

# Reversible Stemless Shoulder Implant T102

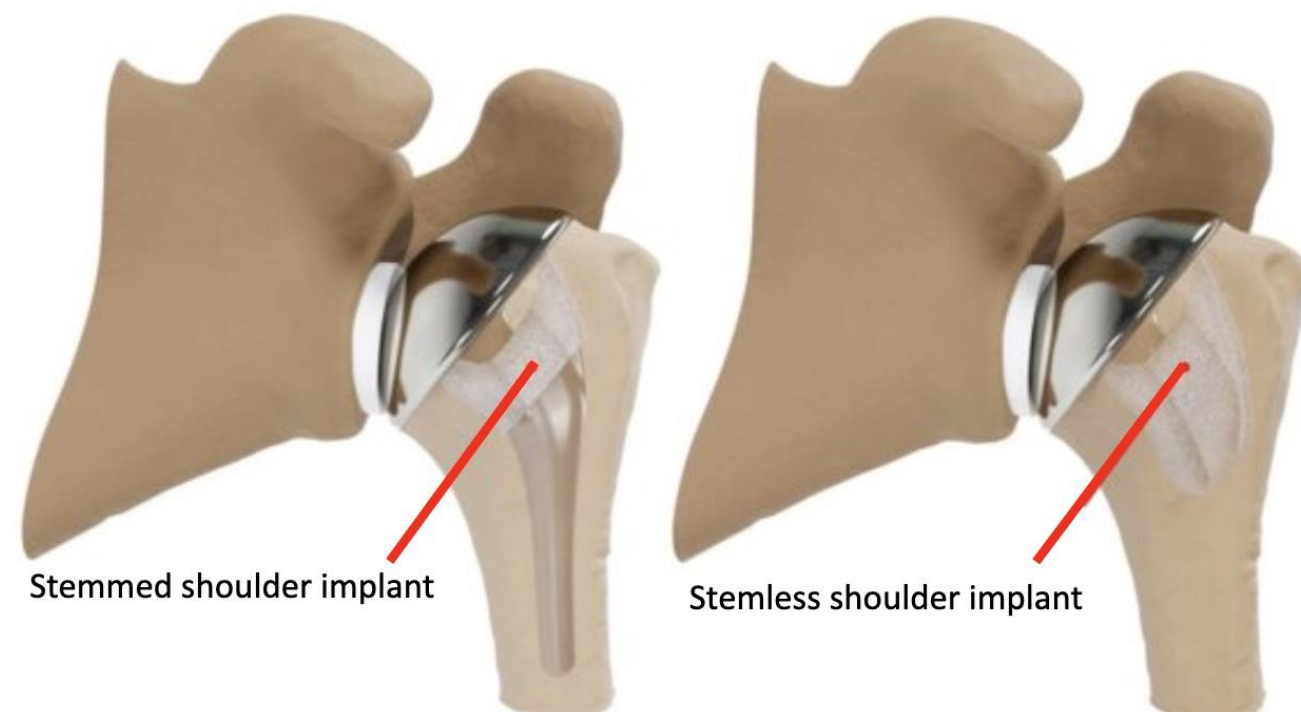
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## Objective

