

# The Nordic Congress for Cardio and Respiratory Physiotherapy

March 12<sup>th</sup> – 13<sup>th</sup>, 2020, Lovisenberg Diaconal Hospital, Oslo, Norway

## Program Day 1

### Thursday 12<sup>th</sup> March 2020

#### 09:00 – 10:00 Registration and networking

**09:15 – 09:45** Annual meeting for members of the Norwegian Physiotherapist Association

**10:00 – 10:30** **Plenary**  
**Welcome**

*Heidi Bunæs-Næss (N), Chair Nordic Congress for Cardio and Respiratory Physiotherapy 2020*

**10:30 – 12:00** **Plenary**  
**Keynote lectures**

*Chairs: Birgitta Blakstad Nilsson (N), Barbara Brocki (D)*

**10:30 – 11:00** **e-health in pulmonary rehabilitation**

*Henrik Hansen (D), Postdoctoral fellow, PhD, PT, Hvidovre Hospital (D)*

**11:00 – 11:30** **e-health in cardiac rehabilitation**

*Pernille Lunde, PhD student, OsloMet (N)*

**11:30 – 12:00** **Discussion and conclusions**

#### 12:00 – 13:00 Lunch and visit to exhibitions

#### 13:00 – 14:15 Oral presentations

*Chairs: Henrik Hansen (D) and Åsa Cider (S)*

1. **Monika Fagevik Olsén:** Technical aspects of devices and settings of the equipment for positive expiratory pressure-a systematic review.
2. **Rikke Gottlieb:** Peak systolic blood pressure increases during moderate intensity resistance training in ascending aorta surgery patients.
3. **Bente Frisk:** Predictors for increase in exercise capacity after pulmonary rehabilitation in patients with COPD.
4. **Tonje Klætte:** Evaluation of an interdisciplinary patient education day combined with individual respiratory physiotherapy on quality of life in patients with non-CF bronchiectasis.
5. **Durita Viderø Gunnarsson:** Evaluation of a technology assisted physical activity intervention among hospitalized patients: a quasi-randomized clinical trial (TAPAS).

#### 14:15 – 14:45 Break in Exhibition area

**14:45 – 15:15**

## **Plenary**

### **Keynote lecture**

*Chairs: Monika Fagevik Olsén (S), Bente Frisk (N)*

#### **Exercise training versus physical activity**

*Inger-Lise Aamot Aksetøy, Postdoctoral fellow and Head of Norwegian National Advisory Unit on Exercise Training as Medicine for Cardiopulmonary Condition (N)*

**15:30 – 16:15**

## **Focused networking sessions**

### **Session I**

#### **Exercise in pulmonary hypertension**

*Åsa Cider, PhD, Gothenburg University (S)*

### **Session II**

#### **Exercise in atrial fibrillation**

*Maria Borland, PhD, Gothenburg University (S)*

### **Session III**

#### **Positive expiratory pressure - Common clinical applications and physiological effects**

*Monika Fagevik Olsén, Professor, PT, Gothenburg University (S)*

### **Session IV**

#### **The Chelsea critical care physical assessment (CPAx)**

*Katrine Astrup Sørensen, MSPT, Århus University Hospital (D)*

**16:30 – 17:15**

## **Focused networking sessions**

### **Session I**

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*Maria Borland, PhD, Gothenburg University (S)*

### **Session III**

#### **Positive expiratory pressure - Common clinical applications and physiological effects**

*Monika Fagevik Olsén, Professor, PT, Gothenburg University (S)*

### **Session IV**

#### **Keep your glottis open – what that might mean?**

*Tiina Andersen, PhD, Haukeland University Hospital (N)*

**19:00 –**

**Conference dinner**

## Program Day 2

Friday 13<sup>th</sup> March 2020

09:00 – 10:35

### Plenary

#### Keynote lectures

*Chairs: Birgitta Blakstad Nilsson (N), Henrik Hansen (D)*

09:05 – 09:35

#### Physiological response after high intensity training

*Elisabeth Edvardsen, Postdoctoral fellow, Norwegian School of Sports Sciences (N)*

09:35 – 10:05

#### Resistance and muscle training as a treatment modality in patients with pulmonary diseases

*Andre Nyberg, Associate Professor, Umeå University (S)*

10:05 – 10:35

#### Discussion

10:35 – 11:00

#### Break in Exhibition area

11:00 – 12:00

#### Poster discussion

*Chairs: Barbara Brocki (D) and Monika Fagevik Olsén (S)*

1. **Lue Katrine Drasbæk Philipsen:** Cardio-pulmonary exercise test (CPET) is feasible in young children with cystic fibrosis (CF) aged six to twelve years and may be a valuable monitoring tool.
2. **Lue Katrine Drasbæk Philipsen:** Implementation of systematic physiotherapeutic control in adult patients with cystic fibrosis
3. **Dagmar Lybæk Sieg:** Cardiac rehabilitation in broad perspective-thinking outside the box.
4. **Durita Viderø Gunnarsson:** Technology assisted physical activity among hospitalized medical patients – a quasi- randomized clinical trial (TAPAS II).
5. **Stacey Haukeland-Parker:** Rehabilitation to improve physical capacity, dyspnea and quality of life following pulmonary embolism – study protocol (THE PE-REHAB STUDY)
6. **Morten Kolltveit:** Performance of mechanical insufflation-exsufflation devices with settings used in children with neuromuscular disorders
7. **Mette Brøkner Hansen:** Achieving competencies in respiratory physiotherapy.

