

## Design Review – Talking Points

- Linear/ Cam Actuation
- Broaden Ideas about Flow
- Design Report:
  - How do we get flow?
  - How do we get linear actuation?
  - Figure out work/force needed, measure actual number
- Think Outside of the “syringe”
  - Possible glass syringe testing
  - Glass – high frequency = cavitation
- Potential Risks / Validation
  - Pump Validation:
    - Signal → Displacement → Flow
  - Arbitrary Wave Form Validation
  - Pressure inside the System Validation
  - Error of Linear Actuator
- Measuring/Testing:
  - Positioning Coder
  - Laser Vibrometer
  - Ultrasound
  - Voltage Regulator – Reduce Noise
  - Data Acquisition
- **MEASURE FLOW, NOT DISPLACEMENT**
- Use Human Specs for testing
- Interface:
  - Enter Frequency
  - Enter Stroke Volume
  - Program to Cardiac frequency
  - Non-computer user friendly
- Reservoir – not necessary
- Design Report – Research w/ examples
- **FLOW → PUMP → NO NET FLOW → OSCILLATORY**
- Figure out how to properly test prototype