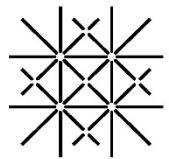


JOINT MASTER IN BIOMEDICAL ENGINEERING



**Universität
Basel**

Department of
Biomedical Engineering



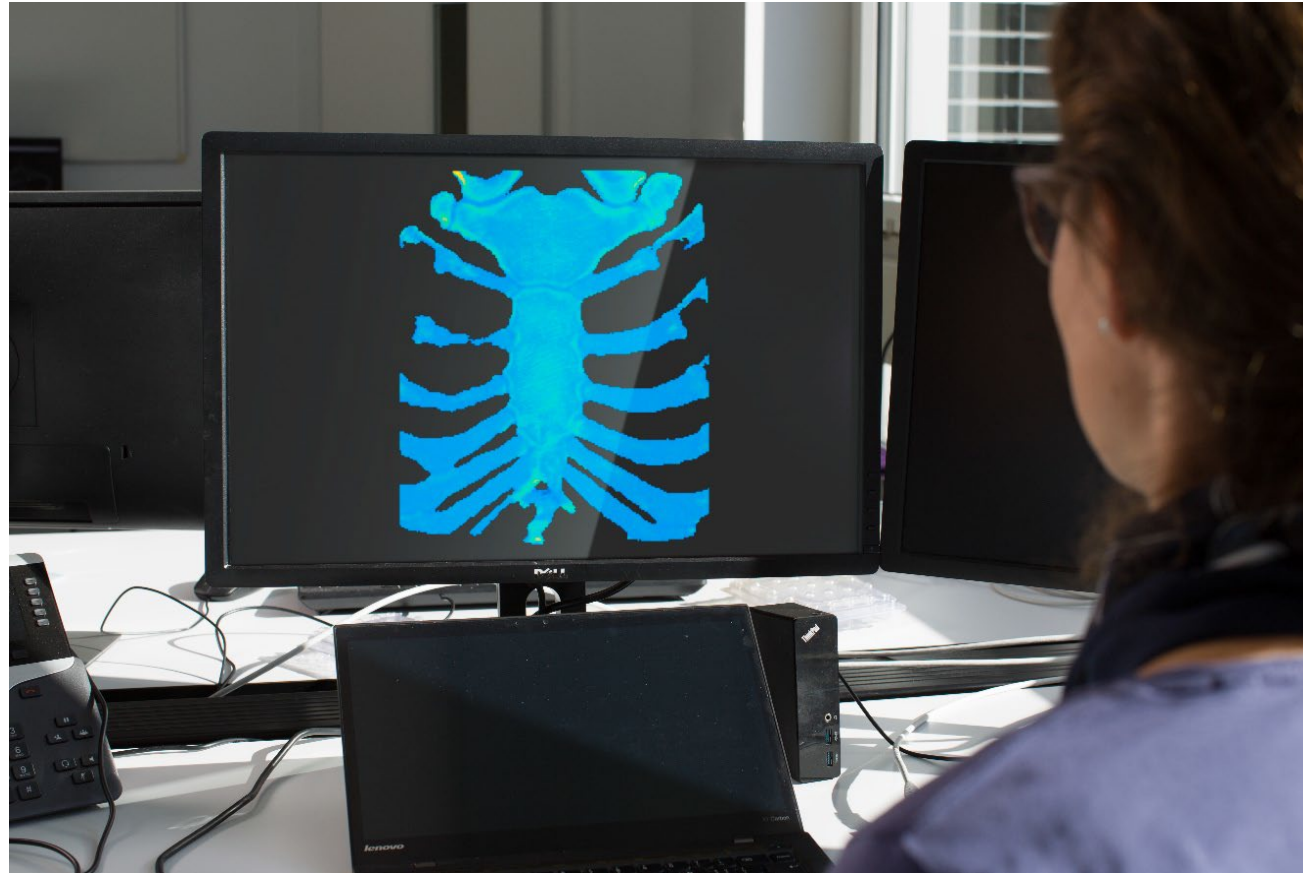
University of Applied Sciences and Arts Northwestern Switzerland
School of Life Sciences



WHAT IS BIOMEDICAL ENGINEERING?

