



KTH, School of Engineering Sciences in
Chemistry, Biotechnology and Health

Programme for Master Thesis Presentation and Opposition

Degree Project in Technology and Health, Second Cycle, HL207X

18 January 2021

<https://kth-se.zoom.us/j/66724704616>

Examiner: Sebastiaan Meijer

Time: 9:00-9:45

Student: **Ilja Leiko**

Title: Improving Type 1 Diabetes Patients' Quality of Life Through Data Collection

Main supervisor: Adam Darwich

Opponent student: Adam Smith

Time: 10:00-10:45

Student: **Tanmina Azad**

Title: Promotion of Physical Activities of Night Shift Nurses with Gamification. A Study of Investigating of Physical Activity among Night Shift Nurses and Promoting Gamification

Supervisor: Maksims Kornevs

Opponent student: Ilja Leiko

Time: 11:00-11:45

Student: **Adam Smith**

Title: Reduce Stress among Nurses through Gamification. Finding Stress Factors among Nurses and Reducing them through Gamification

Supervisor: Maksims Kornevs

Opponent student: Tanmina Azad



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Degree Project in Medical Engineering, Second Cycle, HL205X
18 January 2021

<https://kth-se.zoom.us/j/65067539009>

Time: 12:00-12:45

Student: **Ludivine Amathieu**

Title: A Light-Activated Adhesive to Fix Meshes in Intraperitoneal Laparoscopic Ventral Hernia Repair: Light Activation Efficiency and Fixation Strength Assessments

Supervisor: Elisa Bitton

Opponent student: Federica Aresu

Reviewer: Tobias Nyberg

Time: 13:00-13:45

Student: **Balázs Szabó**

Title: High density EMG based estimation of lower limb muscle characteristics using feature extraction

Supervisor: Ruoli Wang

Opponent student: Ludivine Amathieu

Reviewer: Svein Kleiven

Time: 14:00-14:45

Student: **Ruoyu Huang**

Title: 3D Freehand Ultrasonography in quantifying muscle morphological parameters in lower extremity

Supervisor: Ruoli Wang

Opponent student: Balázs Szabó

Reviewer: Svein Kleiven

Time: 15:00-15:45

Student: **Federica Aresu**

Title: High density sEMG and bipolar sEMG based estimation and comparison of ankle joint kinetics using machine learning

Supervisor: Ruoli Wang

Opponent student: Ruoyu Huang

Reviewer: Svein Kleiven



KTH, School of Engineering Sciences in
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Programme for Master Thesis Presentation and Opposition

Degree Project in Medical Engineering, Second Cycle, HL205X

19 January 2021

<https://kth-se.zoom.us/j/68292557813>

Time: 12:00-12:45

Student: **Claire Diaz**

Title: Combination of IMU and EMG for object mass estimation using machine learning and musculoskeletal modeling

Supervisor: Joris Voerman

Opponent student: Libo Xu

Reviewer: Jonas Willén

Time: 13:00-13:45

Student: **Libo Xu**

Title: GAN-based Automatic Segmentation of thoracic aorta from non-contrast-enhanced CT images

Supervisor: Chunliang Wang

Opponent student: Claire Diaz

Reviewer: Örjan Smedby

Time: 14:00-14:45

Student: **Evgenija Kravchenko**

Title: Association between cognitive measures, global brain surface area, genetics, and screen-time in young adolescents. Estimation of causal inference with help of machine learning

Supervisor: Bruno Sauce

Opponent student: Libo Xu

Reviewer: Xiaogai Li