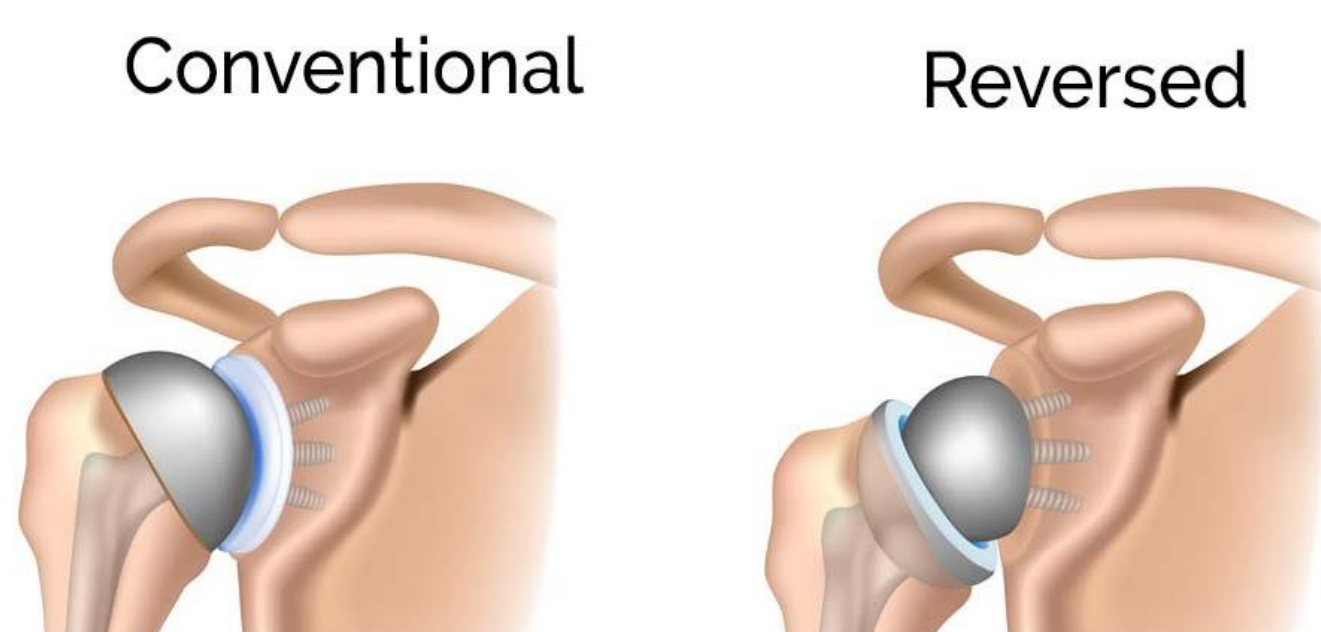
The objective of this project is to improve upon Exactech's current reversible stemless shoulder implant the Equinox.

## Background

- Shoulder joint complications are becoming more prevalent, especially with the aging population, diseases, and accidents
- The glenohumeral (shoulder) joint is the most mobile joint in the body
- The current implant models (stemmed) require extensive bone loss

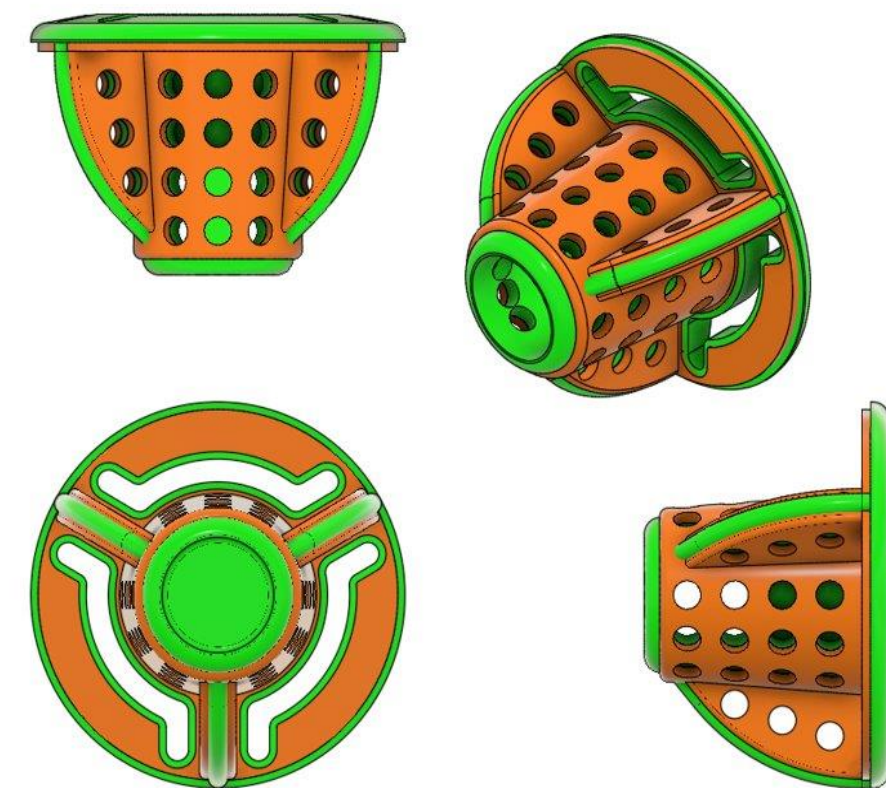


- Anatomic implants typically impede upon range of motion
- Reversible implants increase range of motion and decrease scapular notching

