

1) 3D skeletal muscle cell culture

Research advisor: Dr. Nicolas Place (UNIL, Lausanne)

Engineer advisor: clement.lanfranchi@unil.ch

2) Effects of mouthguard on sportive performances

Research advisor: Dr. Fabio Borrani and Dr. Davide Malatesta

Engineer advisor: naser.nasrollahzadeh@chuv.ch

3) In-field evaluation of sportive performances with portable equipment

Research advisor: Dr. Davide Malatesta

Engineer advisor: yanheng.guo@chuv.ch

4) 3D printed thoracic anatomical models for preoperative planning and education

Medical advisor: Dr. Antoine Dewarrat (CHUV, Lausanne)

Engineer advisor: alexander.nottegar@epfl.ch

5) Whether or not to use steps when climbing a slope in a trail race

Medical advisor: Dr. Fabio Borrani (Institute of Sport Sciences FBM)

Engineer advisor: Jérôme Parent and Olivier Campiche labo.issul@unil.ch

6) Improve laboratory evaluation on trail running

Medical advisor: Dr. Fabio Borrani (Institute of Sport Sciences FBM)

Engineer advisor: Jérôme Parent and Olivier Campiche labo.issul@unil.ch

7) Efficient fat processing in regenerative medicine

Medical advisor and engineering advisor: philippe.abdel-sayed@epfl.ch

8) Experimental hip fracture device

Medical advisor: Dr. Alicia Bojan

Engineering advisor: antoine.reitzel@epfl.ch

9) Ski helmets optimization

Medical advisor: Dr. Jean-Yves Fournier (Hôpital du Valais, Sion)

Engineering advisor: mi-lane.bouchez@epfl.ch

10) Ice hockey players with knee cartilage problem

Medical advisor: Quirin Soehnlein (Performance coach, LHC)

Engineering advisor: alexander.nottegar@epfl.ch

11) Hydrogel glue with cicatrisation properties

Medical advisor: Dr. Kishore Sandu (CHUV, Lausanne)

Engineering advisor: deniz.turgut@epfl.ch

12) How to diminish air leaks after lung volume reduction surgery?

Medical advisor: Dr. Louis-Emmanuel Chriqui (CHUV, Lausanne)

Engineering advisor: vincent.varanges@epfl.ch

13) Development of a supine walking machine for functional imaging of the knee

Medical advisor and engineering advisor: julien.favre@chuv.ch