

Day 1: Pre-conference Workshop: 13/11/2025

Time	Session Title/Topic		Session-Specific Learning Objectives	
8:00 – 8:20	Registration		Simulation Centre, Sidra Medicine	
8:20-8:30	Welcome and housekeeping brief			
8:30 – 9:05	Ventilation Graphics & Bedside monitoring - Lecture <i>Prof. Charles Christopher Roehr (United Kingdom)</i>		<ul style="list-style-type: none">• Learn Ventilatory graphics and loops basic principles and interpretation• Understand End tidal PCO2 – neonatal evidence• Learn Transcutaneous PO2 and PCO2 monitoring – benefits, limitations• Learn Oxygenation monitoring with OI and OSI	
9:05 – 9:40	Non-invasive respiratory support & LISA/MIST - Lecture <i>Prof. Peter Davies (Australia)</i>		<ul style="list-style-type: none">• Understand NIV, BiPAP, CPAP, HFNC – current evidence of its use in NICU• Understand Noninvasive NAVA• Get skilled in LISA /MIST	
9:40 – 10:15	Conventional ventilation and patient trigger modes <i>Prof. Martin Keszler (USA)</i>		<ul style="list-style-type: none">• Achieve Basic principles of different modes of ventilation• Understand Initiating modes and weaning modes• Get clarity on Advantages of PSV mode	
10:15 – 10:50	High frequency oscillatory ventilation <i>Prof. Gianluca Lista (Italy)</i>		<ul style="list-style-type: none">• Understand Basic principles of HFOV and indications of its use – primary and rescue therapies• Learn Ventilatory monitoring data in HFOV• Apply clarity on HFOV Volume guarantee – current evidence• Understand Pros and cons of current modern ventilators with built in HFOV	
10:50 -11:15	Coffee break			
	Parallel sessions of workshops: 4 Delegate groups rotating			
11:15 - 12:00	A	B	C	D
12:00 - 12:45	D	A	B	C
12:45 - 13:30	Lunch Break			
13:30 - 14:15	C	D	A	B
14:15 - 15:00	B	C	D	A

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Workshop A	<p>Practical demonstration and hands-on experience of interpretation of ventilatory graphics and bedside respiratory monitoring</p> <p>Prof. Charles Christopher Roehr (United Kingdom)</p> <p>Local facilitator – Dr N B Soni</p>	<ul style="list-style-type: none"> • Demonstrate ventilatory graphics and hands on experience using test lungs • Achieve bedside respiratory monitoring understanding of various equipment
Workshop B	<p>Practical demonstration and hands on experience of noninvasive ventilation modes and LISA</p> <p>Prof. Peter Davies (Australia)</p> <p>Local facilitator – Dr Sanoj Ali</p>	<ul style="list-style-type: none"> • Learn application of settings of various Noninvasive modes and hands on experience using test lungs • Establish competency in delivery of LISA/MIST
Workshop C	<p>Practical demonstration and hands-on experience of setting up various modes of conventional ventilation</p> <p>Prof. Martin Keszler (USA)</p>	<ul style="list-style-type: none"> • Achieve setting up of various invasive modes of ventilation and hands on experience using test lung
Workshop D	<p>Practical demonstration and hands-on experience of setting up of HFOV</p> <p>Prof. Gianluca Lista (Italy)</p>	<ul style="list-style-type: none"> • Demonstrate HFOV setting & Lung recruitment using test lung • Illustrate understanding of factors influencing ventilation in HFOV using test lung (ETT, Compliance, Amplitude, Frequency) • Learn setting up of HFOV+VG • understand limitations of modern ventilators with HFOV
15:00-15:30	Coffee break	
15:30 – 16:10	<p>Interactive sessions with Panel of experts with question and answers</p> <p>Prof. Charles Christopher Roehr (United Kingdom) Prof. Peter Davies (Australia) Prof. Martin Keszler (USA) Prof. Gianluca Lista (Italy)</p>	<ul style="list-style-type: none"> • Participate in panel discussions and Q & A on Ventilatory graphics, Conventional ventilation, HFOV, and Noninvasive modes to get clarity on any questions or queries they may have on respiratory care of the newborn
16:10-16:20	Closing remarks	

