Registration Form

TEAM INFORMATION

Team Name/Project Title: Gloved and Loaded

Department: Mechanical Engineering

Faculty Advisor: Doug Gallagher

Team Members: Ryan VanderWel, Chris Harmon, Celine Reyes, Hien Phan, Wyatt Seymour, Walter Gililland, Kbrom Ghirmai

PROJECT INFORMATION

Description:

This project will improve the a common laparoscopic tool used in bariatric and OBGYN surgeries

Abstract:

This project will improve the function of a common laparoscopic tool, the 15 degree back cut prestique soft tissue grabber. The current design has only a single degree of freedom in the grasping motion, as well as ergonomic issues with the tool to surgeon interface. This project improves these deficiencies by adding a second degree of freedom to the tool end using a set of mechanical arms and levers. This project solves the ergonomic issues of the current design’s ergonomic issues by adding a pistol grip handle so that the surgeon has ample grip and moves the motion of the tool’s operation into a pistol like action. This allows for more fine control, as well as a firm and intuitive grip on the tool itself, for a more controlled and comfortable operation of the tool.