Basic and Clinical Research in Musculo-skeletal Sciences

Post graduate research program, Faculty of Health and Medical Sciences – University of Copenhagen

in collaboration with

Clinical Academic Groups, Greater Copenhagen Health Science Partners
Physical Activity and Sports in Clinical Medicine (ImPact)

“Physical Activity in Disease Prevention, Treatment and Rehabilitation”

Annual Symposium

Thursday 28th November – Friday 29th November 2019

Comwell Borupgaard
Nørrevej 80, 3070 Snekkersten

THURSDAY 28. NOVEMBER
10.00 – 10.45

Key-note lecture:
Health span and exercise
Professor Karyn Hamilton, Colorado State Univ, USA
Chair: Flemming Dela
### Free oral presentations from PhD students

**Auditorium A**
**Chairs:** Professor Ylva Hellsten, Professor Per Hølmich

Presentations each 8+2 min

The oral presentations are followed by feedback on the presentation technique (20 min)

**Comments on presentation technique:** MA in rhetoric: Thea Feveile Sejr Hansen

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<thead>
<tr>
<th>Time</th>
<th>Name</th>
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<tbody>
<tr>
<td>10.50 – 11.00</td>
<td>Casper Simonsen</td>
<td>“Safety and feasibility of postoperative exercise training for patients with cancer of the gastro-esophageal junction – A follow-up of the PRESET pilot study”</td>
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<td>11.00 – 11.10</td>
<td>Martin Kaj Fridth Nielsen</td>
<td>“Effects of supervised in-hospital physical activity on cardiorespiratory fitness and physical function in children with cancer – A Nonrandomized Controlled Trial from the RESPECT study”</td>
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<td>11.10 – 11.20</td>
<td>Karina Louise Skov Husted</td>
<td>“A new approach to workplace health promotion: Body age assessment in 9851 Danish employees – a cohort study”</td>
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<tr>
<td>11.20 – 11.30</td>
<td>Kenneth Mertz</td>
<td>“Effect of daily protein supplementation with or without resistance training for 1 year on muscle size, strength and function in healthy older adults”</td>
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<tr>
<td>11.30 – 11.40</td>
<td>Signe Hulsbæk</td>
<td>“Maximal isometric knee-extension strength measures indicating sarcopenia is associated with health-related outcomes and mortality in older patients with hip fracture”</td>
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<td>11.40 – 11.50</td>
<td>Jacob Bülow</td>
<td>“Effect of long-term nutritional supplementation and different types of training on glucose tolerance in healthy elderly: CALM cohort”</td>
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<td>11.50 – 12.00</td>
<td>Anne Theil Gylling</td>
<td>“The influence of prolonged muscular strength training upon muscle function and volume in healthy and chronically diseased elderly close to retirement age: The LISA study (Live active Successful Aging)”</td>
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**Auditorium B**
**Chairs:** Professor Charlotte Suetta, Senior Researcher Jesper Løvind Andersen

Presentations each 8+2 min

The oral presentations are followed by feedback on the presentation technique (20 min)

**Comments on presentation technique:** MA in rhetoric: Mads Højlyng

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<td>10.50 – 11.00</td>
<td>Rasmus Skov Husted</td>
<td>“The relationship between pre-operative knee-extensor exercise dosage and effect on knee-extensor strength prior to and following total knee arthroplasty: A systematic review and meta-regression analysis of randomized controlled trials”</td>
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<td>11.00 – 11.10</td>
<td>Mübgan Yilmaz</td>
<td>“Early follow-up of hybrid Total Knee Arthroplasty (TKA) using Persona® protheses – a prospective study using Model-based Radiostereometric Analysis (Mb-RSA)”</td>
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<td>11.20 – 11.30</td>
<td>Lasse Ishøi</td>
<td>“Between-hip differences in maximal hip muscle strength and rate of torque development 6-30 months after hip arthroscopy for femoroacetabular impingement syndrome: A cross-sectional study”</td>
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<td>11.40 – 11.50</td>
<td>Kristine Bramsen Andersen</td>
<td>“Acute Acromioclavicular Dislocation: Epidemiology, Natural History and Analysis of Prognostic Factors – A prospective cohort study”</td>
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<td>11.50 – 12.00</td>
<td>Nikolaj M. M.-Clausen</td>
<td>“The impact of non-steroidal anti-inflammatory drugs as an adjuvant treatment in early phase tendinopathy”</td>
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12.30 – 13.15    Lunch