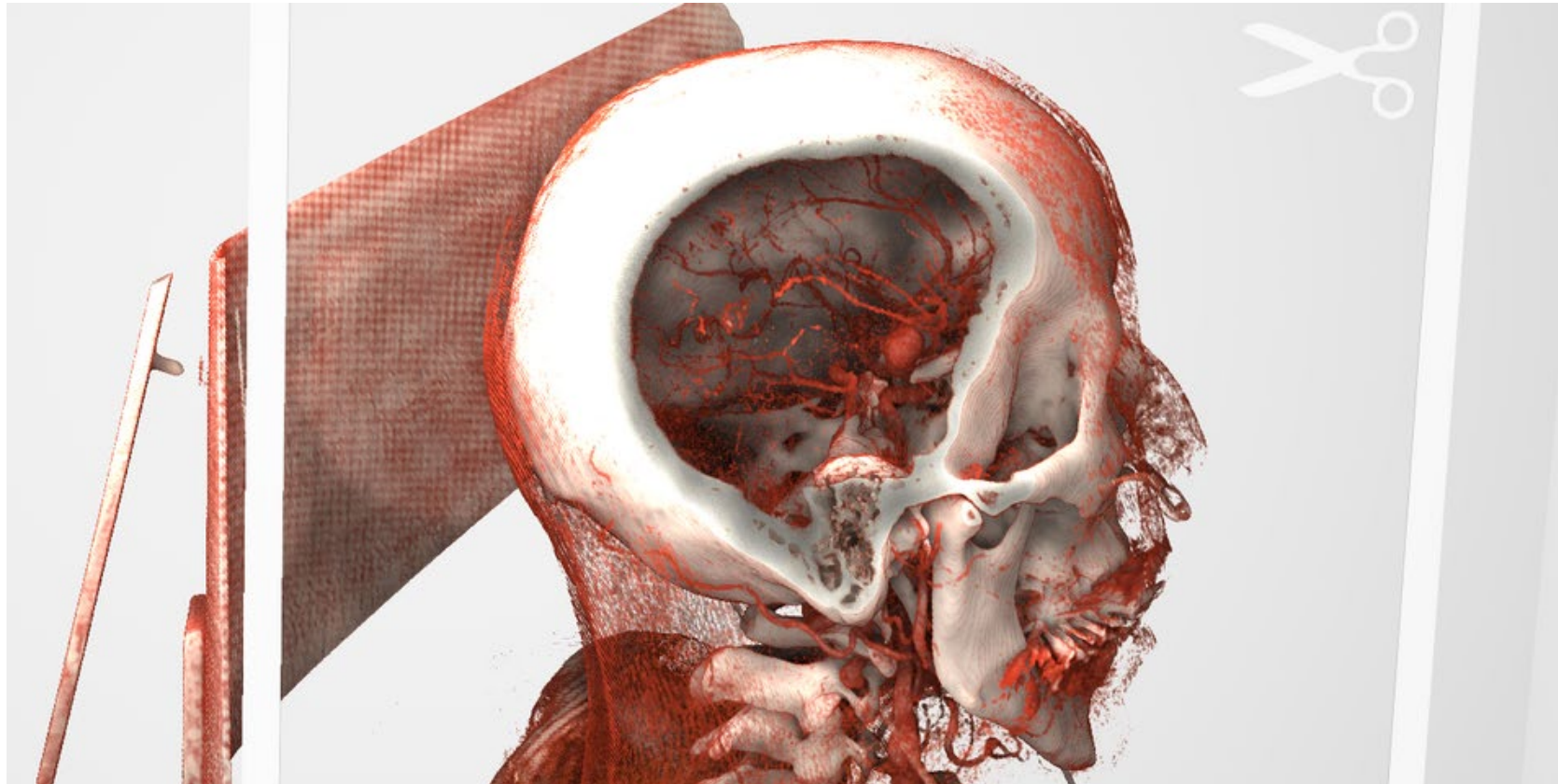


WHAT IS BIOMEDICAL ENGINEERING?

