

REPROGRAMMING THE BRAIN

A Guide to the *Future of the Brain* and *Neuromodulation* by a Patient and his Doctor

In June 2021, Doctor and Patient decided that time had come to surgically implant two six-inch-long metal alloy spikes all the way through Ben's brain. It was felt that the medications Ben was taking to control his Parkinson's disease had become unmanageable.

Back then, Ben was taking about 20 different pills a day. Each pill, if it absorbed properly, would activate the dopamine pathways in his brain and induce uncontrollable writhing movements that would last for about an hour. He would then get about 20 minutes where he'd feel somewhat normal before the slowness and tremor kicked in again. So, he'd take another pill and the cycle would repeat.

After months of adjusting his medication and finding just the right settings on his deep brain stimulator, it was decided, for the first time ever in a clinical trial in North America, to flip on the adaptive settings.

This is the story of how that decision was made and what happened next.

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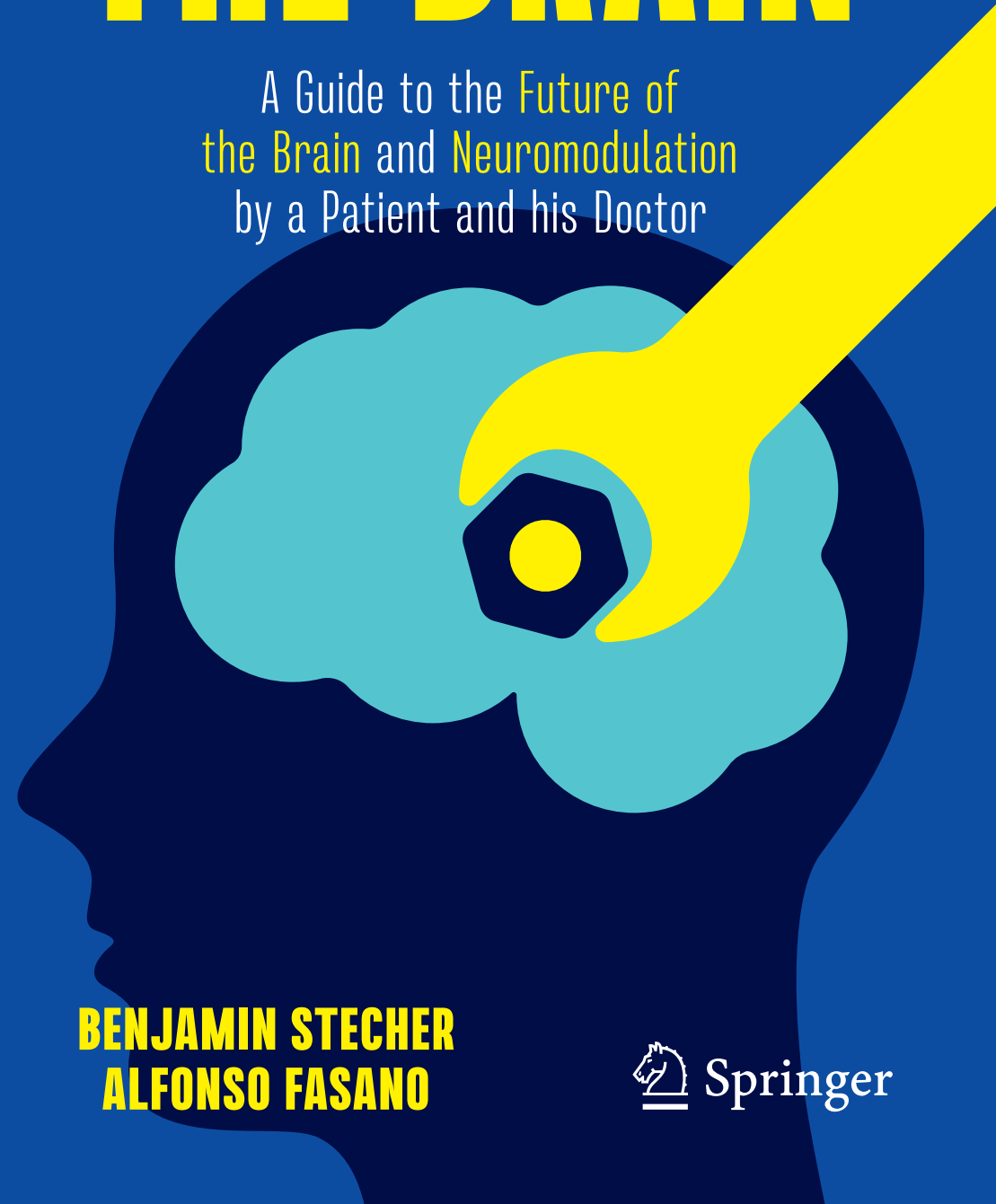
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