



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
- 12:20–13:00 *Lunch*



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Session 3 - Exercise testing and exercise limitations

Chairs: Ioannis Vogiatzis

- 13:00–13:25 Exercise field testing - S. Singh
- 13:25–13:50 Physiology of exercise limitation: cardiopulmonary limitations - C. Burtin
- 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: Rainer Gloeckl

- 15:00–15:25 Symptoms of anxiety and depression - D. Janssen
- 15:25–15:50 Poor collaborative self-management - R. Evans
- 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 - R. Beijers
11:35–12:00 Non-invasive ventilation - R. Gloeckl
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
16:55–17:10 Discussion

Session 9 - Widening the application of pulmonary rehabilitation

Chairs: Thierry Troosters

- 17:15–17:40 Pulmonary rehabilitation in post-COVID, asthma, ILD, lung cancer,
bronchiectasis, etc. - R. Evans
17:40–18:05 Other formats of exercise training: from home alone to urban training -
E. Gimeno-Santos
18:05–18:15 Discussion



Wednesday, 11 October 2023

Session 10 - Workshops

Participants can attend 7 of 12 workshops. All workshops will be repeated 7 times.

Maximum 8 participants per workshop. Medical doctors are encouraged to enrol for workshop 12.

08:00–08:30	Introduction of workshop leaders and workshop instructions - M. Spruit	
08:30–09:00	Round 1	WS1 1-RM assessment – A.W. Vaes
09:05–09:35	Round 2	WS2 MicroFET strength test – T. Troosters
09:40–10:10	Round 3	WS3 Body composition assessment (BIA/DEXA) – F. Franssen
		WS4 Physical activity assessment – F. Pitta, J. Cruz
10:10–10:45	<i>Coffee break</i>	WS5 6-minute walk test – J. Delbressine, E. Gimeno-Santos
		WS6 ISWT / ESWT – S.J. Singh, R. Evans
10:45–11:15	Round 4	WS7 Cardiopulmonary exercise test - I. Vogiatzis
11:20–11:50	Round 5	WS8 Health status questionnaires – D.J.A Janssen
11:55–12:25	Round 6	WS9 Neuromuscular electrical stimulation - M.J.H. Sillen, M. Maddocks
12:30–13:00	Round 7	WS10 Problematic activities of daily life - N. Nakken, M. Cuijpers
		WS11 Testing of inspiratory muscle strength/endurance - R. Gloeckl
13:00–13:45	<i>Lunch</i>	WS12 Inspiratory muscle training – D. Langer

Session 11 - Case report workshops

13:45–14:00	Introduction of case reports – F. Franssen				
	<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>	<u>Group 5</u>
14:00–15:00	- R. Evans, R. Gloeckl	- C. Burtin, J. Cruz	- E. Gimeno- Santos, S. Singh	I. Vogiatzis, M. Maddocks	- D. Janssen, T. Troosters
15:00–15:15	<i>Break</i>				
15:15–17:00	Discussion of case report - F. Franssen, D. Janssen				
17:00–17:15	Summary - M. Spruit, F. Franssen, D. Langer I. Vogiatzis				