**Problem Statement**

- Blood clot associated diseases are a leading cause of death and disability worldwide.
- Thrombosis is a serious disease that causes blood clots inside a vessel.
- About 60,000 – 100,000 people in the United States die of Thrombosis.
- Current treatments require surgery or potentially harmful techniques.

**Project Purpose**

- To test non-invasive solutions for the removal of blood clots.
- To design, analyze, and build a rotating magnetic field device, that fits under a microscope, to view the interaction between magnetic nanoparticles and a synthetic blood clot specimen.

**Project Goal**

The elongated magnetic nanoparticles will be driven to rotate due to the force of the rotating magnetic field created in the homogeneous region of the Helmholtz coils, thus scraping against the synthetic blood clot specimen, and ultimately breaking the blood clot down.

**Acknowledgment**

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