopes to make himself the world's first functioning cyborg

By Kyle Ross  
THE BATTALION

"No way do I want to stay as a human."

These words, unabashedly flowing from the lips of one of today's most outrageous scientists, belong to Kevin Warwick, cybernetics professor at the University of Reading in the United Kingdom. Warwick plans to implant a computer chip in his brain, creating a wireless network controlled only by his thoughts. The chip, which should be ready for implantation within the next 10 years, will offer memory upgrades, multi-dimensional thought, extra sensory input such as infrared and X-ray vision, thought communication and, as Warwick says, "other things that we'll find out when we go for it."

In 2002, Warwick implanted a 100-pin electrode into the median nerve of his left arm. The implant remained in place for more than three months while a substantial amount of experiments were done. The electrode allowed the transmission of signals between his nervous system and his computer. This research is recorded in a book he has written called "I, Cyborg."

"I am working with several neurosurgeons and two of them performed the two-hour operation on me last year. Then a one-hour operation to take the implant out again was done. My body tissues had grown into the implant and had accepted it rather than rejected it," Warwick said.

While the implant was in his arm, he was able to open doors, turn on lights and computers with it. It did not take Warwick long to realize the potential power he had uncovered, but he also got some unexpected side effects.

"The biggest surprise was that I actually felt very close to the computer operating the building. When the chip came out, I really felt something was missing, as though a close friend had died. As a scientist, I was shocked that I felt this affinity

with a machine," Warwick said.

In this month's Focus magazine, Professor Peter Fromherz of the Max-Planck-Institute said, "Connecting humans and computers is science fiction — it is beyond the scope of science."

But John Gelderd, professor of human anatomy and neurobiology at Texas A&M, said, "In general, the monitoring of brain electrical activity is not new. Exploring ways to integrate brain activity with computer function seems to be a logical and inevitable avenue of research."

Warwick seems to agree with Gelderd rather than Fromherz.

"Clearly what research I am doing is beyond the understanding of some folk. Certainly I wish to go ahead with an experiment to link my own brain to a computer network. That is where my own research program is now heading," Warwick said.

One thing is for sure: Where Warwick is heading is without doubt uncharted territory. Many decisions and tests must be done to find the best type of implant, how many connections it should have and where exactly to connect it.

"The whole thing is bloody dangerous," Warwick said. "The human brain is extremely plastic

but is also very volatile. Implanting a chip could cause my brain to malfunction. I could become a vegetable. Probably with a much lower intellectual level, I will start to watch basketball or vote for George W. Bush."

One of the worries that have arisen from the three-month experiment is the heavy dependence the brain could develop on the implanted chip. Once the brain-computer link has been created Warwick believes it would be best to never disconnect it because of the trauma the brain might undergo.

There is no turning back for this scientist and no chance of disconnecting what he sees as a chance to completely change the world.

"Something like thought communication could completely change the way we live and interact

with each other — rather like the impact telephones had but a million times more so. I think we are really looking at a technological, evolutionary step," Warwick said.

Warwick's work could also bring new life to those stricken with handicaps and medical impairments.

Bruce Brown, Class of 1952, has felt the frustrations and sufferings of a post-stroke life. For a time after his stroke, Brown lost his ability to speak. His thoughts, memory and ideas were not affected, but he couldn't communicate them. After rehabilitation, he was able to somewhat regain this ability.

"I have found answers to questions I have had for years. Things I wanted to share with others, but the words wouldn't come out of my

mouth," Brown said. "I wish there was a way I could communicate just using my thoughts."

If Warwick has his way, this wish could soon become a reality for people not just like Brown, but for society as a whole. This technology holds the potential to completely alter the lives of people across the world — or cyborgs across



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the world. "This technology would really enlarge the gap between those who have the chip (those who are cyborgs) and those who do not have it," Warwick said. "It is very positive for cyborgs but not so good for humans."

"No way do I want to stay as a human."

— Kevin Warwick  
cybernetics professor,  
University of Reading

### Career Connection

"Aggies Helping Aggies"



\*October 24th  
\*Reed Arena Rm.301  
\*2:00pm - 4:30pm

Liberal Arts Former Students provide advice to current students regarding careers

Informal Networking \* \* Appetizers Served

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MSC CIA presents...

The Costs of Free Speech:

Where does your money go?

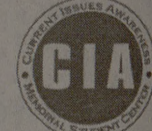
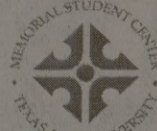
The program will feature representatives from the Student Service Fee Advisory Board (SSFAB), Young Conservatives of Texas (YCT) and Gay, Lesbian, Bisexual, Transgendered Aggies (GLBTA). Panel members will discuss how the university allocates student service fees campus organizations and why some groups receive more funding than others.

Thursday, October 23  
Stark Galleries  
7:00 pm

FREE ADMISSION

Questions? call 845-1515,  
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