PROFOUND	**JOB DESCRIPTION – STAFF SCIENTIST – 1 YEAR CONTRACT (Cologne, Germany)**

Description	
Job Title	Staff Scientist – 1 year contract assignment
Reports to Title	Sr. Director Engineering, Research and Science
General Accountability	Our mission is to Profoundly change the standard of care by creating a tomorrow where clinicians can confidently ablate tissue with precision; a tomorrow where patients have access to safe and effective treatment options, so they can quickly return to their daily lives. Changing the standard of care is part of our fabric. We are a group of energetic, problem-solvers focused on innovation, and looking to change the world. If you want to make a Profound impact with your career, while making a difference in other people's lives, here is your chance. The Staff Scientist is responsible for the development and improvement of magnetic-resonance-guided ultrasound therapies, which is the technology at the core of the Company's product. Specifically, they will research and develop the algorithms and clinical protocols and establish new clinical applications for the company's products. They will act as a liaison with external research partners.
Duties and Responsibilities	Primary duties are as follows: 1. Invent, develop, improve, analyze and validate the ultrasound sonication algorithms and protocols used in the company's product, with the aim to maximize efficacy and efficiency while maintaining safety; 2. Research, develop and improve MR protocols and MR thermometry algorithms used in the Company's product to maximize accuracy and efficiency and leverage technological improvements with MRI scanners; 3. Assist in researching and developing new clinical applications of the company's technology; 4. As part of the clinical team, plan preclinical and clinical studies; prepare clinical protocols, and execute the studies; 5. Work as a liaison with external research partners, including clinicians, contribute to their research as needed, and transfer knowledge back to Profound Medical. Additional duties may be required at times, such as: 6. Analyze data from past clinical treatments to assess system performance and seek improvements; 7. Develop and implement data analytics to assess the technical performance of the product; 8. Contribute to real-time MR thermometry and image processing algorithms and implement in software code; 9. Create protocols for MR imaging and focused ultrasound sonications; 10. Contribute to system validation protocols and to their execution;

	11. Investigate product complaints, perform root cause analysis of failures, and propose remediation in a timely fashion; 12. Generate Intellectual Property by analyzing, inventing and documenting designs and methods; 13. Interact with the wider scientific community through publications and attending conferences; 14. Participate in the generation of system requirements and specifications; 15. Participate in risk management and usability engineering activities.
Competencies	
Education	Masters of PhD in Biomedical Engineering, Medical Physics or equivalent
Certifications	None
Key Attributes (experience, skills and technical knowledge)	**Required:** • Fluent in English, verbal and written • 3 years of experience with medical technology, preferably imaging modalities (MR, CT or ultrasound) • 3 years research experience (experimental design, writing articles, presenting at conferences) • Experience with numerical simulations of physical processes such as wave propagation and thermal diffusion • MatLab or Python scripting languages • Working knowledge of general information technology: Windows OS, IP networking, security, etc. • Excellent problem solving and troubleshooting skills • Ability to thoroughly document and summarize all aspects of development and testing efforts • Able to work well in teams and independently • Valid passport for travel to Canada, United States and Europe **Desirable:** • Understanding of MRI physics • Software development using C# or/and C++ is an asset • Agile/ Scrum software development methodologies