Job Description

Title: Electronics Engineer for Medtech Devices

Position: Permanent (80% to 100%)

Posted on: 27 September 2022

Location: Wyss Center for Bio and Neuroengineering, Campus Biotech, Geneva Switzerland

About the Wyss Center for Bio and Neuroengineering, Geneva, Switzerland

The Wyss Center is an independent, non-profit research and development organization that advances our understanding of the brain to realize therapies and improve lives. The Wyss Center staff, together with the Center’s academic, clinical and industrial collaborators, pursue innovations and new approaches in neurobiology, neuroimaging and neurotechnology.

Wyss Center advances reveal unique insights into the mechanisms underlying the dynamics of the brain and the treatment of disease to accelerate the development of devices and therapies for unmet medical needs. The Center was established by a generous donation from the Swiss entrepreneur and philanthropist Hansjörg Wyss in 2014. Additional resources from funding agencies and other sources help the Wyss Center accelerate its mission.

About the Position

The Electronics Engineer for Medtech Devices will join the Wyss Center’s Electrical Engineering team, which is focused on the design and development of innovative medical devices and technologies for a range of human applications targeting brain disorders. The successful candidate will both perform hands-on electrical engineering tasks, and test and document medical devices in compliance with global regulatory standards including IEC 60601 series, FCC, ETSI, etc. The role involves collaboration with neuroscientists, neurobiologists, clinicians, engineers, quality and regulatory experts and suppliers to determine design criteria and to develop new solutions in a timely and efficient manner.

This position reports directly to the Electrical Engineering Team Manager.

Key responsibilities:

As Electronics Engineer for Medtech Devices, the successful candidate will contribute to multiple Wyss Center projects. They will participate in the design and implementation of electrical systems for neurotechnology, including electronics for active implantable medical devices, wearable technologies, surgical robotics, and more. In addition, they will perform hands-on research and development (R&D) activities for new technologies when required. More specifically, they will:

- Participate in all phases of medical device development for electrical components, including the creation of user and design input requirements, detailed design development, test method development, and design verification.
- Be an active team member by performing activities such as:
  - Create electrical designs for the next generation of neurotechnology devices such as active implantable and wearable devices including analog and digital circuitry on custom PCBs.
  - Prototype new concepts using rapid and conventional prototyping methods.
  - Participate in risk management activities such as FMEAs and Hazard Analysis.
- Perform and document system integration tests.
– Contribute to the validation activities for medical systems and the transfer of designs to external manufacturing companies.
– Collaborate with internal experts such as neuroscientists and engineers: electrical, mechanical, software, quality assurance, regulatory and clinical affairs.

**Required competence and experience:**
– MSc degree or equivalent in Electrical Engineering (or equivalent) with 8+ years of relevant work experience as an electronics engineer in the medical device field or another regulated domain.
– Strong experience and applied expertise with IEC 60601-1 and developing medical devices under an ISO 13485 quality management system and ISO 14971 risk management process or equivalent.
– Experience with verification and validation of class II or class III medical device systems.
– Hands-on experience with design, development, and testing of analogue and digital circuitry on custom PCBs.
– Very good teamwork skills combined with strong verbal/written communication aptitude.
– Ability to work well within a cutting edge, fast-paced, multidisciplinary environment.
– Aptitude for innovation, willingness and ability to drive change, passion for quality and continuous improvement.
– Fluent in English, French is a plus.

**Preferred Qualifications:**
– Knowledge or interest in neurotechnology.
– Experience in motor control / motion control.
– Skills in test automation.
– Experience with IEC 62304, EN 45502 (or ISO 14708) standards or in similar regulated field such as automotive or spatial.

This position is available **immediately**

**To apply,** please send your CV and covering letter describing your qualifications, background, and interest in this position to HR@wysscenter.ch no later than 28th October 2022.