



#### **Advisor: Dr. Stephen Arce**

## **Objective**

Create a functional prototype and complete feasibility testing of a device that assists the surgeon's selection in type of implant used during total shoulder arthroplasty.



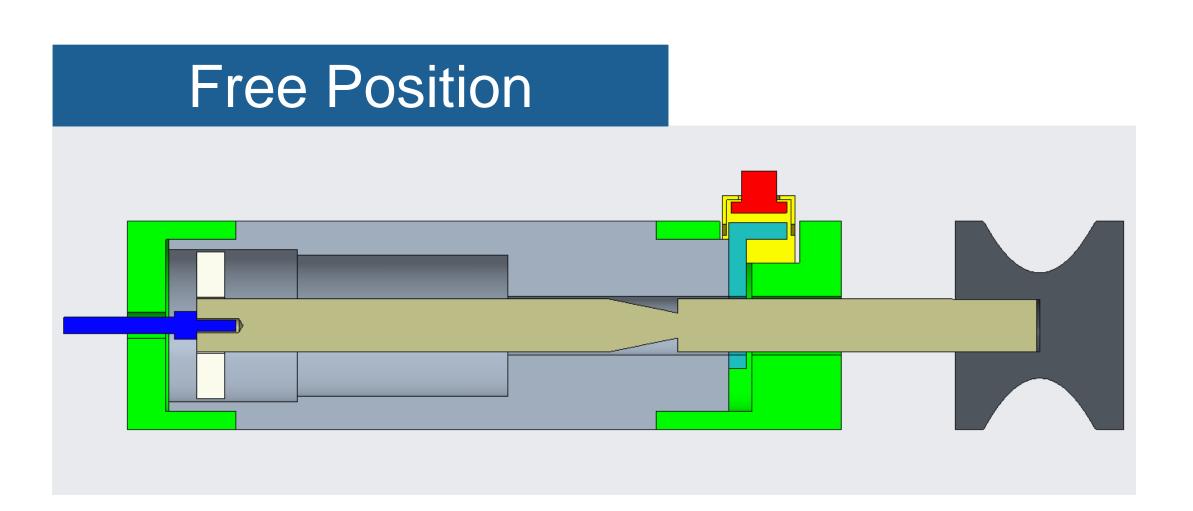
### Stemless Implant





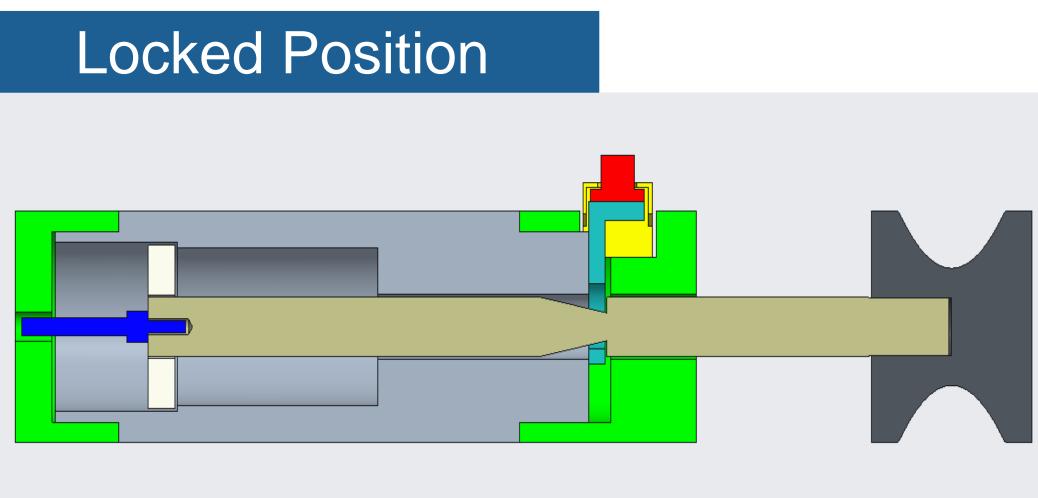
# Team 102: Bone Quality Indenter Grant Giorgi, Abrea Green, Erin Petkus, Tessany Schou, **Timothy Surface, and Nicholas Vastano**

# **Targets**



# **Steps to use**

- Pull handle to compress spring
- Place device against humerus
- Press button to release
- Read scale on back end of rod to determine quality





 Device withstands temperatures up to 140° C • Width of device is smaller than 16 cm Creates indentation less than or equal to 2 cm • Reports results with 95% accuracy Lifespan greater than 50 uses