SYMPOSIUM 1 (auditorium A):

Hormones, muscle and metabolism
Chair: Flemming Dela

13.15 – 13.40    Metabolism in body builders
                Professor Caroline Kistorp, Rigshospitalet, Denmark

13.45 – 14.10    Testosterone/estrogen and sarcopenia in elderly
                Professor Charlotte Suetta, Bispebjerg/Frederiksberg and
                Herlev/Gentofte hospital

14.15 – 14.40    Exercise, sympathetic activity and insulin resistance
                Professor Chris Bell, Colorado State Univ, USA

SYMPOSIUM 2 (auditorium B):

How to present scientific results
Chair: Thomas Bandholm

13.15 – 13.55    Oral presentation of scientific results: Interactions
                Associate Professor Thea Feveile Sejr Hansen, Univ of Copenhagen

14.00 – 14.40    Oral presentation of scientific results: Slides
                MA (Rhetoric) Mads Højlyng, Dept. of Management, CBS

14.45-15.15    Break (coffee/tea)

SYMPOSIUM 3 (auditorium A):

Cardiovascular and respiratory interplay
Chair: Ylva Hellsten and Vibeke Backer

15.15 – 15.40    Exercise as prevention and treatment of astma
                Professor Vibeke Backer, Center for Physical Activity Research,
                Rigshospitalet

15.45 – 16.10    Exercise as prevention and treatment of COPD,
                Professor Nina Godtfredsen, Dept of Respiratory Medicine, Amager and
                Hvidovre Hospital
16.15 – 16.40 Exercise as prevention and treatment of cardiovascular disease
Chief physician Hanne Rasmusen, Dept. of Cardiology, Bispebjerg and Frederiksberg Hospital

SYMPOSIUM 4 (auditorium B):
Exercise and cancer
Chair: Julie Gehl and Bente Klarlund Pedersen

15.15 – 15.40 Why would anyone imagine that exercise inhibits cancer?
Professor Julie Gehl, Roskilde-Køge Hospital, Region Zealand

15.45 – 16.10 Exercise in Pediatric Cancer
Professor Alejandro Lucia, Faculty of Sports Sci, European Univ of Madrid, Spain

Senior researcher, PhD Jesper Frank Christensen, Center of Inflammation and Metabolism/Center for Physical Activity Research (CIM/CFAS), Rigshospitalet

17.00 - 18.30 Poster presentation in Aud A (5 min + 3 slides for each poster)
Posters from all others than MUSKOS PhD students.

Afterwards poster walk including drinks

Chairs: Associate Professor Abigail Mackey, Professor Peter Magnusson

1. Asthma in adults and cardiorespiratory exercise
   Erik Soeren Halvard Hansen
   Centre for Physical Activity Research (CFAS) Rigshospitalet

2. Autophagy gets to the tendons: implications in mechanobiology and injury
   Costanza Montagna
   Department of Orthopedic Surgery M, Institute of Sports Medicine Copenhagen, Bispebjerg Hospital

3. Endorsing a Treatment that creates ambivalence in my professional role*: Facilitators and barriers among physiotherapists and orthopaedic surgeons to pre-operative home-based exercise therapy with one exercise-only in patients with severe knee osteoarthritis
   Rasmus Skov Husted
   Clinical Research Centre, Copenhagen University Hospital Hvidovre
4. Identification of biomarkers for human tendon-derived exosomes using proteomics
Ching-Yan Chloé Yeung
Institute of Sports Medicine Copenhagen, Bispebjerg Hospital

