



Biomechanics and Biomedicine

Muscles make it possible to move our body. Nerves trigger the muscles and transfer information to the brain from both the body and the environment. Research projects in biomechanics and biomedicine aim at understanding how muscles and nerves work.

“The human being is the centre in all our projects”, says Sofia Olandersson, a Ph.D candidate involved in the Hand project. The aims of the Hand project are to develop methods to examine muscles acting on the hand and to a better understanding of the dysfunctional hand in patients suffering from rheumatoid arthritis and other diseases affecting joints and muscles. Hopefully this will create possibilities to a better understanding of disorders and environmental factors that may affect the musculature. Possible environmental factors may include nutrition, injuries and physical training. See also the presentation of PRODEA – Centre for product development within the network alliance Health Technique.

The Pain project also focuses on the human being. The team collaborates with other partners to develop methods to examine the function of pain sensitive nerves. In addition, this will open up possibilities to better diagnostic tools and new strategies for the treatment of pain.

The project Training focuses on training and elite athletes, in which the exercise efficiency and the effect on the immune system are being studied.

In all our research projects there is a close collaboration with researchers nationally and internationally.

“This is essential”, says Marita Hilliges, the research team leader. Studies of patients would not be possible without the collaboration with experienced clinicians. Our collaborations are a prerequisite for research at a high scientific level and give our research students possibilities to make international experiences.