Day 2: Conference: 14/11/2025		
Time	Session Title/Topic	Session-Specific Learning Objectives
7:30-8:00	Registration	
8:00 – 8:10	Introduction	
8:10 – 9:45	Session 1	
8:10-8:35	Oxygenation of Preterm Infants in the Delivery Room Prof Ola Didrik Saugstad (25mins)	<ul style="list-style-type: none"> Participants will be able to learn the timing of initiation and titration of oxygen in preterm infants in delivery room. Participants will be able to understand effects of hyperoxia and hypoxia in delivery room in preterm infants and their long-term impact
8:35-9:00	Lung Recruitment Maneuver (LRM)– How and Why? Prof Gianluca Lista (25mins)	<ul style="list-style-type: none"> Participants will be able to understand the actual techniques for LRM in the delivery room. Participants will be able to learn the actual techniques for LRM in the NICU. Participants will be able to appreciate the actual methods for LRM monitoring both in the delivery room and in the NICU.
9:00-9:25	Respiratory Management of Extreme Preterm Infants at Borderline Viability Prof Peter Davis (25mins)	<ul style="list-style-type: none"> Appreciate an understanding of the differences in pathobiology of infants born prior to 25 weeks' gestation compared to those born at later gestations. Reflect on the typical respiratory course of these infants. Describe practice variation and evidence gaps in management of these infants.
9:25 – 9:45	Discussion Q&A (20mins)	<ul style="list-style-type: none"> Learn from discussions by interactive questions and answers with experts
9:45 -10:15	Coffee Break	
10:15am-10:30am	Inauguration and welcome	
10:30am – 11:30am	Session 2:	
10:30-10:55	Mechanical Ventilation: Disease-Specific Strategies Prof Martin Kezler	<ul style="list-style-type: none"> Participants will be able to understand the importance of tailoring ventilation strategy to underlying pathophysiology.

	(25mins)	<ul style="list-style-type: none"> Participants will be able to be familiar with key aspects of pathophysiology of different causes of neonatal respiratory failure. Participants will be able to understand the rationale for the choice appropriate ventilation modes and settings in different patient categories.
10:55-11:20	<p>Postnatal Corticosteroids to Prevent or Treat BPD – Which Drugs, at What Times?</p> <p>Prof Lex Doyle (25mins)</p>	<ul style="list-style-type: none"> Participants will be able to review the evidence supporting the use of postnatal corticosteroids to prevent or treat BPD. Understand the balance between the risks and benefits of using postnatal corticosteroids to prevent or treat BPD. Clarify the knowledge gaps when considering use of postnatal corticosteroids to prevent or treat BPD.
11:20-11:30	<p>Discussion Q&A (10mins)</p>	<ul style="list-style-type: none"> Learn from discussions by interactive questions and answers with experts
11:30 – 13:00	Prayer & Lunch	
13:00– 15:00	Session 3:	
13:00 -13:25	<p>Post-Extubation Respiratory Support for Preterm Infants: CPAP, NIPPV or Nasal High Frequency Ventilation</p> <p>Prof Daniel DeLuca (25mins)</p>	<ul style="list-style-type: none"> Appreciate the main causes of extubation failures and ways to prevent. understand the basics of different NIV modes. Learn how to choose between the various modes and personalize the management
13:25 – 13:50	<p>Management of Bronchopulmonary Dysplasia Associated Pulmonary Hypertension</p> <p>Prof Philip Levy (25mins)</p>	<ul style="list-style-type: none"> Appreciate and learn different phenotypes of chronic pulmonary hypertension in preterm infants and their hemodynamic profiles? Identify diagnostic strategies, including echocardiographic and clinical criteria, for detecting pulmonary hypertension in infants with BPD. Learn current evidence-based management approaches—including respiratory support, pharmacologic therapies, and nutritional optimization—for improving outcomes in infants with BPD-associated PH

13:50 – 14:15	<p>Changes in Respiratory Support for Preterm Infants & Long-Term Respiratory Outcomes in Survivors since the 1960s</p> <p>Prof Lex Doyle (25mins)</p>	<ul style="list-style-type: none"> • Understand the changes in respiratory support for infants born preterm over the modern era of neonatal intensive care. • Learn the short-term respiratory outcomes and survival rates associated with changes in respiratory support. • To appreciate the expected respiratory outcomes into adulthood for the tiniest survivors of neonatal intensive care from the modern era of neonatal intensive care.
14:15 -14:40	<p>Recent Advances in Pharmacotherapy for Pulmonary Hypertension in Newborn</p> <p>Dr Neil Patel (25mins)</p>	<ul style="list-style-type: none"> • Understand pathophysiological mechanisms of PH of the newborn. • Appreciate key target pharmacological pathways. • Understand a pathophysiology-based approach to selecting therapies
14:40 – 15:10	<p>Discussion Q&A (30mins)</p>	Learn from discussions by interactive questions and answers with experts
15:10 -15:40	Coffee Break	
15:40 – 16:45	Session 4	
15:40-16:05	<p>European RDS Guideline 2025</p> <p>Prof Charles Roehr (25mins)</p>	<ul style="list-style-type: none"> • Learn Key elements of the 2022 Euro-RDS guidelines with particular focus on supporting pulmonary transition. • Appreciate Benefits and cautions related to optimized cord management. • Learn Means of assessing respiratory distress syndrome in preterm infants.
16:05-16:30	<p>Transport of the Ventilated Infant</p> <p>Prof Martin Kezler (25mins)</p>	<ul style="list-style-type: none"> • Participants will be able to be aware of the unique challenges of respiratory support during transport. • Understand the importance of appropriate equipment, personnel and supplies for transport. • Know the best practices for safe transport of the ventilated newborn with different needs
16:30-16:55	<p>Discussion Q&A (25mins)</p>	Learn from discussions by interactive questions and answers with experts
4:55pm-5:00pm	Closing remarks	