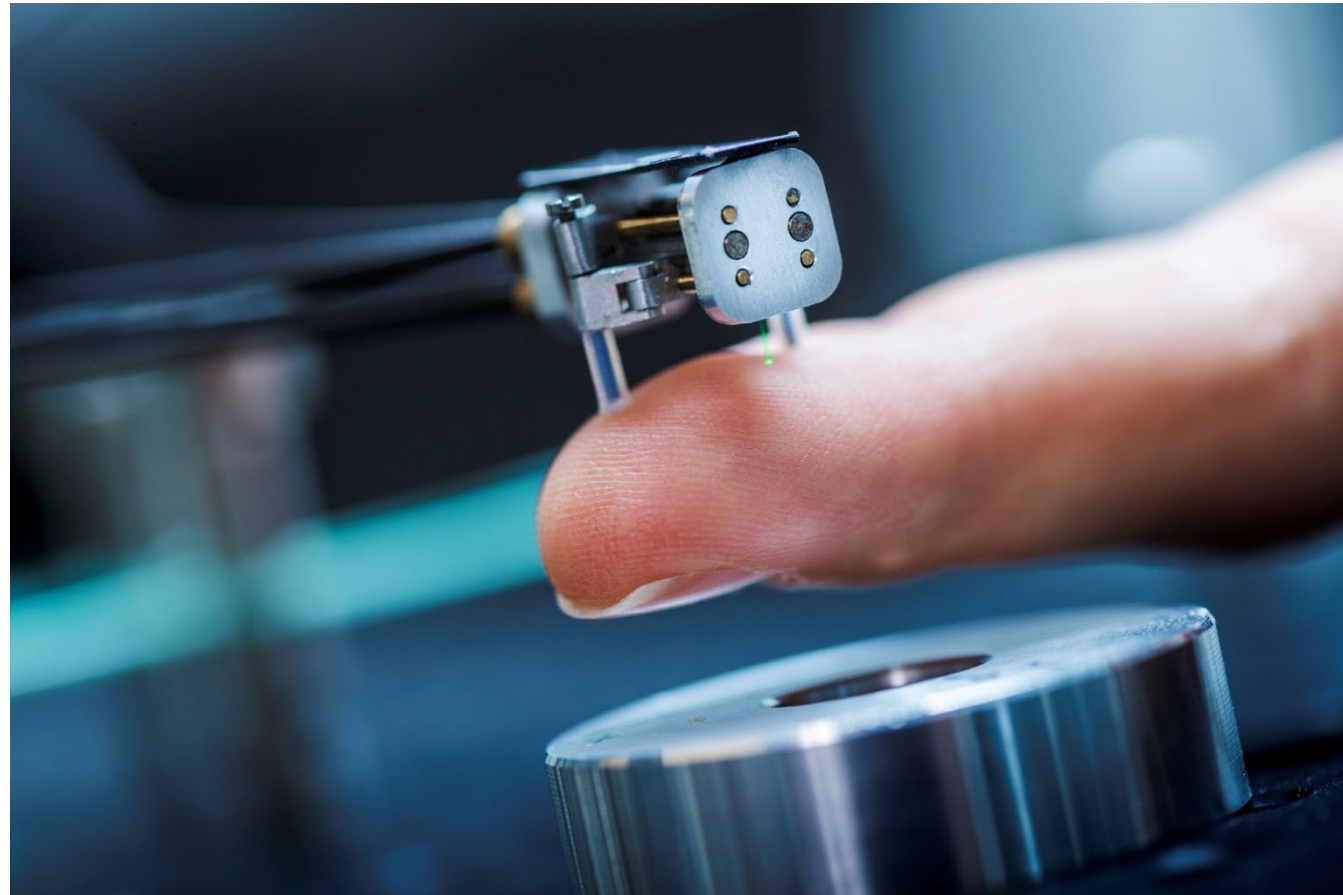




WHAT IS BIOMEDICAL ENGINEERING?



WHAT IS BIOMEDICAL ENGINEERING?



