



Mark S. George, M.D.

Medical University of South Carolina

- Distinguished University Professor and Layton McCurdy Endowed Chair of Psychiatry and Behavioral Sciences
- Director, Brain Stimulation Laboratory

Brain Stimulation Devices - The new bioengineering “gold rush”?

About 30 years ago, when I began my career, we could finally view the living human brain without sacrificing people. CT, then PET, then MRI allowed us to see and understand the brain, much like the rest of medicine had long been able to view other less interesting organs like the heart or liver.

Adventurous scientists then began using these brain maps enabled by the brain imaging revolution to guide tools to stimulate the brain. These invasive and non-invasive brain stimulation are now exploding.

In this talk, I will outline the main brain stimulation methods in place and on the drawing board. Brain Stimulation is booming at an ever-increasing pace. The rapid proliferation of brain stimulation startup companies in some ways resembles the California Gold Rush. I will use several examples to make the case that whether a technique makes it to FDA approval and general clinical use depends on many factors that are not necessarily ‘scientific’.



Department of
Biomedical Engineering
UNIVERSITY OF MINNESOTA

For information or disability accommodations, contact Rachel Jorgenson at bmengp@umn.edu or 612-624-8396.