Video: 2 minutes

Motivation

* Need - endoscopic neurosurgery, say that it requires a small bipolar
  + Show the current bipolar go inside the keyhole and show that it’s too big, vs. our small one that goes through the trocar which is ~the size of the davinci bipolar

Propose technology

* Mechanism - Zoom in on the mechanism of the grasper
  + Show the entire system
* Size – show da Vinci bipolar beside ours

Demonstration

* Setup trocar, 3D printed skull with silicone brain, tissue (bacon? Chicken? Apple?) , endoscope, USB camera, on a table/cart with a sheet on top to look clean
* Take a shot of the overall setup, show the davinci, electro-generator, tool, setup
* Switch to the endoscope camera view and show tissue being cauterized

Impact

Why do we need robotic neurosurgery?

Increased dexterity of the surgeon -> a dextrous manual instrument is hard to control intuitively, whereas a dextrous robotic tool is easier to control teleoperatively

Improved ergonomics

Stereoscopic HD Visualization

Ask Dr. Drake