Today

SOME HISTORY OF DIAGNOSIS





2 INSTITUTIONS – 1 MASTER: Master of Science Biomedical Engineering



University
of Basel

Department of
Biomedical Engineering



Fachhochschule
Nordwestschweiz



ADMISSION REQUIREMENTS

Medicine related Bachelors

- Biomedicine/Biomedical Sciences
- Dental Medicine
- Forensic Sciences
- Health Science and Technologies
- Human Medicine
- Pharmaceutical Sciences
- Sport, Exercise and Health Sciences
- Veterinary Medicine

Natural Science Bachelors

- Biochemistry, Biology, Biotechnology
- Chemistry
- Computational Sciences, Data Science
- Computer Science
- Digital Life Sciences, Life Sciences and Technologies
- Materials Sciences
- Mathematics
- Medical Informatics
- Mikrotechnologies
- Micro - und Medical Technologies
- Mobile Robotics
- Nanosciences
- Physics
- Photonics

Engineering Bachelors

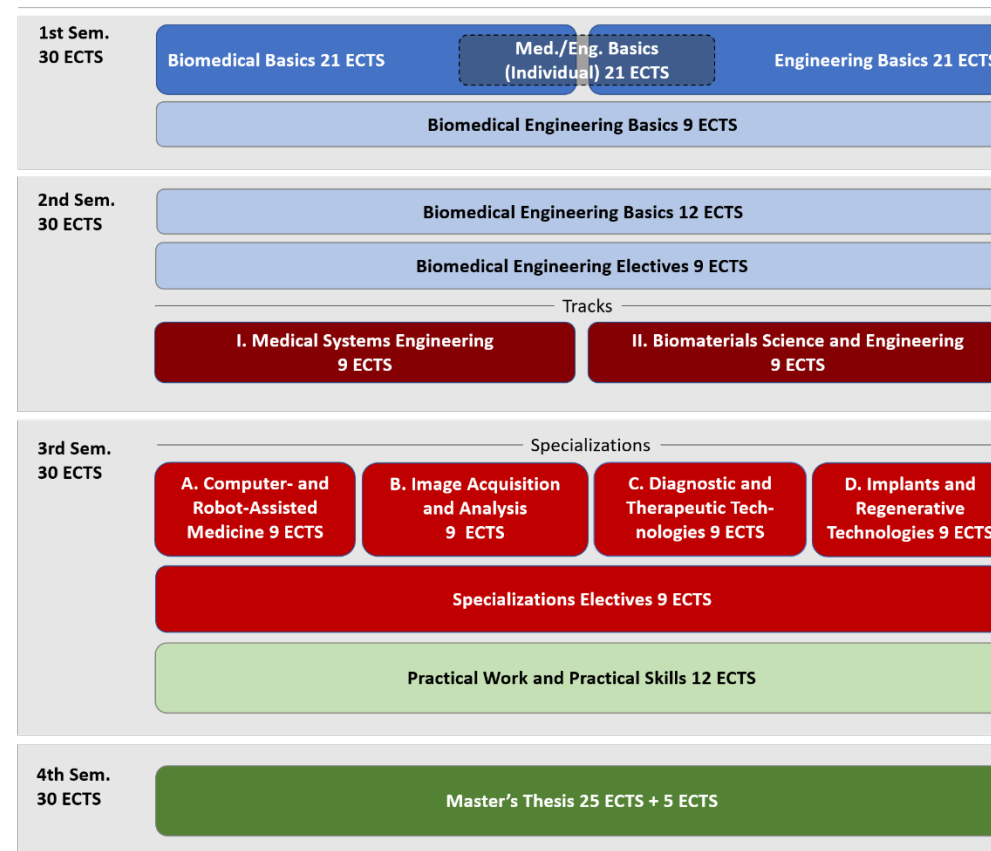
- Chemical Engineering
- Civil Engineering
- Electrical engineering
- Environmental Engineering and Geomatics Engineering Sciences
- Mechanical Engineering
- Mobile Robotics
- System Engineering