Day 3: Conference: 15/11/2025		
Time	Session Title/Topic	Session-Specific Learning Objectives
8:00 - 8:15	Registration	
8:15 - 8:30	Recap of Day 1 and Introduction	
8:30 – 10:30	Session 5:	
8:30-8:55	Non-Invasive Monitoring of Gas Exchange and Assessment of Lung Function Prof Charles Roehr (25mins)	<ul style="list-style-type: none"> Appreciate Concepts of permissive hypercapnia versus normocapnia. Understand Invasive versus non-invasive Carbon Dioxide monitoring. Learn alternatives to chest X-Ray in assessing lung volume
8:55-9:20	Bedside Use of Lung Ultrasound to Guide Respiratory Management Prof Daniel De Luca (25mins)	<ul style="list-style-type: none"> Learn the basics of lung ultrasound diagnostics. Understand the main examples of functional quantitative lung ultrasound. Appreciate about ultrasound guided respiratory management
9:20-9:45	Surfactant Administration: Traditional and Alternative Routes Prof Gianluca Lista (25mins)	<ul style="list-style-type: none"> Participants will be able to appreciate the physiological effect of surfactant administration. Participants will be able to learn the correct technique for administering surfactant. Participants will be able to understand the benefits and limits of different surfactant administration routes.
9:45-10:10	Adjunctive Therapies for Respiratory Support in Newborn Infants Prof Peter Davis (25mins)	<ul style="list-style-type: none"> Demonstrate an understanding of the evidence base relating to the use of caffeine in neonates. Understand the benefits and risks of the use of muscle relaxants and analgesics in ventilated infants. Learn the range of interventions to prevent or treat bronchopulmonary dysplasia.
10:10-10:30	Discussion Q&A (20mins)	<ul style="list-style-type: none"> Learn from discussions by interactive questions and answers with experts.
10:30-11:00	Coffee Break	

11:00 – 12:30	Session 6:	
11:00-11:25	<p>Established and Evolving Therapies for RSV Prophylaxis</p> <p>Prof Manuel Sanchez (25mins)</p>	<ul style="list-style-type: none"> • Appreciate the new post Covid burden of RSV disease. • Understand the mechanism of action of the new long action monoclonal antibodies to protect from severe RSV infection. • Understand a new universal strategy of protection from RSV infection with long-acting monoclonal antibodies. • Learn about the use of universal prophylaxis with long-acting monoclonal antibodies in Spain.
11:25-11:50	<p>Respiratory Outcomes Following Definitive Closure of the Patent Ductus Arteriosus</p> <p>Prof Philip Levy (25mins)</p>	<ul style="list-style-type: none"> • Acknowledge the relationship between a patent ductus arteriosus and pulmonary mechanics. • Understand the major considerations for consideration for procedural closure of the PDA. • Recognize the respiratory phenotype following definitive closure of the PDA. • Appreciate respiratory outcomes following definitive closure of PDA and how they dictate the ideal timing for closure.
11:50-12:15	<p>Searching for Evidence, Gaps in Knowledge and Future Directions in Neonatal Medicine</p> <p>Prof Ola Saugstad (25mins)</p>	<ul style="list-style-type: none"> • Recognize how to search for evidence in neonatal medicine • Appreciate current gaps in Neonatal Medicine • Acknowledge what future hold in advances in Neonatal Medicine
12:15-12:30	<p>Discussion Q&A (15mins)</p>	<ul style="list-style-type: none"> • Learn from discussions by interactive questions and answers with experts
12:30 – 13:30	Prayer & Lunch	
13:30 – 14:45	Session 7	
13:30-13:55	<p>New Ventilatory Strategies for Protection of the Immature Lung, the Role of HFOV Today</p> <p>Prof Manual Sanchez Luna (25mins)</p>	<ul style="list-style-type: none"> • Learn to prevent ventilator induced lung injury by decreasing the tidal volume. • Understand the basics of HFOV combined with volume guarantee. • Appreciate the effect on lung protection with a new philosophy of using very low high frequency tidal volume combined with very high frequencies. • Analyze clinical results of a new combined strategy of preventing immature lung trauma.

13:55-14:20	<p>Congenital Diaphragmatic Hernia (CDH) Phenotypes and Principles of Management</p> <p><i>Dr Neil Patel</i></p> <p><i>(25mins)</i></p>	<ul style="list-style-type: none"> • Learn the unique developmental pathophysiology and challenges of CDH. • Understand the concepts of postnatal cardio-respiratory phenotypes and interactions in CDH. • Appreciate a pathophysiology-based approach to early postnatal CDH management.
14:20-14:45	<p>Discussion Q&A</p> <p><i>(25mins)</i></p>	<ul style="list-style-type: none"> • Learn from discussions by interactive questions and answers with experts
14:45-15:00	Coffee Break	
15:00 -16:30	<i>Session 8:</i>	
15:00 -16:15	Case based panel discussions	<ul style="list-style-type: none"> • Learn from interesting cases with input from experts • Appreciate interpretation of clinical, laboratory and radiological investigations • Recognize evidence-based management of patients
16:15-16:30	Closing remarks and thanks	