Device allows people to alter mouse genes through mind control

Scientists have created a mind-control system that allows a person to alter the genes in a mouse through the power of thought alone.

The approach fuses the latest advances in cybernetics with those in synthetic biology by connecting a wireless headset that monitors brainwaves to an implant in the mouse that can change the rodent's genes.

A person wearing the device could alter how much protein was made from a gene in the mouse by changing his or her state of mind from concentrating to relaxed or vice-versa.

With practice, volunteers found that they could turn the gene on or off in the mouse at will, and thereby raise or lower the levels of protein circulating in the animal's blood system.

The experiment could lead to the development of a radical new approach to the treatment of diseases. Scientists hope it is a first step towards the development of a system that will monitor brainwaves for signs of illnesses and automatically release medicines into the body to treat them.

Researchers have some major hurdles to overcome before the system can be implanted into humans, but Martin Fussenegger, a bioengineer who leads the project at ETH Zurich said he hoped to see clinical trials in people with chronic pain or epilepsy in the next five years.

Read full, original article: Mind-control device lets people alter genes in mice through power of thought