There are **2 million** people in the United States suffering from Epilepsy or **6 out of every 1,000** Americans. Epilepsy is usually diagnosed by EEG or, in more severe cases, ECoG operations in which depth electrodes are inserted into the brain. The status quo technologies confine patients to their beds for days on end, using *physical cables* to connect their brain to a bedside monitor. Patients’ quality-of-life is significantly reduced and the data collected is unrepresentative of real-world activity.

My name is Thomas Liu and my team, Wireless Neural Recorder, will untether these patients, by **wirelessly** transmitting ECoG data. We are making a *secure*, *real-time, low power*, and *highly efficient* **embedded system** that acts as the end cap screw to the intracranial probe. Our device, is no larger than a pencil eraser and has better performance than the current bulky equipment. The Wireless Neural Recorder will allow patients to freely move about their room, interacting with their loved ones, while transmitting reliable data to a secure terminal.

There are no existing products that can wirelessly transmit ECoG data in real-time that can provide the level of care that we are offering. As such, we expect to be the first on the market with animal testing beginning Spring 2016. With over 10,000 health care providers in America performing a total of over 10 million EEG operations each year, we estimate the potential market to be 300 million dollars.

Our team of electrical engineers and neurosurgeons are currently working on our first prototype which will be operational by the end of the year. We are looking for mentors and sponsors, who are experienced with implementation of medical devices and would love to speak to you afterwards.

It is important not to lose sight of why we started. We created the wireless neural recorder because we want to help patients, who already suffer from epilepsy, to be free from being leashed to a machine. And we want you to be part our vision for a wireless solution.