Description	
Job Title	Systems and Sustaining Engineering - Intern
Reports to Title	Senior Systems Developer
General Accountability	The Systems and Sustaining Engineering Intern is responsible for driving continuous improvement in all mechanical aspects of the TULSA-PRO systems. They are responsible for assisting with the design and test of medical devices, including hardware/software development, device function and system MR-compatibility. Some testing is done offsite, at MRI facilities in the GTA and with design, data analysis, and reporting conducted at the Company's main office.
Duties and Responsibilities	Duties and responsibilities will include (but are not limited to): 1. Participate in the generation of system requirements and specifications 2. Participate in risk management and usability engineering activities 3. Perform verification MRI testing and writing verification reports 4. Run regular phantom testing with new revisions of equipment/software at MRI site(s) 5. Investigate product complaints at clinical/customer sites, perform root cause analysis of failures, and propose remediation in a timely fashion 6. Analyze Complaint data and generate prioritized actions to address shortcomings associated with the company's products 7. Review existing product design, identify weaknesses, propose, implement and monitor effectiveness of improvements. 8. Analyze mechanical designs 9. Build early concepts of corrective designs and thoroughly test them 10. Create strategy for the verification of the corrective designs, and participate in verification activities. 11. Produce DHF and DMR documentation for transfer to test/manufacturing 12. Characterize equipment's MR compatibility and effect on MRI data (and vice-versa) 13. Contribute to risk management content such as FMEA, PFMEA and hazard analysis 14. Perform all duties in compliance with the quality management system; actively contribute to the continuous improvement of the QMS

Competencies	
Education	Systems Engineering or similar undergraduate degree
Certifications	None
Key Attributes (experience, skills and technical knowledge)	**Required:** ▪ Knowledge of Solidworks ▪ Demonstrated troubleshooting and root cause analysis skills ▪ Tenacious problem solver, organized, detail oriented ▪ In depth knowledge of manufacturing processes such as machining, injection molding, urethane casting, 3D printing and sheet metal ▪ Knowledge of medical device standards such as IEC-60601-1, ISO 10993 ▪ Knowledge of ASTM standards and testing methods ▪ Competency in mechanical analysis skills such as kinematics, solid and fluid dynamics, heat transfer, material strength ▪ Excellent verbal and written skills. Ability to quickly, clearly, and concisely communicate. ▪ Mechanical aptitude including ability to use common shop tools and measurement equipment **Desired:** ▪ Experience working with MR compatible devices and therapeutic ultrasound devices. ▪ Knowledge of electromechanical design ▪ Experience working with cable assemblies and PCBs ▪ Working knowledge of industrial design ▪ Experience working with sterilization and disinfection methods ▪ Experience with statistical analysis ▪ MRI console operation ▪ Device-compatibility testing with MRI ▪ MR-sequence development ▪ Basic experience with image processing