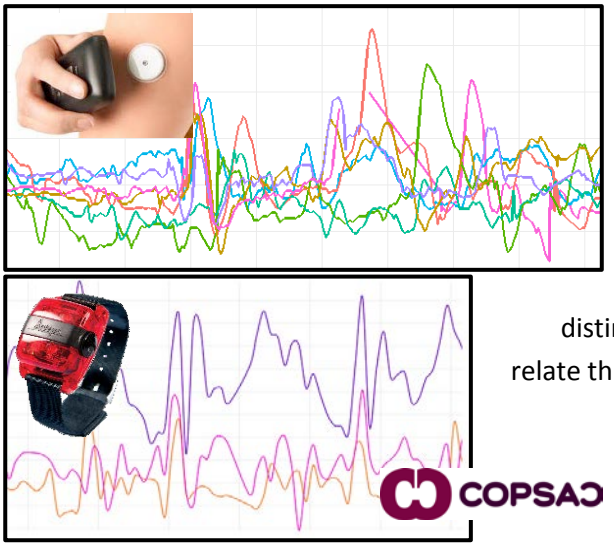
**MSc-project**

**Integration of longitudinal Sensor data for Monitoring Activity and Metabolism**

**Introduction:**
Technology has made it possible to obtain longitudinal data via so called Wearable and Implantable Technology (WIT). This gives a unique possibility to monitor *everyday life,* and gives rise to the characterization of patient phenotypes.




**Objective and Description:**
This project is going to analyze 14 days matched *Continues Glucose Monitoring* data and *physical activity* data – via accelerometers – from the COPSAC2000 cohort (www.copsac.com) consisting of 18 year old children (n = 400). The aim is to develop algorithms for extracting features from the sensor data, examine common and distinct information between the two technologies and further to relate this information to background knowledge on these adolescents.
COPSAC is a part of Herlev Gentofte Hospital, with physical location in Gentofte.

**Max number of students:** 2

**Prerequisites:**
Computational skills preferably in R or Matlab is required.

**Supervisors:**
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**Responsible institution**: COPenhagen Studies on Asthma in Childhood (COPSAC)

# Medicinsk signalbehandling