

### Humans spend WAY too long learning.

It takes 10,000 hours to become an expert at something. That amounts to spending 8 hours a day for nearly 5 years! The average person spends 13 years and two months at work. Basically, the process isn't optimized.

### Stimulating the brain to be smarter.

Researchers have used tDCS to send the brain activity of military pilots into novice pilots. They have also been able to "steer cyborg mice through a maze with brain stimulation" using optogenetics. The potential of these technologies is limitless!

#### How RedPill Helps You Become Smarter, Quicker



#### 1. Stimulation

Brain-mapping is done through chemical preservation and 3d electron microscopy.

Transmitting electrical brainwaves is done with TDCs and Optogenetics. These technologies let us change the ability of neurons to respond to stimuli.



#### 2. Brain State

By inducing a state of heightened neuroplasticity and synaptogenesis, humans naturally learn faster.

We use TDCs since it's been shown to "accelerate the formation of new neural pathways during the time that someone practises a skill"



#### 3. Memory

Learning is basically the process of creating new connections between neurons. This process is known as synaptogenesis

Understanding exactly how memory is stored is pivotal to be able to store skills in our brain. This is what stands in our way between downloadable skills.

We're looking into advanced non-invasive brain-imaging to better understand and aggregate neural data.

#### fNIRS

fNIRS tracks blood hemoglobin levels and displays which neural networks are being activated. Using fNIRS, we can track which parts and networks of the brain are active in practicing and learning certain skills.

#### EEG x AI

EEG is a brain-recording technique that detects voltage fluctuations in the brain. Using artificial intelligence and deep learning techniques, we're working on improving the denoising of EEGs.