Research Scientist

Job Summary:
We are looking for a highly motivated Research Scientist who wants to play a key role in developing a novel therapy for patients with Acute Decompensated Heart Failure (ADHF). The ideal candidate has strong data science experience and domain knowledge in heart failure physiology. We are a growing company with a team of highly dedicated professionals who are focused on creating a meaningful solution for patients with ADHF.

Job Responsibilities and Duties:
This Research Scientist will play a vital role in developing and advancing a neuromodulation therapy to improve the outcomes for patients hospitalized with ADHF. This role will be responsible for understanding disease progression and the mechanism for ADHF. The Research Scientist will be responsible for determining how stimulation impacts ADHF patients and how these patients respond to therapy. The Research Scientist will be responsible for developing the stimulation protocol along with supporting the execution of stimulation during the cases in the clinical studies.

Additionally, the Scientist will work collaboratively with internal and external stakeholders to understand what data is needed during pre-clinical and clinical studies to aid in recruitment in clinical studies, regulatory approval and commercial adoption. The Scientist will be involved in the strategic development of study protocols, on-going data review and interpretation in pre-clinical and clinical studies, and contribution to study reports and publications. In addition, the Research Scientist will interface with physicians, regulatory agencies, and vendors to support the pre-clinical and clinical work. It is expected that the Scientist has experience in and will be involved in the life-cycle of the system including Concept, Design, Verification/Validation, Clinical, Regulatory, and Commercial release.

Key Duties/Requirements:
- understand disease progression and the mechanism for ADHF
- understand current treatment approaches to ADHF, including past clinical trials (what worked, what didn't)
- determine how stimulation impacts ADHF patients and how these patients respond to therapy over minutes and days
- determine how stimulation compares to medical management
- develop the stimulation protocol and guide the stimulation approach during clinical cases
    - determine what parameter is best correlated to improving ADHF patients and determining what "dose" is needed
        - Optimize mechanism of "dose", i.e. optimize how a "dose" impacts measured physiologic parameters (contractility, pressure, heart rate, etc.)
        - Optimize "dose" to therapeutic outcomes
- preparing/presenting data summaries for key stakeholders

Qualifications and Skills:

- Must have at least 10 years of related experience, preferably in the field of heart failure. Knowledge of heart failure, cardiac anatomy and physiology is required.
- Advanced degree or equivalent education (i.e., MS or PhD) /degree in life science/healthcare is required
- Experience using MATLAB to perform data analysis on signal processing of pressure and ECG data is preferred
- Familiarity with neurostimulation and electrophysiology techniques
- Familiarity with interpreting ECG's
- Ability to lead pre-clinical studies: study design, protocol development, technical writing, regulated studies (GLP)
- Experience managing and working with pre-clinical contract organizations
- Understanding of clinical research methodology including study design, protocol writing, and data collection is required, as well as FDA and local regulatory requirements. Strong understanding of biostatistics and data management.
- Experience in procedure development and observation in a hospital environment
- Experience working with imaging modalities including fluoroscopy, CT and echocardiography
- Experience with hazard analysis and other risk assessments
- Strong communicator, including the ability to present results and train as needed
- Demonstrated ability to work effectively with physicians, clinical consultants, scientific advisors, and peers
- Ability to work with minimal direction
- Responds to changing business demands and opportunities
- Capable of working in a fast paced, small company atmosphere. Able to identify and evaluate inside and outside resources to accomplish tasks.
- Critical thinking and analytical skills, data analysis, data interpretation, making recommendations for proper course of action
- Ability to fit well with Cardionomic's core values: Commitment to Quality, Collaboration, Candor, Competence, Closure

Working conditions:

Work is predominantly done from home, with some periodic time in the office (1-2 days/week). Work location is subject to change and evolve as Covid evolves. Some travel will be necessary for clinical case observation, advisory board participation, conference attendance, and other business needs.