**Problem Statement**
Design and build a sub folding machine that meets all governmental regulations and requirements, while being a safe, efficient, practical and cost effective solution.

**Objectives**
- Reduce employee involvement in a tedious task
- Process automation and expandability
- Utilize vacuum sealing technology and thermal plastics to extend the product lifespan

**Proposed Design**
- Mechanical design with limited moving parts
- Meet FDA and ISO standards
- Build in an ISO 9000 Certified facility
- Modular design for expandability and maintenance

**Motivation**
- Gain business and engineering knowledge with consumer goods
- Reduce time spent on tedious yet necessary duties
- Enhance the quality of end products

**Prototype and Testing**
For practicality, certain parts of the prototype will be built out of PLA and ABS. This will allow rapid iterations at a reduced cost while allowing for minimal time investment. Key components will be simulated in ANSYS and SolidWorks using specified materials.

**Timeline**

**Team Members**
- Omar Tavarez
- Daniel Pijeira
- Carlos Bonilla

**Advisor**
Dr. Benjamin Boesl