

Job Description

Title: Senior Mechanical/Materials Engineer for Active Implants

Posted on: 10th March 2020

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

The Wyss Center for Bio and Neuroengineering (<https://www.wysscenter.ch>), a non-profit organization focused on the translation of neurotechnology to clinical applications, is seeking a **Senior Mechanical/Materials Engineer** to join our growing, international team of scientists, clinicians and engineers. The individual will work both independently and collaboratively as a member of the Wyss Center's technical team to develop innovative advanced implantable and wearable technologies that are designed to collect real-time neurophysiological signals, transmit multichannel recordings and provide closed loop control signals for a range of human applications.

Key responsibilities:

In his/her position the **Senior Mechanical/Materials Engineer** for Active Implants will:

- Conceptualize and create mechanical designs for the Center's next-generation implantable and wearable devices
- Prototype new concepts using rapid prototyping methods (3D printing, machining, etc.)
- Develop and improve hermetic and near-hermetic encapsulation solutions optimized for the intended applications of various devices (using implantable silicone, epoxy, ceramics, titanium or other emerging encapsulation materials and technologies)
- Design and improve connection solutions to connect implants to leads (using laser-micro welding, resistance welding, crimping, or other connection technologies)
- Provide key input on materials selection for long term active implantable and wearable devices based on biocompatibility, biostability, manufacturability and cost
- Balance technical requirements with manufacturability and cost
- Document new designs in compliance with the applicable medical regulations and standards
- Perform Design Verification, including test planning, executing and reporting, and transfer designs to external production and clinical grade manufacturing partners
- Act as an active member of the Wyss Center's technology team and collaborate closely with Electrical Engineers, Software Engineers, Scientists, and Product Managers
- Collaborate with clinicians and end-users to capture, analyze and implement requirements to design technologies suitable for a patient/clinician setting
- Scout for novel technologies and establish strategic collaborations with related suppliers / partners
- Coordinate a small team of Mechanical Engineers and manage the lab facilities and budget
- Help drive a positive, collaborative and translation-focused culture at the Wyss Center

This position will report directly to our CTO and will supervise a team of two Engineers.

Required competence and experience:

- MSc in Micro Engineering, Materials Science, Mechanical Engineering, Biomedical Engineering or equivalent with at least 7 years work experience in MedTech industry (in an ISO 13485 and/or 21 CFR certified environment)

- Hands-on experience with design, development and testing of long-term active implantable and/or class III medical devices
- Good knowledge of medical-grade materials and components used for long-term implants
- Good knowledge of medical-grade manufacturing and assembly processes
- Specialization in one or more of the following areas:
 - Biocompatible materials
 - Rapid Prototyping methods
 - Accelerated aging of medical devices in different conditions
- Team leadership skills, including people skills
- Good knowledge of the different stakeholders, suppliers and sub-contractors in the space and experience in managing sub-contractors and vendors
- Aptitude for innovation, willingness and ability to drive change, passion for quality and continuous improvement
- Results oriented, proactive problem-solving attitude with strong sense of ownership, urgency, and drive.
- Excellent communication and presentation skills, ability to interact and influence all levels of the business as well as clients and partners
- Fluent in English, French a plus

Additional skills include:

- Experience or interest in neurotechnology
- Expertise in ISO 14708 and IEC 60601
- Experience with thermal dissipation

To apply, please send your CV and covering letter describing your qualifications and your motivations to HR@wysscenter.ch no later than Friday 3rd April 2020.