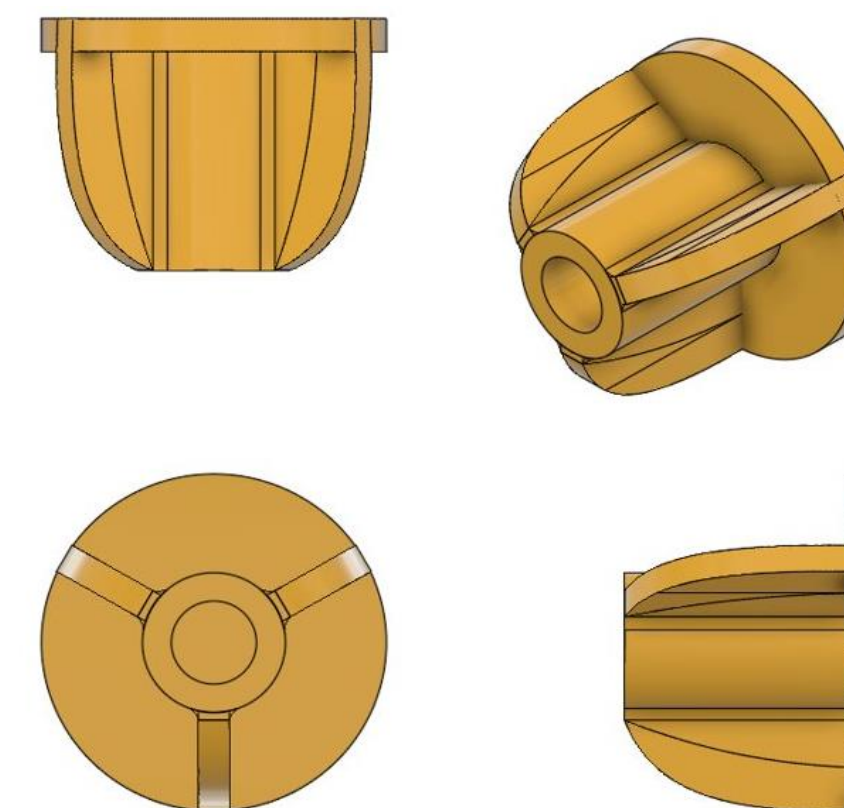


## Models

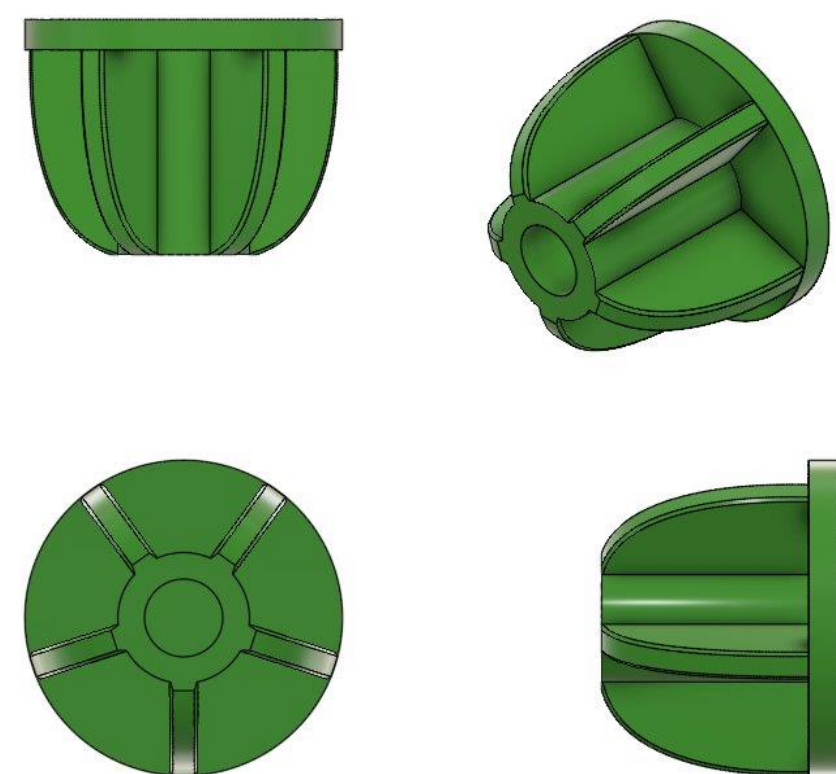
### Equinox



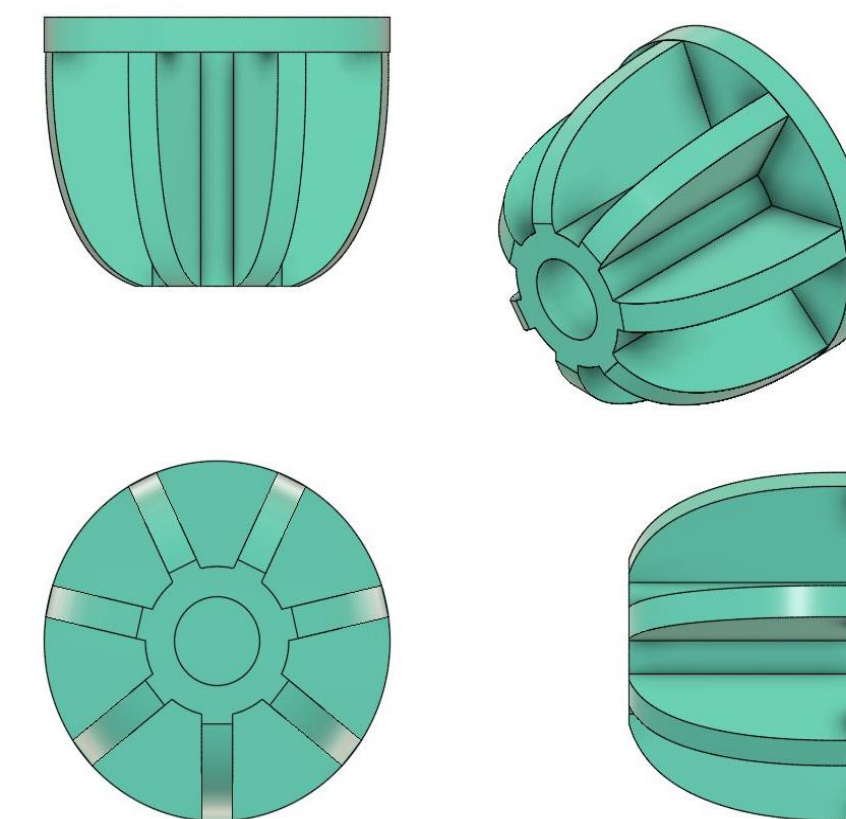
### 3 Fin Design



### 5 Fin Design



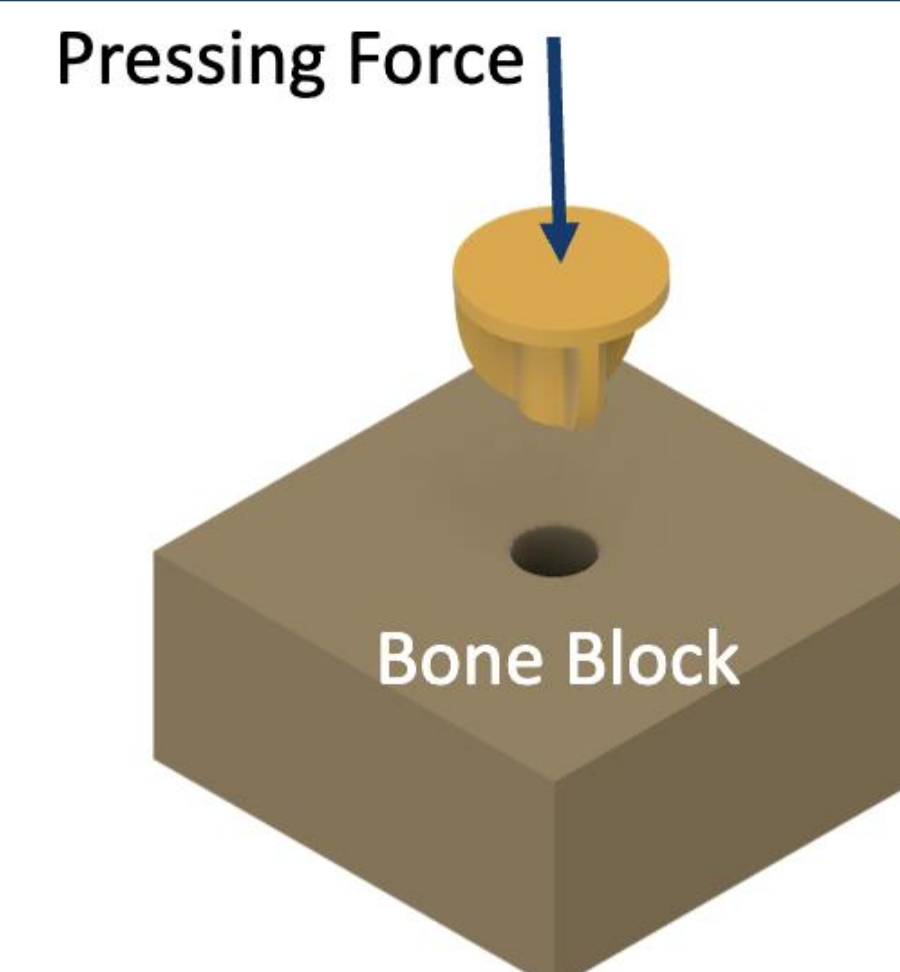
