Schedule 2026 Hemodynamics Club

Acute Pulmonary Hypertension in the Preterm Population

9:30 AM - Welcome & Overview: Acute pulmonary hypertension in preterm populations (10 min)
Patrick McNamara, MB BCh MRCPCH MSc - University of Iowa Health Care

9:40 AM - Pathophysiology of early pulmonary vascular disease in preterm infants in the transitional period (25 min)
Satyan Lakshminrusimha, MD FAAP - UC Davis Health

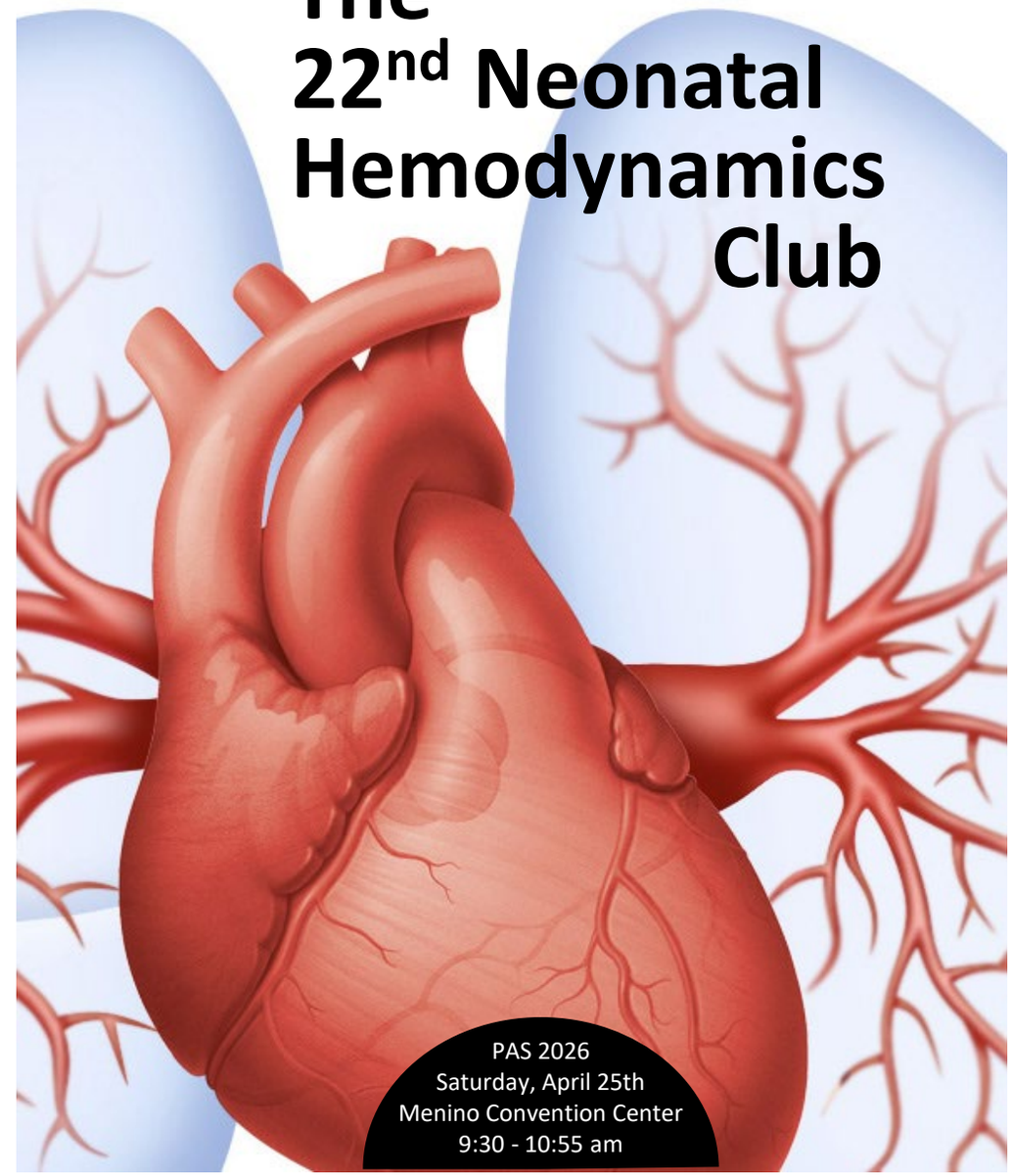
10:05 AM - Precision hemodynamics in transitional acute pulmonary hypertension of prematurity (25 min)
Audrey Hebert, MD FRCPC MHSc - CHU de Quebec - University Laval

10:30 AM Reflections on talks and audience Q&A (25 min)
Shazia Bhombal, MD - Emory University