12:00 – 13:00

#### Lunch and visit to exhibitions

13:00 – 14:00

## Oral presentations

*Chairs: Bente Frisk (N) and Åsa Cider (S)*

1. **Brit Hov:** Prevalence of mechanically assisted cough in the Norwegian neuropediatric population.
2. **Stacey Haukeland-Parker:** The translation and validation of the Norwegian version of the Leicester Cough Questionnaire.
3. **Anne Kristine Brekka:** Laryngeal response during mechanical insufflation – exsufflation – age influence on healthy persons.
4. **Maria Borland:** Cardiac rehabilitation induced improvement in physical fitness is “perishable goods” in patients with permanent atrial fibrillation.

14:00 – 14:15 Break in Exhibition area

14:15 – 15:15 **Plenary**

## State of the art

*Chairs: Barbara Brocki (D) and Monika Fagevik Olsén (S)*

1. **Dysfunctional breathing**  
*Karen Hjerrild Andreasson, PT, PhD fellow, Naestved-Slagelse-Ringsted Hospitals (D)*
2. **Exercise in patients with peripheral arterial disease**  
*Elisabeth Bø, PT, PhD, Oslo University hospital (N)*
3. **Physiotherapy and weaning from mechanical ventilation**  
*Marit Viravong, PT, MSc, Oslo University hospital (N)*

15:15 – 15:45 **Plenary**

*Chairs: Birgitta Blakstad Nilsson (N), Bente Frisk (N)*

## Closing lectures

## Presentation of the speakers



### Henrik Hansen

#### e-health in pulmonary rehabilitation

Henriks primary research focus is intervention studies (RCT) and new rehabilitation models, including optimization of outcome measurements for clinical research and practice in people with cardio- and pulmonary diseases. Henrik is co-author of several systematic meta-analysis and currently involved in working group on an upcoming Cochrane review concerning Tele-rehabilitation in chronic respiratory diseases.



### Pernille Lunde

#### e-health in cardiac rehabilitation

Pernille will talk about how e-health can be used in cardiac rehabilitation, and if it does give any additional effects.



### Inger-Lise Aamot Aksetøy

#### Exercise training versus physical activity

This lecture will discuss how we use the terms **physical activity** (PA) and **exercise training** (ET) in patient care and how we can maximize the benefits of both PA and ET in clinical practice.



### Åsa Cider

#### Exercise in pulmonary hypertension

This lecture focus on the pathology causing exercise intolerance that negatively affect activities of daily living and quality of life in patients with pulmonary hypertension (PH). Further, the importance of pre-exercise screening and test of physical fitness as a prerequisite to exercise prescription will be described. Last, but not least the effect of aerobic and muscular exercise will be highlighted.



## **Maria Borland**

### **Exercise in atrial fibrillation**

This workshop highlights physiotherapist led exercise-based cardiac rehabilitation for patients with different types of atrial fibrillation. It will include the latest evidence, personal reflections and theoretical and practical discussions with the audience based on patient cases.



## **Monika Fagevik Olsén**

### **Positive expiratory pressure - Common clinical applications and physiological effects**

Breathing exercises with Positive Expiratory Pressure (PEP) is used by many categories of patients. Four aims of the treatment are to increase low lung volumes, decrease hyperinflation, facilitate mucous clearance and increase respiratory muscle strength. The session will focus on the applications and physiological explanations of the effects of the treatments.



## **Katrine Astrup Sørensen**

### **The Chelsea critical care physical assessment (CPAx)**

The CPAX tool was developed in England for the purpose of measuring functional ability and changes in functional ability of critically ill patients in the ICU. CPAX consists of 10 components, which are graded on a six-point scale from dependent to independent (0-5). A research group at Aarhus University Hospital has translated the CPAX into Danish and tested its reliability.



## **Tiina Andersen**

### **Keep your glottis open – what that might mean?**

Larynx can limit the exercise performance, effectiveness of respiratory therapy in patients with neurological conditions or in ICU patients. The middle airway responses to several respiratory physiotherapy techniques will be demonstrated and discussed in this workshop.



## **Elisabeth Edvardsen**

### **Physiological response after high intensity training**

This lecture will give a summary of the most important known physiological changes in addition to  $VO_{2max}$  that will take place after high intensity interval training in a clinical setting.



## **Andre Nyberg**

### **Resistance and muscle training as a treatment modality in patients with pulmonary diseases**

Andres research focuses on developing clinically relevant measurement methods and effective and feasible treatment modalities targeting extrapulmonary manifestations (such as; limb muscle-, cardiovascular- and cognitive dysfunctions) among people with chronic respiratory disease, with a specific emphasis on people with chronic obstructive pulmonary disease (COPD).



## **Karen Hjerrild Andreasson**

### **Dysfunctional breathing**

The existing literature and clinical experiences regarding dysfunctional breathing (DB) will be presented in this session. Patients with DB have disordered breathing pattern, hyperventilation, dry coughing, and/or frequent sighing, which causes breathlessness and decreases of quality of life for the patient. Trained physiotherapists provide breathing retraining showing reduced symptoms and improved quality of life in these patients



## **Elisabeth Bøe**

### **Exercise in patients with peripheral arterial disease**

This lecture will summarize the evidence for supervised exercise therapy after percutaneous transluminal angioplasty for intermittent claudication.



## **Marit Viravong**

### **Physiotherapy and weaning from mechanical ventilation**

Ventilator weaning and timing of artificial airway removal often require contributions from several disciplines in the ICU. How can we as Respiratory Physiotherapists make a difference?