MIT Scientist Controls Your Brain With Fiber Optics

Kelly Hodgkins – MIT scientist Ed Boyden invented a way to implant optical fibers into your brain and activate them on command using light. As neurons are turned on and off, the researchers can see what the circuits do.

The technology is being used to create detailed circuit maps of the brain that can be used in both medicine and brain research. Boyden has used the fiber optics to map cognition and emotional responses by the brain. He has also cured blindness and post-traumatic stress disorder in mice. In the future, the technology could be used to connect the brain to prosthetics in a way that would let amputees use a replacement limb like it was the original. [TED]
