Tremor Reduction Assessment in Microlaryngeal Surgery

- **Goal:**
  - Assess the degree of tremor reduction in robotic microlaryngeal surgical procedures on cadaveric phantoms
- **What Students Will Do:**
  - Conduct user studies and reduce data
  - Adapt/improve surgical tool tracking software
  - Perform data analysis
- **Deliverables:**
  - Documented code
  - Experimental data
  - Academic paper
- **Size group:** 1-2
- **Skills:**
  - Computer programming (Python, MATLAB, ...)
  - Image processing, computer vision, data analysis
- **Mentors:**
  - Jasmine (Sue Min) Cho scho72@jhu.edu
  - Dr. Russell Taylor rht@jhu.edu
  - Dr. Deepa Galaiya gdeepa1@jhmi.edu
  - Dr. Ioan Lina ilina1@jhmi.edu

Example video of freehand (left) + freehand (right) microlaryngeal procedure on a pig cadaver


1 600.456/656 CB2 Spring 2022