



Job Description

Title: R&D Mechanical Engineer

Position: Permanent

Posted on: 20 January 2023

Location: Wyss Center for Bio and Neuro Engineering, 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 **R&D Mechanical Engineer** will join the Center's mechanical team to design and develop innovative medical devices and technologies for a range of human applications, including novel long term active implantable products and next generation encapsulation technology. The role involves collaboration with neuroscientists, clinicians and engineers to determine design criteria and to develop new solutions in a timely and efficient manner.

Key responsibilities:

As an **R&D Mechanical Engineer**, the successful candidate will design, develop, and test microelectromechanical (MEMS) solutions for brain-computer interface devices, including electromechanical systems, active implantable medical devices, surgical robotics, wearable technologies and more. He/she will own tasks from initial idea to production, devoting time in the lab to perform hands-on mechanical research and development (R&D) activities as well as collaborating with internal and external experts. More specifically, he/she will:

- Create mechanical designs for next-generation implantable and wearable devices
- Prototype new concepts using rapid and conventional prototyping methods (CAD, 3D printing, CNC machining, laser welding, casting etc.)
- Design and develop miniaturized, biocompatible hardware solutions (using materials such as silicone, epoxy, ceramics, titanium or other emerging materials and technologies)
- Drive all phases of medical device development, including concept development, creation of user and design input requirements, detailed design development, test method development, and execution / management of design verification
- Close collaboration / management of suppliers to ensure design meets requirements
- Participate in risk management activities such as FMEAs and Hazard Analysis
- Support validation activities and transfer designs to external production and clinical grade manufacturing partners
- Collaborate with internal experts (electrical, software, and systems engineers and scientists) and external partners (academic and industrial)





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- Help drive a positive, collaborative, and translation-focused culture at the Wyss Center

This position reports directly to our Mechanical Engineering Manager.

Required competence and experience:

- MSc or PhD degree in Micro-engineering, Mechanical Engineering, Biomedical Engineering or equivalent with at least 5 years of relevant work experience
- Hands-on experience with design, development, fabrication and testing
- Good knowledge of precision design, manufacturing, and assembly processes
- 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 documentation and communication skills, ability to interact at all levels of the organization
- Can work independently and use initiative
- Fluent in English, French is a plus

Preferred Qualifications:

- Experience working in medical devices in an ISO 13485 QMS and ISO 14971 risk management or equivalent
- Experience with long-term active implantable and/or class III medical devices
- Experience or interest in neurotechnology
- Experience with GD&T, 3D CAD (SolidWorks preferred), IEC 60601-1, supporting pre-clinical and clinical trials, design for manufacturing, design for assembly
- Swiss nationality or valid Swiss work permit

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 19th February 2023.

