

| NOVEMBER 3 2025                                                |                                                                                  |                        |
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| SESSION 1 – FOUNDATIONS IN NEONATAL PHYSIOLOGY                 |                                                                                  |                        |
| Session Moderators: Dr. Eugene Dempsey & Dr. Shiran Moore      |                                                                                  |                        |
| 12:00-12:05 ET                                                 | Session introduction by moderators                                               |                        |
| 12:05-12:30 ET                                                 | Essential principles of cardiovascular physiology                                | Dr. Patrick McNamara   |
| 12:30-12:55 ET                                                 | Normal neonatal myocardium                                                       | Dr. Philip Levy        |
| 12:55-13:20 ET                                                 | Cardiopulmonary interactions                                                     | Dr. Dany Weisz         |
| 13:20-13:40 ET                                                 | Case based presentation ( <i>Cardiopulmonary Interactions</i> )                  | Dr. Leticia La Banda   |
| 13:40-14:00 ET                                                 | Question and answer period                                                       |                        |
| NOVEMBER 4 2025                                                |                                                                                  |                        |
| SESSION 2 – NEONATAL SHOCK                                     |                                                                                  |                        |
| Session Moderators: Dr. Danielle Rios & Dr. Michael Castaldo   |                                                                                  |                        |
| 12:00-12:05 ET                                                 | Session introduction by moderators                                               |                        |
| 12:05-12:30 ET                                                 | Physiology of septic shock in neonates: Role of echocardiography                 | Dr. Ashraf Kharrat     |
| 12:30-12:55 ET                                                 | Approach to assessing blood pressure and choosing the correct cardiotropic agent | Dr. Koert de Waal      |
| 12:55-13:20 ET                                                 | Assessment of organ oxygenation before and during NEC/sepsis                     | Dr. Elisabeth Kooi     |
| 13:20-13:40 ET                                                 | Case Based Presentation ( <i>Dopamine vs. Norepinephrine use</i> )               | Dr. Sagee Nissimov     |
| 13:40-14:00 ET                                                 | Question and answer period                                                       |                        |
| NOVEMBER 5 2025                                                |                                                                                  |                        |
| SESSION 3 – CHALLENGES IN NEONATAL CARE                        |                                                                                  |                        |
| Session Moderators: Dr. Gabriel Altit & Dr. Maria Carmen Bravo |                                                                                  |                        |
| 12:00-12:05 ET                                                 | Session introduction by moderators                                               |                        |
| 12:05-12:30 ET                                                 | Pulmonary hypertension at the limits of viability                                | Ms. Michelle Baczynski |
| 12:30-12:55 ET                                                 | Hemodynamic management of congenital diaphragmatic hernia                        | Dr. Stephanie Boyd     |
| 12:55-13:20 ET                                                 | Hemodynamics of Vein of Galen Malformation                                       | Dr. Neil Patel         |
| 13:20-13:40 ET                                                 | Vein of Galen: Interventions                                                     | Dr. Darren Orbach      |
| 13:40-14:00 ET                                                 | Question and answer period                                                       |                        |
| NOVEMBER 6 2025                                                |                                                                                  |                        |
| SESSION 4 – THE PATENT DUCTUS ARTERIOSUS                       |                                                                                  |                        |
| Session Moderators: Dr. Souvik Mitra & Cheryl Battersby        |                                                                                  |                        |
| 12:00-12:05 ET                                                 | Session introduction by moderators                                               |                        |
| 12:05-12:30 ET                                                 | When to screen: Hemodynamics vs. symptoms-based approaches                       | Dr. Aisling Smith      |
| 12:30-12:55 ET                                                 | How many courses is too many courses of pharmacotherapy?                         | Dr. Maher Shahroor     |
| 12:55-13:20 ET                                                 | When to consider device closure of the PDA                                       | Dr. Adrienne Bischoff  |
| 13:20-13:40 ET                                                 | Case based presentation ( <i>Flipping Physiologies</i> )                         | Dr. Rhucha Joshi       |
| 13:40-14:00 ET                                                 | Question and answer period                                                       |                        |

**Course Objectives** - At the end of this course, participants will be able to:

- 1) Review key principles of cardiopulmonary physiology as they pertain to the fetus and newborn circulation
- 2) Understand the physiological changes that occur during the transition to extrauterine life and clinical manifestations of interrupted/ altered transition
- 3) Review the physiological effects of cardiopulmonary therapeutic agents, their potential benefits and side effects, and how they may vary based on underlying pathophysiology
- 4) Learn pathophysiological alterations that occur in common disease states affecting the term and preterm infants and their physiology and evidence-based management algorithms