



Surgical Instruments for Robotic Microsurgery

Zaid Ashai, Pranav Lakshminarayanan

Mentors: Kevin Olds, Allen Feng, Marcin Balicki

Dr. Taylor, Dr. Richmon

Goals:

- Validate the use of the REMS for microvascular anastomosis
- Develop compatible needle holders for this procedure

Significance:

 Improve microsurgeries using a tremorreducing steady-hand robot

Results:

- Proved that the REMS improves the quality of microvascular procedures
- Constructed a general adapter for current tools and a custom needle driver for the REMS









Demonstration of the REMS for Microvascular Procedures







