Bioengineering Day Poster Addendum

1. List two to four Desired Needs of your project that led to your final design objectives.
    - Developing a wall-less flow phantom that mimics physiological features like vascular size and flow rates
    - Optimization of high-resolution ultrasound modalities that use microbubble-enhanced techniques
2. List the major Constraints on your design/project
    - Time: Building and Testing phantoms and optimizing ultrasound workflows is a time-taking process with lots of iterating
    - Material Constraints: Availability of ultrasound equipment and materials needed to make accurately tissue mimicking structures
3. List the major Engineering Standards on your design/project
    - NEMA PS3 DICOM Standard, following this standard ensures that medical imaging data collecting is handled and stored well
4. Explain Ethical, Environmental, or Societal concerns for practical applications of your project.
    - Testing and validation through phantoms raising an ethical concern and it must be done right for translation to clinical use for ultrasound modality
5. Describe Active Teamwork and Leadership in your design group
    - It was a collaborative environment and everyone's opinions were considered. We agreed upon a leader and work was delegated equally. Meeting deadlines was tracked using notebooks and update check-ins with our mentors where we received valuable feedback
6. What were the most significant motivating factors that led you to
    - Learning a new skill set such as ultrasound imaging and technology was exciting to me so it drove me to learn more about the background and be proactive about asking questions to mentors,
    - Contributing to meaningful research helped me face setbacks and challenges
7. What are your most innovative and/or entrepreneurial ideas for this project
    - Creating a commercial phantom and workflow that can be used by physicians and ultrasound technicians to practice high-resolution ultrasound