ERS course on Pulmonary rehabilitation
09-11 October 2023
Horn, Netherlands

Monday, 09 October 2023

**Registration and Welcome**
08:00–08:30  Registration
08:30–08:45  Welcome to CIRO and introduction of the ERS Faculty - M. Spruit

**Session 1 - Introduction of pulmonary rehabilitation**

**Chairs:** Sally J. Singh
08:45–09:10  The burden of multifaceted chronic lung diseases: rationale for pulmonary rehabilitation - F. Franssen
09:10–09:35  Pulmonary rehabilitation: conceptual framework and definition - T. Troosters
09:35–10:00  Organisational aspects of pulmonary rehabilitation - M. Spruit
10:00–10:20  Discussion and Q&A

10:20–10:45  **Coffee break**

**Session 2 - Physical inactivity and problematic ADL**

**Chairs:** Joana Cruz
10:45–11:10  Physical inactivity and problematic activities of daily life in chronic lung diseases - F. De Oliveira Pitta
11:10–11:35  Extra-pulmonary consequences of physical inactivity - M. Maddocks
11:35–12:00  How to assess physical inactivity and problematic activities of daily life in chronic lung diseases? - E. Gimeno-Santos
12:00–12:20  Discussion

12:00–13:00  **Lunch**
Monday, 09 October 2023

**Session 3 - Exercise testing and exercise limitation**

**Chairs:** Ioannis Vogiatzis

- 13:00–13:25  Exercise field testing - S. Singh
- 13:50–14:15  Physiology of exercise limitations: lower-limb and respiratory muscle dysfunction - D. Langer
- 14:15–14:35  Discussion

- 14:35–15:00  *Coffee break*

**Session 4 - Non-physiological impairments**

**Chairs:** Inga Jarosch

- 15:00–15:25  Symptoms of anxiety and depression - D. Janssen
- 15:50–16:15  Health illiteracy - D. Janssen
- 16:15–16:35  Discussion

- 16:35–18:00  Guided tour CIRO and Welcome cocktail
Tuesday, 10 October 2023

**Session 5 - Exercise training**

**Chairs:** Thierry Troosters

- 08:30–08:55  
  Endurance training - A. Vaes
- 08:55–09:20  
  Interval training - I. Vogiatzis
- 09:20–09:45  
  Resistance training and NMES - M. Maddocks
- 09:45–10:00  
  Discussion

10:00–10:20  
**Coffee break**

**Session 6 - Adjuncts to exercise training**

**Chairs:** Martijn A. Spruit

- 10:20–10:45  
  Pharmacotherapy - F. Franssen
- 10:45–11:10  
  Oxygen - R. Evans
- 11:10–11:35  
  Nutritional and hormonal supplements - A. Schols
- 11:35–12:00  
  Non-invasive ventilation - I. Jarosch
- 12:00–12:25  
  Inspiratory muscle training - D. Langer
- 12:25–12:35  
  Discussion

12:35–13:15  
**Lunch**

**Session 7 - Behaviour change and collaborative self-management**

**Chairs:** Frits M.E. Franssen

- 13:15–13:40  
  Understanding and supporting behaviour change - L. Brighton
- 13:40–14:05  
  Enhancing self-efficacy - S. Singh
- 14:05–14:30  
  Collaborative self-management - R. Evans
- 14:30–14:55  
  Advance care planning - D. Janssen
- 14:55–15:10  
  Discussion

15:10–15:40  
**Coffee break**
Tuesday, 10 October 2023

**Session 8 - Lung attacks**

**Chairs:** Lisa Jane Brighton

- **15:40–16:05** What is an exacerbation? - F. Franssen
- **16:05–16:30** Early mobilization during severe exacerbations - C. Burtin
- **16:30–16:55** Post-exacerbation pulmonary rehabilitation - M. Maddocks
- **16:55–17:00** Discussion

**Session 9 - Widening the application of pulmonary rehabilitation**

**Chairs:** Thierry Troosters

- **17:00–17:20** Pulmonary rehabilitation in post-COVID, asthma, ILD, lung cancer, bronchiectasis, etc. - R. Evans
- **17:20–17:45** Other formats of exercise training: from home alone to urban training - E. Gimeno-Santos
- **17:45–18:00** Discussion
Wednesday, 11 October 2023

Session 10 - Workshops

Participants can attend 7 of 10 workshops. Maximum 8 participants per workshop.
All workshops will be repeated 7 times.

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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>08:00–08:30</td>
<td>Introduction of workshop leaders and workshop instructions - M. Spruit</td>
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<tr>
<td>08:30–09:00</td>
<td>Round 1</td>
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<td>09:05–09:35</td>
<td>Round 2</td>
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<td>09:40–10:10</td>
<td>Round 3</td>
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<td>10:10–10:45</td>
<td>Coffee break</td>
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<td>10:45–11:15</td>
<td>Round 4</td>
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<td>11:20–11:50</td>
<td>Round 5</td>
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<td>11:55–12:25</td>
<td>Round 6</td>
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<td>12:30–13:00</td>
<td>Round 7</td>
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<td>13:00–13:45</td>
<td>Lunch</td>
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<th>Time</th>
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<tr>
<td>13:45–14:00</td>
<td>Introduction case report</td>
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<td>14:00–15:00</td>
<td>Case report: Group 1 - R. Evans, I. Jarosch</td>
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<td>14:00–15:00</td>
<td>Case report: Group 2 - C. Burtin, J. Cruz</td>
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<td>14:00–15:00</td>
<td>Case report: Group 3 - E. Gimeno-Santos, S. Singh</td>
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<td>14:00–15:00</td>
<td>Case report: Group 4 - I. Vogiatzis, M. Maddocks</td>
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<td>14:00–15:00</td>
<td>Case report: Group 5 - D. Janssen, T. Troosters</td>
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<td>15:00–15:15</td>
<td>Break</td>
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<td>15:15–17:00</td>
<td>Discussion of case report - F. Franssen, D. Janssen</td>
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<td>17:00–17:15</td>
<td>Summary - M. Spruit, F. Franssen, D. Langer I. Vogiatzis</td>
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