KEY FACTS & CURRICULUM



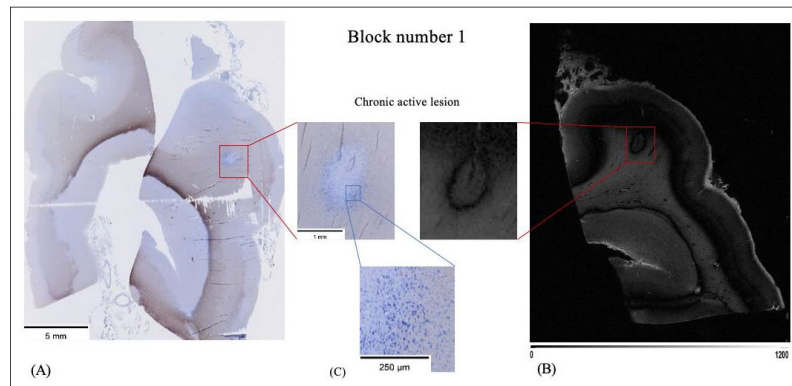
4
Semesters



* Not all combinations of modules can be guaranteed

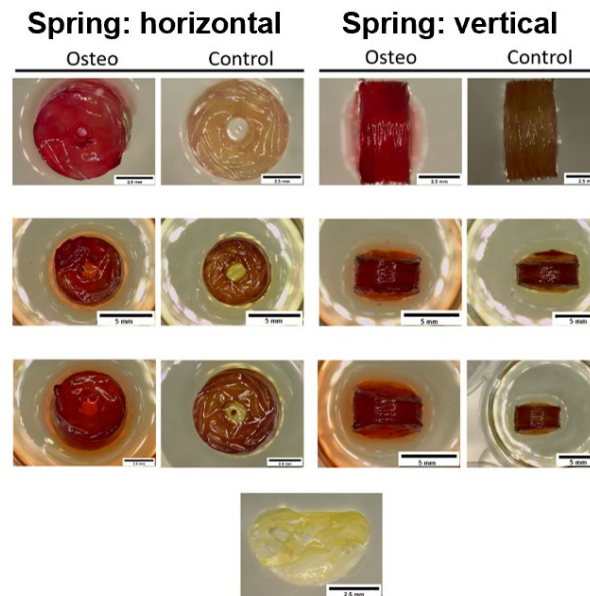


MASTER'S THESIS PROJECTS IN 2024



Identification of 9.4T MRI sequences for enhanced cellular visualization of multiple sclerosis lesions

By Elisabetta Giacomelli



Development of a self-assembled osteochondral construct using 4D technology

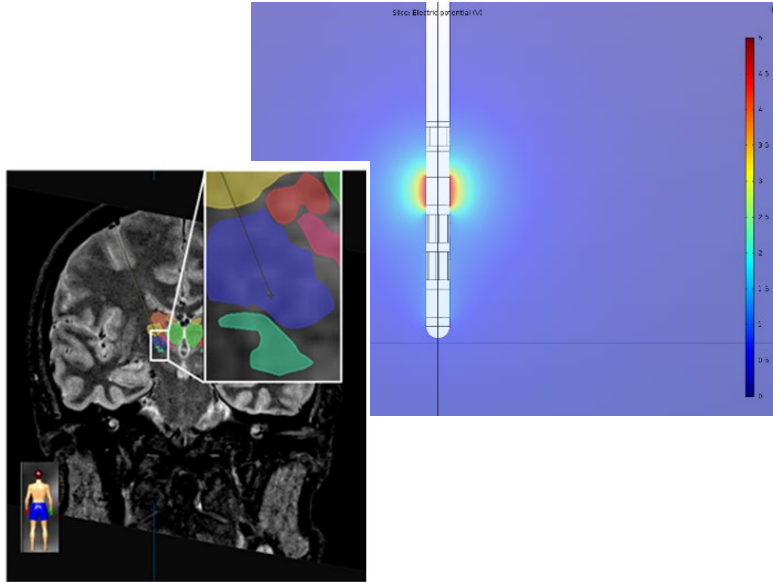
By Geraldine Borer



A Deep-Learning Approach for Navigated Anterior Cruciate Ligament Surgeries

By Martino Giorgi

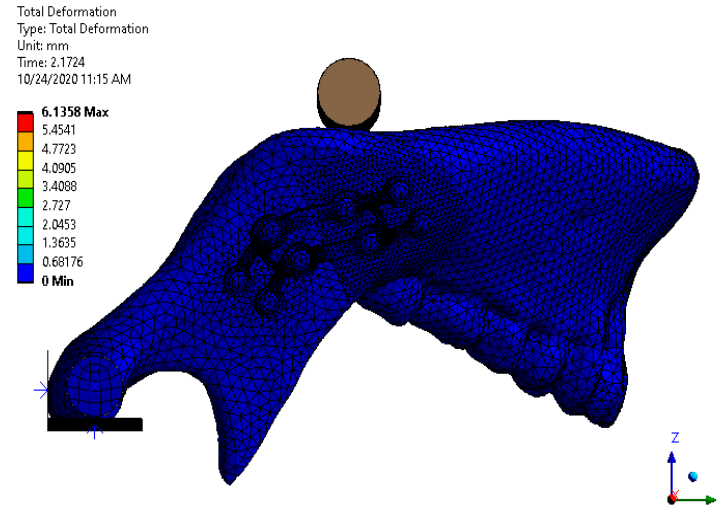
OTHER MASTER'S THESIS PROJECTS



Deep Brain Stimulation (DBS) – Simulation and Experimental Work - Modelling of electrical field distribution within phantom.