5. Reattachment of proximal avulsions of the hamstrings tendons is a good treatment in middle aged patients
Niels Rithamer Jakobsen
Department of Orthopaedics, Section of Sports traumatology and Arthroscopy – Bispebjerg Hospital, University of Copenhagen

6. Influence of dietary protein-matrix on amino acid absorption and anabolic response – application of intrinsically-labeled intact- or hydrolysed meat protein
Jakob Agergaard
Institute of Sports Medicine Copenhagen, Department of Orthopedic Surgery M, Bispebjerg Hospital

7. Delayed loading following repair of ruptured Achilles tendon – a randomized controlled trial
Rikke Høffner
Institute of Sports Medicine Copenhagen and Department of Physical and Occupational Therapy, Bispebjerg and Frederiksberg Hospital

19.00 Dinner (including PhD CUP)
Chairs: Professor Thomas Bandholm and associate professor Kristian Thorborg

FRIDAY 29. NOVEMBER

8.30 – 9.15 Key-note lecture:
History of skeletal muscle adaptation to exercise
Professor Stefano Schiaffino, Univ Padova, Italy
Chair: Abigail Mackey
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<td><strong>Chairs:</strong> Professor Clara Prats, Senior Researcher Peter Schjerling</td>
<td><strong>Chairs:</strong> Associate Professor Kristian Thorborg, Professor Thomas Bandholm</td>
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<td><strong>Ronni Eg Sah</strong></td>
<td><strong>Casper Søndenbroe</strong></td>
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<td>“Reliability of maximal mitochondrial oxidative capacity in human adipose tissue”</td>
<td>“Muscle and neuron signaling – the influence of age and exercise”</td>
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<td><strong>Rannvá Dahl</strong></td>
<td><strong>Jens R. Jakobsen</strong></td>
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<td>“Skeletal muscle fatty acid oxidation in patients suffering from carnitine transporter deficiency and the regulation of carnitine uptake in human skeletal muscle”</td>
<td>“A new method to isolate the myotendinous junction for quantitative measures”</td>
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<td><strong>Arthur Ingersen</strong></td>
<td><strong>Cheng Zhang</strong></td>
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<td>“The combined effects of endurance exercise and glucagon like peptide receptor agonists on insulin secretory capacity in patients with type 2 diabetes”</td>
<td>“Regional difference in turnover of human patellar tendon”</td>
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<td><strong>Troels Gammeltoft Dolin</strong></td>
<td><strong>Maria Swennegren Hansen</strong></td>
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<td>“Geriatric assessment and intervention in older patients undergoing surgery for colorectal cancer – The GEPOC study”</td>
<td>“Validation of the Achilles Tendon Length Measure and the Achilles Tendon Resting Angle in relation to the Copenhagen Achilles Length Measure”</td>
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<td><strong>Rudi Neergaard Hansen</strong></td>
<td><strong>Allan Cramer</strong></td>
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<td>“Do patients with patellofemoral pain exhibit elevated bone metabolic activity in the patellofemoral joint?”</td>
<td>“Collagen metabolism in acutely ruptured Achilles tendons”</td>
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10.40 – 11.00 Coffee/tea break

SYMPOSIUM 5 (auditorium A):

Interphases – Where tissues meet and recover
Chair: Peter Magnusson, Michael Kjær

11.00 – 11.25 Muscle wasting in intensive care unit patients and different intervention strategies
Professor Lars Larsson, Dept of Neurophysiology, Karolinska Inst, Stockholm, Sweden

11.30 – 11.55 Skeletal muscle and tendon – two very different tissues meet
Associate Professor Abigail Mackey-Sennels, Dept Biomedical Research, Univ Copenhagen

12.00 – 12.25 Bone regulation – a potential interplay with other tissues?
Professor Niklas Rye Jørgensen, Dept of Clinical Biochemistry, Rigshospitalet, Denmark

12.30 – 13.15 Lunch
(and separate board meeting Basic and Clinical Research in Musculo-skeletal Sciences)