



**Nordic Seminar on Technical Measurements of
Physical Activity & Sedentary Behaviour
Early career researchers' sessions**

Thursday 5.10.2023

Session 3a: Epidemiological session, Chair Prof. Sari Stenholm
Room: *Medisiina D, Säätiö hall*

- 15.00 Do organisational levels influence the physical behaviour among childcare workers?
A variance component analysis using compositional data
Christian Tolstrup Wester, National Research Centre for the Working Environment,
Denmark
- Low back pain among eldercare workers: Defining the “Sweet-Spot” of daily durations
of occupational physical behaviors composition
Stavros Kyriakidis, National Research Centre for the Working Environment,
Denmark
- Changes in 24-hour (non)-movement behaviour during the retirement transition:
preliminary results of the ‘Move into Retirement’ study
Nina Vanswevelt, KU Leuven, Belgium
- Do individuals with different personality profiles differ in their MVPA and SB patterns?
Johanna Ahola, University of Jyväskylä, Finland
- Active break**
- 15.45 Association of Accelerometer-measured Physical Activity and Midlife Income: A
Northern Finland Birth Cohort 1966 Study
Hanna Junttila, Oulu Deaconess Institute Foundation, Finland
- Do cardiorespiratory fitness and body composition modify the association between
physical activity and menopausal symptoms?
Matti Hyvärinen, University of Jyväskylä, Finland
- Fitness-related physical activity explains most of the association between
accelerometer data and cardiometabolic health
Jonatan Fridolfsson, University of Gothenburg, Sweden
- Feasibility and usability of the co-developed self-management program GAUdiS
aimed at reducing sedentary time in older adults
Lisa Hultman, Mälardalen University, Sweden
- Predictors associated with an increase in daily steps among people with prediabetes
or type 2 diabetes participating in a two-year pedometer intervention
Kristina Larsson, Sophiahemmet University, Sweden
- 16:30 Closing of the day



Session 3b: Context-related session, Chair Dr. Tuija Leskinen

Room: *Medisiina D, Lauren 1 hall*

- 15.00 Domain-specific device-based physical activity data for adolescents
Line Matthiesen, University of Southern Denmark, Denmark
- Investigating the use of different parts of a green area based on GPS tracking in older adults: work-in-progress
Kirsi Keskinen, University of Jyväskylä, Finland
- The association between greenness and moderate-to-vigorous physical activity during active travel
Sanna Pasanen, University of Turku, Finland
- Thinking out of the box – Can trajectory analyses be used to model mobility habits in older adults?
Max Brauer, Universitätsmedizin Berlin, Germany
- Active break**
- 15.45 Can camera-based user detections be an alternative to Direct Observations?
Cathrine Damsbo Madsen, University of Southern Denmark, Denmark
- Concurrent validation of questions about physical activity and sedentary time in targeted health dialogues in Sweden
Lisbeth Johansson, Jönköping University, Sweden
- Validity of IMU-sensors for assessing gait features of older adults in hilly environment outdoors
Emmi Matikainen-Tervola, JAMK University of Applied Sciences, Finland
- The influence of season and day of week on physical activity in different age groups: The HUNT4 Study
Atle Kongsvold, Norwegian University of Science and Technology (NTNU), Norway
- 16:30 Closing of the day



Session 3c: Technical session, Chair Dr. Kristin Suorsa
Room: *Medisiina D, Blokki 2 (D1054)*

- 15.00 Influence of accelerometer calibration on the estimation of objectively measured physical activity: The Tromsø Study
Marc Weitz, UiT – The arctic university of Norway
- Validation of two accelerometers measuring physical activity in children
Anna Stage, University of Copenhagen, Denmark
- Comparison of free-living physical activity assessment based on accelerometry versus heart rate in community dwelling older adults
Joona Neuvonen, University of Jyväskylä, Finland
- Deep learning versus classical machine learning for predicting 24-hour movement behaviours: A comparative analysis of handcrafted features and raw acceleration signal
Alireza Sameh, University of Oulu, Finland
- Active break**
- 15.45 A framework for developing novel AI-based classifiers from movement recordings
Manu Airaksinen, Helsinki University Hospital (HUS), Finland
- Free-living sit-to-stand kinematics as indicator of lower extremity physical function
Antti Löppönen, University of Jyväskylä, Finland & KU Leuven, Belgium
- Muscle contractile inactivity increases proportional to sedentary bout duration
Christian Brakenridge, South- Eastern Finland University of Applied Sciences, Finland
- Activation patterns of thigh and gluteal muscles during prolonged sitting and five different active countermeasures
Suvi Lamberg, South- Eastern Finland University of Applied Sciences, Finland
- Identification of Heavy Lifting using simple wearables (LiftID): Development and Evaluation
Markus D. Jakobsen, National Research Centre for the Working Environment, Denmark
- 16:30 Closing of the day