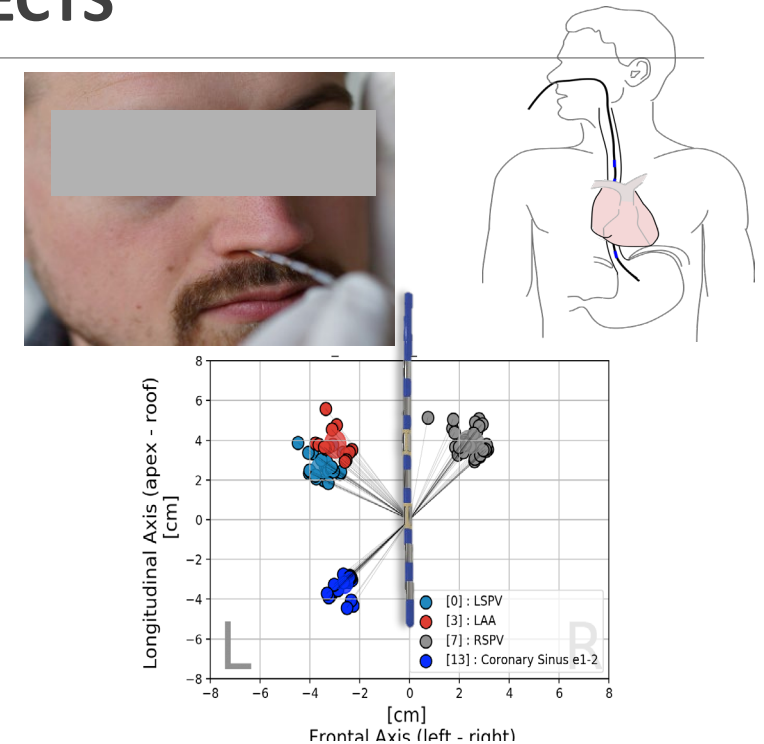
By A. Dietschy



Finite Element Analysis and Validation of Mandible Fracture Treatment – Modelling and Biomechanical Testing.



By M. Maintz



Cardiac Mapping System Based on Esophageal Electrocardiography – Source localization on invasively measured multi-channel electrocardiographic signals.