### 7 Fin Design



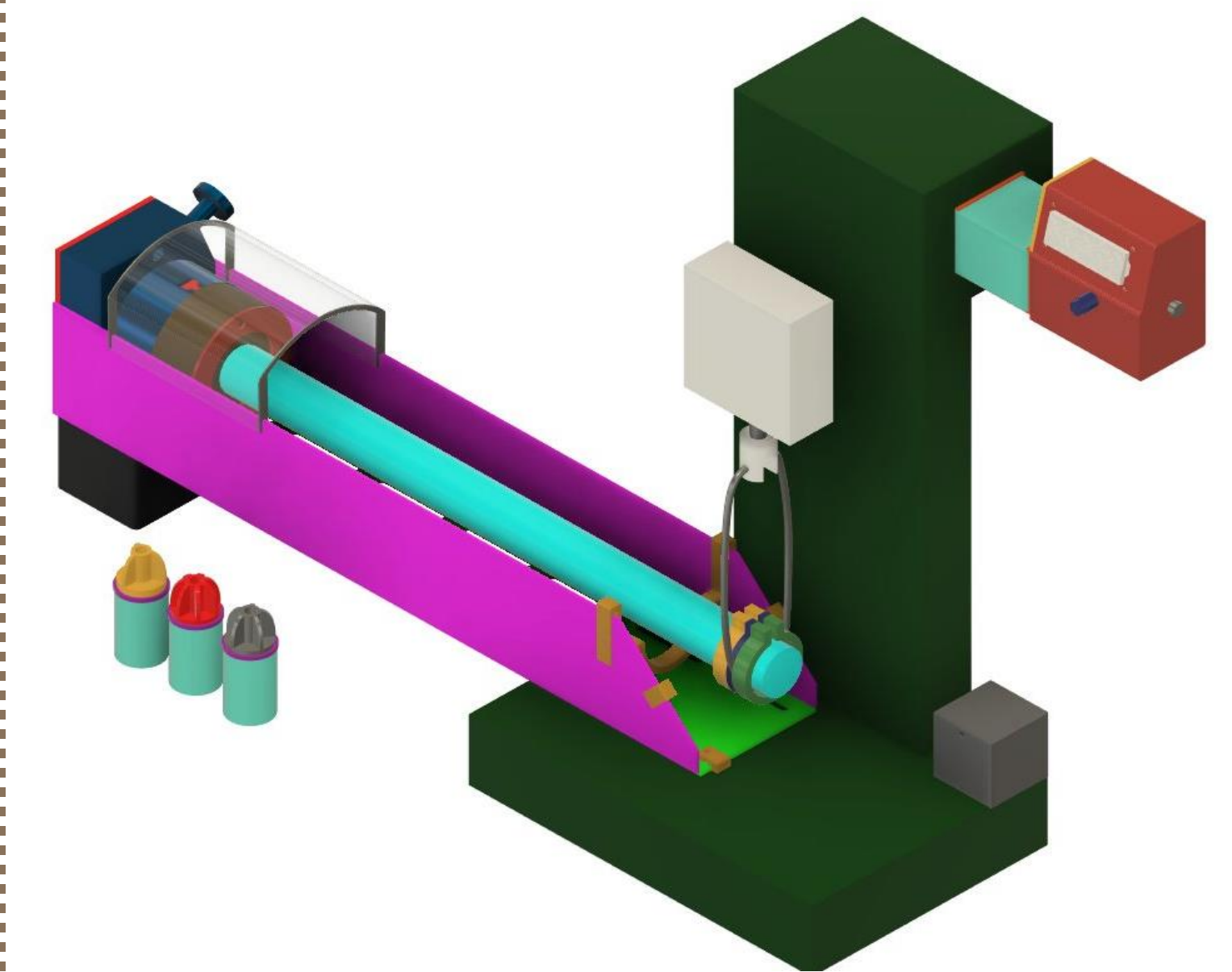
## Key Goals

- Understand methods of implant failure
- Develop robust and repeatable testing method
- Address the methods of implant failure in redesign
- Lengthen overall part lifespan
- Ease of manufacturing

## Implantation



## Test Stand



## Results

- Preliminary results show a drastic improvement in fixation when comparing the three-fin to the five-fin design.

## Acknowledgements

**Sponsor:** Tom Vanasse  
**Advisors:** Stephan Arce, Ph.D.  
and Shayne McConomy, Ph.D.