

## Assistant Professor (Tenure Track) of Musculoskeletal Bioengineering

The Department of Health Sciences and Technology (<u>www.hest.ethz.ch</u>) at ETH Zurich invites applications for the above-mentioned position.

The proposed professorship aims to apply engineering principles to the study of the musculoskeletal system and the development of novel bioengineering approaches to the treatment of its pathologies and illnesses. The new professor is expected to provide leadership in the design, characterization and application of novel biomaterials for use in tissue engineering and regenerative medicine, with a focus on engineering solutions to control the host response and target functional restoration. A holistic approach to bioengineering-based therapies is envisioned, with applications in tissue engineering and regenerative medicine.

The successful candidate is expected to excel in musculoskeletal bioengineering, with a deep knowledge of biomaterials development and application, as well as structure/function requirements for musculoskeletal tissue engineering and regenerative medicine. Possible areas of expertise include mechanobiology of target tissue families, biomimetic aspects of multiscale biomaterials fabrication, selection and/or modification of biomaterials for guided tissue regeneration, use of novel model systems including human organoids, microphysiological bioreactor systems, in vivo models with live imaging, multiscale computational biology for the study of systemic interactions, smart and biosensing materials, and cell and drug encapsulation.

An additional prerequisite is a strong commitment to bioengineering education and teaching. The professorship will be embedded in the Department's program in Health Sciences and Technology. She/he will be expected to teach undergraduate level courses (German or English) as well as graduate level courses (English).

Assistant professorships have been established to promote the careers of younger scientists. ETH Zurich implements a tenure track system equivalent to that of other top international universities. At the assistant professor level, commitment to teaching and the ability to lead a research group are expected.

ETH Zurich is an equal opportunity and family-friendly employer, values diversity, and is responsive to the needs of dual-career couples.

## Please apply online: www.facultyaffairs.ethz.ch

Applications should include a curriculum vitae, a list of publications, a statement of future research and teaching interests, a description of the leadership philosophy, a description of the three most important achievements, and a certificate of the highest degree. The letter of application should be addressed to the President of ETH Zurich, Prof. Dr. Joël Mesot. The closing date for applications is 31 December 2023.