By multiple students

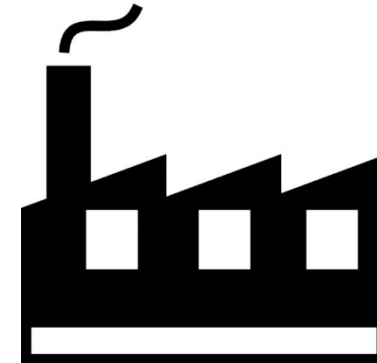
CAREER PROSPECTS



Academic Research



Healthcare



Industry

CAREER IN HEALTHCARE



CAREER IN INDUSTRY

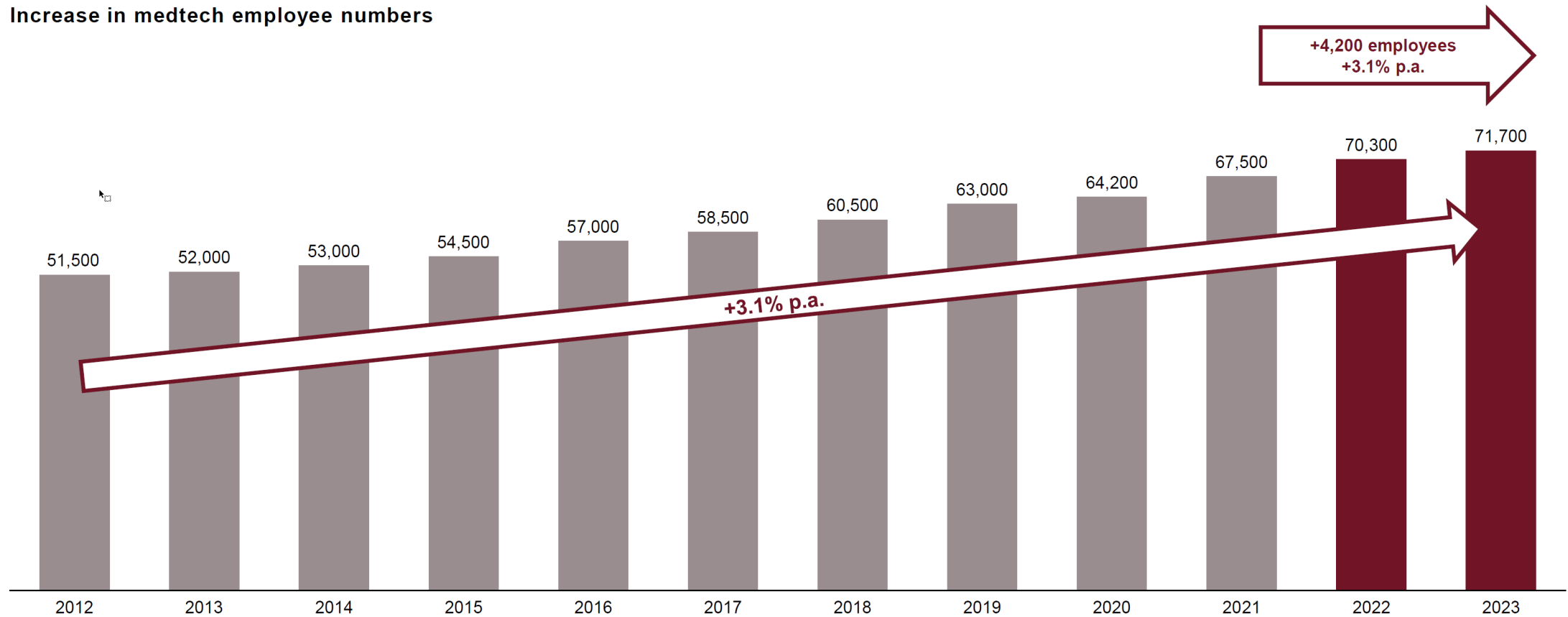


Diagnostics

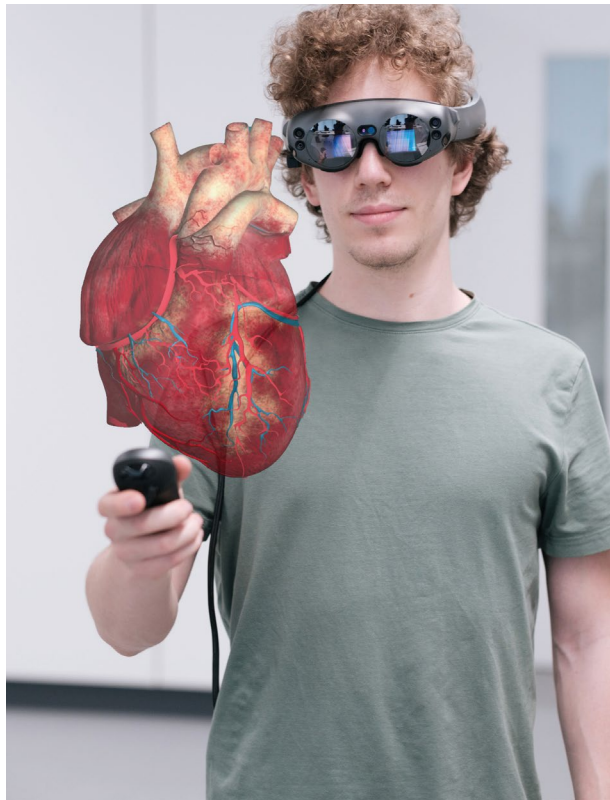


GROWING MEDTECH INDUSTRY IN SWITZERLAND

Increase in medtech employee numbers



ACADEMIC RESEARCH CAREER



Thank You For Your Interest!

QUESTIONS? CONTACT US:

master-dbe@unibas.ch



MEET US:

