ADVANCE PROGRAMME

Respiratory Failure and Mechanical Ventilation Conference

13-15 February 2020
Berlin, Germany
I am delighted to welcome you to the first ever ERS Respiratory Failure and Mechanical Ventilation Conference. This exciting event has been developed around a combination of cutting-edge scientific sessions and interactive educational content, and as conference chair it is a true pleasure to be able to offer this to our members and healthcare professionals.

The conference programme has been developed around three main tracks - adult acute respiratory failure, chronic respiratory failure and paediatric respiratory failure. We have listened to feedback from participants of other ERS courses and our organising committee have designed topic areas with the delegates’ needs at the forefront of their thinking. This was no easy task to ensure that the requirements of pulmonologists, paediatricians, intensivists and other professionals working in critical care were catered for. However, we are confident that the programme will provide something for everyone.

I would also like to encourage delegates to utilise choice during your time at the conference. You are welcome to follow a particular track throughout, however the flexibility of the conference means that you are free to attend any session from the programme if this better matches your interests.

You will find a focus on interactive sessions, and this will include the ability to participate in hands-on practical skills sessions and presentations of original research and case reports. Additionally, the conference will provide you with access to the experts in the field.

Furthermore, the conference will also provide invaluable networking opportunities within the community. Personally, I find the chance for knowledge exchange and ideas sharing with colleagues and peers to be a key element in contributing to professional development. Throughout the conference programme you will have the chance to personally meet the experts in the field.

I would like to thank those of you who have submitted cases and abstracts for presentation or discussion at the event. Your contributions are vital in making the content of the conference relevant and beneficial for participants.

Our host city is a diverse and vibrant European capital and is a fitting venue for what promises to be a stimulating and successful event. I look forward to welcoming you to Berlin.

Leo Heunks
Conference chair
OVERVIEW PROGRAMME

THURSDAY, 13.02.2020

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<td>Friedrich Wilhelm</td>
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<td>Grenander I</td>
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08:00-10:00

OPENING SESSION
Understanding respiratory physiology

10:00-10:30 Break

10:30-12:00

SYMPOSIUM
Pediatric mechanical ventilation recommendations

SYMPOSIUM
Get the basics right

SYMPOSIUM
Non-invasive ventilation (NIV) in neuromuscular disorders

12:00-12:50 Lunch Break

12:50-14:00

CASE BASED
Monitoring of mechanical ventilation in children

CASE BASED
Monitoring the ventilated patient

CASE BASED
Noninvasive ventilation - practical aspects

14:00-15:15 Break

15:15-17:15

PRO/CON Debate
Controversies in patients with acute respiratory failure

14:10-16:30

SKILLS WORKSHOP*
Respiratory monitoring

14:10-15:10

THEMATIC POSTER SESSION

*additional registration required
OVERVIEW PROGRAMME
SATURDAY, 15.02.2020

Rooms

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<td>Noninvasive ventilation outside the ICU</td>
<td>Rescue strategies for respiratory failure</td>
<td>Health-related quality (HRQL) of life in patients with long-term ventilation</td>
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<td><strong>09:30-10:00 Break</strong></td>
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<td>SYMPOSIUM</td>
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<td>Diagnostic techniques during ventilation</td>
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<td>MEET THE EXPERT</td>
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<td>Noninvasive ventilation and noninvasive CPAP in the PICU</td>
<td>Understanding the ventilator waveform</td>
<td>Measurements of nocturnal gas exchange</td>
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<td><strong>12:30-13:30 Lunch Break</strong></td>
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<tr>
<td>Weaning from mechanical ventilation</td>
<td>Problem-solving - Case studies of NIV problems</td>
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<td><strong>15:15-15:45 Break</strong></td>
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<td>CLOSING SESSION</td>
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<td>YEAR IN PREVIEW</td>
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<td>Paediatric - Acute - Chronic</td>
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*additional registration required
Alexander II

Session 08:00 - 10:00

Symposium: Opening session: Understanding respiratory physiology

Aims: To provide an introduction of respiratory physiology.

Disease(s): Adult acute respiratory failure, Chronic respiratory failure, Paediatric respiratory failure

Target audience: Anaesthesiologist, Clinician, Emergency medicine doctor, Fellow, Intensivist/critical care physician, Junior member, Paediatrician, Physiologist, Pulmonologist, Resident, Respiratory physician, Respiratory therapist, Scientist, Student

Chairs: Lise Piquilloud (Lausanne, Switzerland), Anita Simonds (London, United Kingdom)

08:00 Welcome and introductory word by the Conference Chair
Leo Heunks (Amsterdam, Netherlands)

08:10 Development of the respiratory system: from cradle to grave
Peter Rimensberger (Geneva 14, Switzerland)

08:40 Impaired gas exchange
Stefano Nava (Bologna (BO), Italy)

09:10 Basics of respiratory mechanics
Leo Heunks (Amsterdam, Netherlands)

09:40 History of mechanical ventilation
Martin J. Tobin (Hines, United States of America)

Friedrich Wilhelm

Session 10:15 - 12:35

Skills workshop: Respiratory monitoring

Aims: To learn to visualize the diaphragm and the lung using ultrasound and how it can help in diagnosis of respiratory failure; to know the practical aspects of esophageal balloon insertion and how esophageal balloon can help in medical decision making; to learn the interpretation of signals derived from esophageal balloon.

Disease(s): Adult acute respiratory failure

Target audience: Anaesthesiologist, Clinician, Emergency medicine doctor, Fellow, Intensivist/critical care physician, Junior member, Paediatrician, Physiologist, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist

Chairs: Alexandre Demoule (Paris, France)

Introduction

- Diaphragm ultrasound
  Pieter Roel Tuinman (Amsterdam, Netherlands)

- Lung ultrasound
  Martin Dres (Paris, France)

- Esophageal balloon for monitoring breathing effort and transpulmonary pressure
  Heder de Vries (Amsterdam, Netherlands)

Alexander I

Session 10:30 - 12:00

Symposium: Paediatric mechanical ventilation recommendations

Aims: To receive an update on the most recent recommendations and data on mechanical ventilation in children and preterms and paediatric acute respiratory distress syndrome (ARDS).

Disease(s): Paediatric respiratory failure

Target audience: Emergency medicine doctor, Intensivist/critical care physician, Neonatologist, Paediatrician, Pulmonologist, Researcher, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

Chairs: Linda Corel (Rotterdam, Netherlands), Christopher Milesi (Montpellier, France)

10:30 Recommendations for mechanical ventilation in children
Martin Kneyber (Groningen, Netherlands)

11:00 Recommendations for mechanical ventilation in preterms
Peter Rimensberger (Geneva 14, Switzerland)

11:30 Ventilation strategies in pediatric ARDS: are they different in children as compared to adults?
Daniele De Luca (Clamart, France)
### Alexander II Session 10:30 - 12:00

**Symposium: Getting the basic right**

**Different modes of ventilation**

**Aims:** To learn the different modes of ventilation.

**Disease(s):** Adult acute respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Respiratory physician, Trainee

**Chairs:** Lieuwe Bos (Amsterdam, Netherlands), Lara Pisani (Bologna (BO), Italy)

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<th>Time</th>
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<tr>
<td>10:30</td>
<td>Controlled ventilator modes</td>
<td>Paolo Navalesi (Milan, Italy)</td>
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<tr>
<td>11:00</td>
<td>Partially supported modes</td>
<td>Lise Piquilloud (Lausanne, Switzerland)</td>
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<tr>
<td>11:30</td>
<td>NIV modes: different from IMV</td>
<td>Elise Morawiec (Paris, France)</td>
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### Alexander III Session 10:30 - 12:00

**Symposium: Noninvasive ventilation (NIV) in neuromuscular disorders**

**Aims:** To elucidate developments in mechanical ventilation in patients with neuromuscular disorders.

**Disease(s):** Chronic respiratory failure, Paediatric respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Intensivist/critical care physician, Junior member, Nurse, Paediatrician, Patient, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist

**Chairs:** Brigitte Fauroux (Paris, France), Wolfram Windisch (Cologne, Germany)

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<td>10:30</td>
<td>Role of neuromuscular diseases in pulmonary medicine</td>
<td>Wolfram Windisch (Cologne, Germany)</td>
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<td>11:00</td>
<td>NIV in rapidly progressive diseases: when to start?</td>
<td>Anita Simonds (London, United Kingdom)</td>
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<td>11:30</td>
<td>Cough assisting</td>
<td>Peter J. Wijkstra (Groningen, Netherlands)</td>
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### Alexander III Session 12:50 - 14:00

**Case-based session: Noninvasive ventilation - practical aspects**

**Aims:** To approach different scenario in which volume-target ventilation may clearly improve efficacy of ventilation and understand possible limits and traps of different algorithms and ventilators used; To discuss the application of other tools in alternative to long-term NIV.

**Disease(s):** Chronic respiratory failure

**Target audience:** Clinician, Physiotherapist, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

**Chairs:** Friederike Sophie Magnet (Köln, Germany)

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<tr>
<td>12:50</td>
<td>Target volume ventilation: when and how?</td>
<td>Cesare Gregoretti (Palermo, Italy)</td>
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<tr>
<td>13:20</td>
<td>Alternatives to long-term NIV</td>
<td>Lara Pisani (Bologna (BO), Italy)</td>
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### Alexander I Session 12:50 - 14:00

**Case-based session: Monitoring of mechanical ventilation in children**

**Aims:** To provide participants with practical information on the monitoring of mechanical ventilation in children and its usefulness.

**Disease(s):** Paediatric respiratory failure

**Target audience:** Clinician, Emergency medicine doctor, Intensivist/critical care physician, Neonatologist, Paediatrician, Pulmonologist, Respiratory physician, Sleep specialist/technologist

**Chairs:** Daniele De Luca (Clamart, France)
12:50 Monitoring of invasive ventilation  
Martin Kneyber (Groningen, Netherlands)

13:20 Patient-ventilator interaction: assessment and clinical relevance  
Peter Rimensberger (Geneva 14, Switzerland)

Alexander II Session 12:50 - 14:00
Case-based session: Monitoring the ventilated patient
Aims: To learn about advanced respiratory mechanics and monitoring of ARDS patients.

Disease(s): Adult acute respiratory failure
Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee
Chairs: Alexandre Demoule (Paris, France)

12:50 Advanced respiratory mechanics  
Leo Heunks (Amsterdam, Netherlands)

13:20 ARDS: state of the art  
Lieuwe Bos (Amsterdam, Netherlands)

Grenander I Session 14:10 - 15:10
Thematic Poster Session: Thematic poster session I

Friedrich Wilhelm Session 14:10 - 16:30
Skills workshop: Respiratory monitoring
Aims: To learn to visualize the diaphragm and the lung using ultrasound and how it can help in diagnosis of respiratory failure; to know the practical aspects of esophageal balloon insertion can how esophageal balloon can help in medical decision making; to learn the interpretation of signals derived from esophageal balloon.

Disease(s): Adult acute respiratory failure
Chairs: Pieter Roel Tuinman (Amsterdam, Netherlands)

Introduction

Diaphragm ultrasound  
Elise Morawiec (Paris, France)

Lung ultrasound  
Lara Pisani (Bologna (BO), Italy)

Esophageal balloon for monitoring breathing effort and transpulmonary pressure  
Martin Kneyber (Groningen, Netherlands)

Alexander II Session 15:15 - 17:15
Pro and con debate: Controversies in patients with acute respiratory failure
Aims: To tackle three different controversial issue in the treatment of acute de novo respiratory failure, like the utility and effectiveness of steroid therapy, the rationale for performing lung biopsy in ARDS and finally the potential danger and utility of NIV to treat de novo respiratory failure.

Disease(s): Adult acute respiratory failure
Target audience: Anaesthesiologist, Intensivist/critical care physician, Junior member, Pulmonologist, Respiratory therapist
Chairs: Lise Piquilloud (Lausanne, Switzerland)

15:15 PRO - Lung biopsy in ARDS  
Lieuwe Bos (Amsterdam, Netherlands)

15:25 CON - Lung biopsy in ARDS  
Christian Karagiannidis (Cologne, Germany)

15:35 Discussion
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<td>15:55</td>
<td>PRO - NIV in acute hypoxemic failure</td>
<td>Paolo Navalesi (Milan, Italy)</td>
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<td>16:05</td>
<td>CON - NIV in acute hypoxemic failure</td>
<td>Alexandre Demoule (Paris, France)</td>
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<td>Discussion</td>
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<td>16:35</td>
<td>PRO - Steroids in ARDS</td>
<td>Stefano Nava (Bologna (BO), Italy)</td>
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<tr>
<td>16:45</td>
<td>CON - Steroids in ARDS</td>
<td>Marcus Schultz (Amsterdam, Netherlands)</td>
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<td>Discussion</td>
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Alexander III  
Session 08:00 - 09:30

Symposium: Noninvasive ventilation (NIV) in COPD

Aims: To provide an overview of current evidence about different aspects of long-term NIV applied to hypercapnic COPD patients: which are the goals of ventilation? How to “personalise” the therapy and how to make a good patient selection? To discuss the results of the recent task force on long-term NIV in COPD.

Disease(s): Chronic respiratory failure

Target audience: Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Physiotherapist, Pulmonologist, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

Chairs: Peter J. Wijkstra (Groningen, Netherlands), Michael Dreher (Aachen, Germany)

08:00  
Patient selection  
Nicholas Hart (London, United Kingdom)

08:30  
What are the targets?  
Marieke L. Duiverman (Groningen, Netherlands)

09:00  
ERS Task Force on long-term NIV in COPD  
Wolfram Windisch (Cologne, Germany)

Alexander I  
Session 08:00 - 09:30

Symposium: Specific ventilation strategies in children

Aims: To provide an update on specific ventilation strategies.

Disease(s): Paediatric respiratory failure

Target audience: Anaesthesiologist, Emergency medicine doctor, Intensivist/critical care physician, Neonatologist, Paediatrician, Pulmonologist, Respiratory therapist, Sleep specialist/technologist

Chairs: Linda Corel (Rotterdam, Netherlands), Paolo Navalesi (Milan, Italy)

08:00  
NAVA  
Peter Rimensberger (Geneva 14, Switzerland)

08:30  
ECMO  
Speaker to be confirmed

09:00  
High flow nasal cannula in acute and chronic respiratory failure  
Christopher Milesi (Montpellier, France)

Alexander II  
Session 08:00 - 09:30

Symposium: Mechanical ventilation in specific cases

Aims: To learn IMV strategies in different chronic pulmonary diseases.

Disease(s): Adult acute respiratory failure

Target audience: Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

Chairs: Marcus Schultz (Amsterdam, Netherlands), Lara Pisani (Bologna (BO), Italy)

08:00  
Mechanical ventilation in obstructive lung disease  
Lise Piquilloud (Lausanne, Switzerland)

08:30  
Mechanical ventilation in interstitial lung disease  
Martin Dres (Paris, France)

09:00  
Ventilation strategies during weaning  
Nicholas Hart (London, United Kingdom)

Alexander III  
Session 09:45 - 12:05

Skills workshop: How to set the ventilator based on individual conditions

Aims: To address practical aspects of non-invasive ventilation; to address problem-solving strategies in case of individual problems occurring during NIV-commencement; to provide recommendations for handling NIV-patients with specific emphasis on the underlying condition.
Disease(s) : Chronic respiratory failure

**Target audience**: Anaesthesiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Nurse, Paediatrician, Pulmonologist, Resident, Respiratory physician, Respiratory therapist

**Chairs**: Michael Dreher (Aachen, Germany)

How to assess sleep quality during NIV
Nicholas Hart (London, United Kingdom)

How to establish high-intensity NIV in COPD
Jens Callegari (Köln, Germany)

How to use transcutaneous CO2 monitoring for long-term NIV
Friederike Sophie Magnet (Köln, Germany)

What is necessary for neuromuscular patients in addition to NIV?
Anita Simonds (London, United Kingdom)

**Alexander II Session** 10:00 - 12:00

**Symposium: Adverse effects of mechanical ventilation**

**Aims**: To understand how mechanical ventilation may induce hair and which organs / tissues are at risk.

**Disease(s)**: Adult acute respiratory failure, Chronic respiratory failure, Paediatric respiratory failure

**Target audience**: Anaesthesiologist, Clinician, Emergency medicine doctor, Fellow, Intensivist/critical care physician, Junior member, Paediatrician, Physiologist, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist

**Chairs**: Paolo Navalesi (Milan, Italy), Lara Pisani (Bologna (BO), Italy)

10:00 Heart - lung interaction
Pieter Roel Tuinman (Amsterdam, Netherlands)

10:30 Ventilator - induced lung injury
Marcus Schultz (Amsterdam, Netherlands)

11:00 Ventilator induced respiratory muscle injury
Alexandre Demoule (Paris, France)

11:30 Long-term consequences of mechanical ventilation
Sangeeta Mehta (Toronto, Canada)

**Alexander I Session** 13:00 - 14:00

**Meet the Expert: Weaning failure in children**

**Aims**: To discuss the therapeutic options in case of weaning from invasive and noninvasive ventilation.

**Disease(s)**: Paediatric respiratory failure

**Target audience**: Intensivist/critical care physician, Paediatrician, Pulmonologist, Respiratory physician, Respiratory therapist

13:00 Weaning failure in children
Pons Odena Marti (Barcelona, Spain)

**Alexander III Session** 13:00 - 14:00

**Meet the Expert: Sleep-related hypoventilation**

**Aims**: To understand strategies in diagnosis and treatment in patients with sleep-related hypoventilation.

**Disease(s)**: Chronic respiratory failure

**Target audience**: Anaesthesiologist, General practitioner, Intensivist/critical care physician, Junior member, Nurse, Otolaryngologist, Paediatrician, Patient, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist, Student, Trainee

13:00 Sleep-related hypoventilation
Marieke L. Duiverman (Groningen, Netherlands)

**Alexander II Session** 13:00 - 14:00

**Meet the Expert: The practice of sedation in critically ill patients**

**Aims**: To learn how to assess the status of the patient; to assess the level of sedation; to know the use of different kind of drugs to sedate the patients (i.e. sedation vs analgesia); to understand the practice of sedation during invasive and noninvasive ventilation.
Disease(s) : Adult acute respiratory failure
Target audience : Anaesthesiologist, Emergency medicine doctor, Intensivist/critical care physician, Physiotherapist, Respiratory physician, Respiratory therapist

13:00 The practice of sedation in critically ill patients
Sangeeta Mehta (Toronto, Canada)

Grenander I Session 14:10 - 15:10
Thematic Poster Session: Thematic poster session II
Disease(s) : Adult acute respiratory failure, Chronic respiratory failure, Paediatric respiratory failure

Friedrich Wilhelm Session 14:10 - 16:30
Skills workshop: How to set the ventilator based on individual conditions
Aims : To address practical aspects of non-invasive ventilation; to address problem-solving strategies in case of individual problems occurring during NIV-commencement; to provide recommendations for handling NIV-patients with specific emphasis on the underlying condition.
Disease(s) : Chronic respiratory failure
Chairs : Heder de Vries (Amsterdam, Netherlands)

13:10 How to assess sleep quality during NIV
Jean-Paul Janssens (Genève, Switzerland)

13:30 How to establish high-intensity NIV in COPD
Marieke L. Duiverman (Groningen, Netherlands)

13:50 How to use transcutaneous CO2 monitoring for long-term NIV
Christian Karagiannidis (Cologne, Germany)

14:10 What is necessary for neuromuscular patients in addition to NIV?
Cesare Gregoretti (Palermo, Italy)

Alexander II Session 15:15 - 17:15
Symposium: Noninvasive ventilation and high flow nasal therapy (HFNT)
Aims : To describe the indications and standards of practice for NIV and HFNO in different clinical situations.
Disease(s) : Adult acute respiratory failure
Target audience : Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee
Chairs : Leo Heunks (Amsterdam, Netherlands), Lise Piquilloud (Lausanne, Switzerland)

15:15 The role of high flow nasal oxygen therapy in hypoxemic respiratory failure
Elise Morawiec (Paris, France)

15:35 NIV in hypercapnic acute respiratory failure: COPD
Stefano Nava (Bologna (BO), Italy)

15:55 NIV in hypercapnic acute respiratory failure: non-COPD
Paolo NaVallesi (Milan, Italy)

16:15 High flow nasal therapy in hypercapnic acute respiratory failure
Alexandre Demoule (Paris, France)

16:35 NIV use post-extubation
Laurent Brochard (Toronto (ON), Canada)

16:55 NIV in palliative care
Anita Simonds (London, United Kingdom)

Alexander III Session 15:15 - 17:15
Symposium: Prolonged Weaning
Aims : To focus on the specific group of patients with prolonged weaning.
### Disease(s)

- Adult acute respiratory failure
- Chronic respiratory failure

### Target audience

Anaesthesiologist, Cardiologist, Clinician, Epidemiologist, Fellow, Intensivist/critical care physician, Junior member, Physiotherapist, Psychologist, Public health official, Pulmonologist, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist, Social worker, Student, Trainee

### Chairs

- Jens Callegari (Köln, Germany), Nicholas Hart (London, United Kingdom)

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<td>15:15</td>
<td>Weaning in long-term acute care hospitals</td>
<td>Martin J. Tobin (Hines, United States of America)</td>
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<td>15:55</td>
<td>Treatment strategies</td>
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<tr>
<td>16:35</td>
<td>Unsuccessful weaning: what comes next?</td>
<td>Friederike Sophie Magnet (Köln, Germany)</td>
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Alexander III  Session  08:00 - 09:30

Symposium: Health-related quality (HRQL) of life in patients with long-term ventilation

Aims: To address the important issue of health-related quality of life (HRQL) in patients with long-term mechanical ventilation; to discuss the methodology of HRQL assessment and clinical data.

Disease(s): Chronic respiratory failure

Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Lung function technician, Patient, Physiologist, Physiotherapist, Psychologist, Public health official, Pulmonologist, Researcher, Resident, Respiratory physician, Scientist, Sleep specialist/technologist, Social worker, Student, Trainee

Chairs: Jean-Paul Janssens (Genève, Switzerland), Peter J. Wijkstra (Groningen, Netherlands)

08:00  Methods of HRQL assessment
   Marieke L. Duiverman (Groningen, Netherlands)

08:30  HRQL in NIV
   Wolfram Windisch (Cologne, Germany)

09:00  HRQL in tracheotomized patients
   Friederike Sophie Magnet (Köln, Germany)

Alexander I  Session  08:00 - 09:30

Symposium: Noninvasive ventilation outside the ICU

Aims: To provide an update on the most recent developments of CPAP and NIV in children outside the ICU.

Disease(s): Paediatric respiratory failure

Target audience: Emergency medicine doctor, Intensivist/critical care physician, Paediatrician, Pulmonologist, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

Chairs: Cesare Gregoretti (Palermo, Italy), Alessandro Amaddeo (Paris, France)

08:00  NIV as a transition from the ICU to the home
   Pons Odena Marti (Barcelona, Spain)

08:30  Update on long term CPAP
   Brigitte Fauroux (Paris, France)

09:00  Update on long term NIV
   Linda Corel (Rotterdam, Netherlands)

Alexander II  Session  08:00 - 09:30

Symposium: Rescue therapies for respiratory failure

Aims: To give indications for rescue therapies; to describe advantages and disadvantages.

Disease(s): Adult acute respiratory failure

Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

Chairs: Christian Karagiannidis (Cologne, Germany), Lise Piquilloud (Lausanne, Switzerland)

08:00  Prone positioning and recruitment manouvre
   Marcus Schultz (Amsterdam, Netherlands)

08:30  Extracorporeal CO2 removal
   Stefano Nava (Bologna (BO), Italy)

09:00  ECMO
   Christian Karagiannidis (Cologne, Germany)

Friedrich Wilhelm  Session  09:45 - 12:05

Skills workshop: How to set the ventilator based on individual conditions in children

Aims: To learn first line and consecutive settings of a ventilator in children with different conditions.
**Symposium: Diagnostic techniques during mechanical ventilation**

**Aims:** To learn the contra-/indications and interpretation of the diagnostic results of lung ultrasound, esophageal pressure monitoring and bronchoscopy in mechanically ventilated patients.

**Disease(s):** Adult acute respiratory failure, Chronic respiratory failure, Paediatric respiratory failure

**Target audience:** Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident

**Chairs:** Sangeeta Mehta (Toronto, Canada), Heder de Vries (Amsterdam, Netherlands)

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>10:00</td>
<td>Lung ultrasound</td>
<td>Pieter Roel Tuinman (Amsterdam, Netherlands)</td>
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<td>10:25</td>
<td>Esophageal pressure monitoring</td>
<td>Laurent Brochard (Toronto (ON), Canada)</td>
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<td>10:50</td>
<td>Bronchoscopy in mechanically ventilated patients</td>
<td>Lieuwe Bos (Amsterdam, Netherlands)</td>
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**Case-based session: Noninvasive ventilation and noninvasive CPAP in the PICU**

**Aims:** To discuss clinical cases of paediatric noninvasive ventilation and noninvasive CPAP in the PICU.

**Disease(s):** Paediatric respiratory failure

**Target audience:** Emergency medicine doctor, Intensivist/critical care physician, Paediatrician, Pulmonologist, Respiratory therapist, Sleep specialist/technologist

**Chairs:** Brigitte Fauroux (Paris, France)

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<tr>
<th>Time</th>
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<tr>
<td>11:30</td>
<td>Case of a child</td>
<td>Linda Corel (Rotterdam, Netherlands)</td>
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<tr>
<td>12:00</td>
<td>Case of an infant</td>
<td>Alessandro Amaddeo (Paris, France)</td>
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**Meet the Expert: Measurements of nocturnal gas exchange**

**Aims:** To provide participants with an overview of the required technical skills in monitoring nocturnal gas exchange as well as the fields of use and limitations of the different techniques available today.

**Disease(s):** Chronic respiratory failure

**Target audience:** Clinician, Physiotherapist, Pulmonologist, Resident, Respiratory physician

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<th>Time</th>
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<th>Speaker</th>
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<tr>
<td>11:30</td>
<td>Measurements of nocturnal gas exchange</td>
<td>Jean-Paul Janssens (Genève, Switzerland)</td>
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</table>
Meet the Expert: Understanding the ventilator waveform
Aims: To understand all points of the waveform and its changes.

Disease(s): Adult acute respiratory failure

Target audience: Anaesthesiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

11:30 Understanding the ventilator waveform
Laurent Brochard (Toronto (ON), Canada)

No Room
Skills workshop: How to set the ventilator based on individual conditions in children
Aims: To learn first line and consecutive settings of a ventilator in children with different conditions.

Disease(s): Paediatric respiratory failure

Chairs: Cesare Gregoretti (Palermo, Italy)

7-year old child needing ECMO
Martin Kneyber (Groningen, Netherlands)

3-month old baby with severe bronchiolitis
Christopher Milesi (Montpellier, France)

28 GA baby with acute respiratory failure
Daniele De Luca (Clamart, France)

2-year old child with congenital myopathy
Alessandro Amaddeo (Paris, France)

Friedrich Wilhelm
Skills workshop: Core competency in mechanical ventilation
Aims: To understand the principles of controlled mechanical ventilator modes (PCV, VCV); to understand the principles of partially supported modes (PSV); to learn how to measure respiratory mechanics (compliance, Resistance, PEEPi); to understand the principles of safe mechanical ventilation in obstructive airway disease

Disease(s): Adult acute respiratory failure  Chronic respiratory failure  Paediatric respiratory failure

Target audience: Allied health professional, Clinician, Nurse, Paediatrician, Trainee, Fellow, Respiratory physician, Respiratory therapist, Intensivist/critical care physician, Pulmonologist, Emergency medicine doctor, Physiologist, Anaesthesiologist

Controlled mechanical ventilation modes (PCV, VCV)
Lieuwe Bos (Amsterdam, Netherlands)

Partially supported ventilation modes (PSV)
Christian Karagiannidis (Cologne, Germany)

Measurement of respiratory mechanics (compliance, resistance, PEEPi)
Speaker to be confirmed

Mechanical ventilation in obstructive airway disease
Speaker to be confirmed

Alexander II
Case-based session: Weaning from mechanical ventilation
Aims: To learn definitions and outcomes; to understand reasons for weaning failure and how to treat these factors.

Disease(s): Adult acute respiratory failure

Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

Chairs: Martin J. Tobin (Hines, United States of America)

13:30 Definition and outcome
Laurent Brochard (Toronto (ON), Canada)
13:50  Why can't my patient be weaned?  
Martin Dres (Paris, France)

14:15  How to ventilate difficult to wean patients  
Leo Heunks (Amsterdam, Netherlands)

14:40  Early mobilisation and IMT  
Sangeeta Mehta (Toronto, Canada)

15:05  Swallowing and talking in difficult to wean patients  
Nicholas Hart (London, United Kingdom)

Alexander III  
Case-based session: Problem-solving - Case studies of NIV problems
Aims: To address practical aspects of non-invasive ventilation.
Disease(s): Chronic respiratory failure
Target audience: Anaesthesiologist, Cardiologist, Clinician, Emergency medicine doctor, Intensivist/critical care physician, Junior member, Nurse, Physiotherapist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist, Student, Trainee
Chairs: Stefano Nava (Bologna (BO), Italy)

13:30  Individual titration of nocturnal NIV  
Jean-Paul Janssens (Genève, Switzerland)

14:10  Leakages, mask problems and side effects  
Jens Callegari (Kölîn, Germany)

14:50  The role of obesity  
Marielle L. Duiverman (Groningen, Netherlands)

Alexander II  
Symposium: Closing session: Year in Preview
Aims: To discuss important developments and studies that are coming up and how the future might look like.
Disease(s): Adult acute respiratory failure, Chronic respiratory failure, Paediatric respiratory failure
Target audience: Anaesthesiologist, Clinician, Intensivist/critical care physician, Pulmonologist, Researcher, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist
Chairs: Leo Heunks (Amsterdam, Netherlands)

15:45  Year in preview “paediatric” track  
Brigitte Fauroux (Paris, France)

16:15  Year in preview “acute” track  
Marcus Schultz (Amsterdam, Netherlands)

16:45  Year in preview “chronic” track  
Wolfram Windisch (Cologne, Germany)