PAS Hemodynamics Club 2004-2025

2004: Low systemic blood flow **Speakers:** Nick Evans, Michael Weindling
2005: Cerebral Blood Flow **Speakers:** David Osborn, Adre Du Plessis
2006: Relative adrenal insufficiency **Speakers:** Kristi Watterberg, Cynthia Cole
2007: Systemic blood flow during transition **Speakers:** Nick Evans, Mary Paradisis
2008: Organ blood flow with a focus on CBF during transition **Speaker:** Michael Weindling
2009: Patent ductus arteriosus **Speaker:** Ron Clyman
2010: Diagnosis, treatment and outcome of PPHN **Speakers:** Nick Evans, Keith Barrington
2011: Cerebral oxygenation **Speakers:** Frank van Bel, Petra Lemmers
2012: MRI and echocardiography **Speakers:** Alan Groves, Shahab Noori
2013: Pathophysiology of CNS injury, Simulation **Speakers:** Istvan Seri, Shahab Noori
2014: Physiology and timing of cord clamping **Speakers:** Stuart Hooper, Martin Kluckow
2015: PPHN Hemodynamics **Speakers:** Robin Steinhorn, Amish Jain/Luc Mertens
2016: The Pharmacokinetic rationale of PDA treatment **Speaker:** Bart Van Overmeire
2017: Fetal hemodynamics and brain development **Speaker**: Mike Seed
2018: Evolution of Hemodynamic Evaluation **Speakers**: Afif El-Khuffash & Koert de Waal
2019: The role of surgical ligation of the PDA **Speakers**: Dany Weisz & Carl Backes
2020: No Hemodynamics Club
2021: The forgotten right ventricle **Speakers**: Regan Giesinger & Phil Levy
2022: Hemodynamic phenotypes in CDH **Speakers**: Neil Patel & Shazia Bhombal
2023: Cord clamping - physiology & evidence **Speakers:** Anup Katheria & Elizabeth Foglia
2024: Hemodynamics of Neonatal Sepsis **Speakers**: Willem de Boode & Ashraf Kharrat
2025: Hemodynamic Physiology and Treatment **Speakers:** Samir Gupta & Patrick McNamara

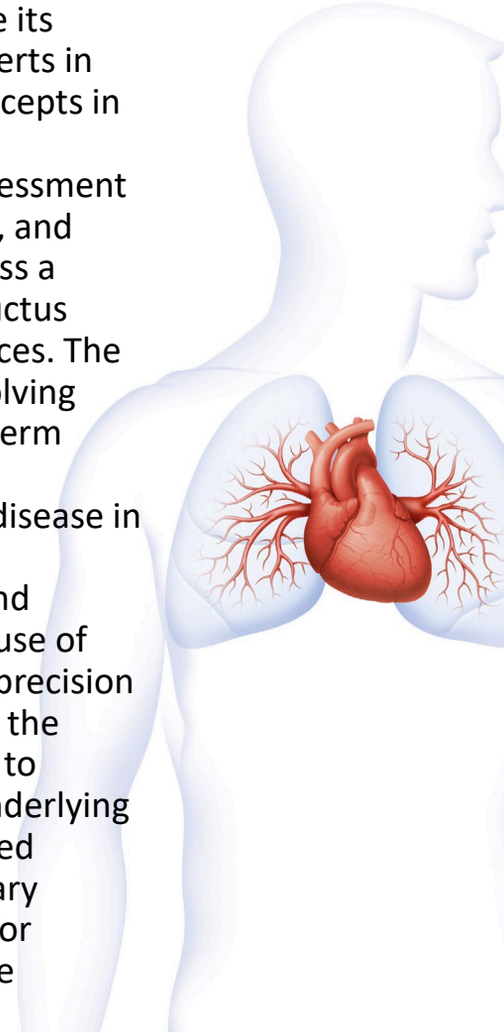
The 22nd Neonatal Hemodynamics Club



PAS 2026
Saturday, April 25th
Menino Convention Center
9:30 - 10:55 am

About the Club

The Neonatal Hemodynamics Club addresses clinically relevant topics in neonatal-perinatal medicine with a special focus on developmental cardiovascular physiology and neonatal hemodynamics. Since its inception in 2004 by Professor Istvan Seri, experts in this field have discussed clinically relevant concepts in developmental cardiovascular physiology, comprehensive methods of hemodynamic assessment including targeted neonatal echocardiography, and novel therapeutic insights / interventions across a broad range of neonatal topics from patent ductus arteriosus to transitional circulation disturbances. The 2026 session will explore the complex and evolving topic of acute pulmonary hypertension in preterm infants. Our first speaker will review the pathophysiology of early pulmonary vascular disease in the preterm population, with an emphasis on maladaptive transitional circulation. Our second speaker will discuss the clinical approach and use of targeted neonatal echocardiography to guide precision care for acute pulmonary hypertension during the transitional period in preterm infants. We aim to enhance participants' understanding of the underlying mechanisms, diagnostic challenges and targeted hemodynamic interventions for early pulmonary vascular disease. There will be time set aside for audience questions and discussion to allow the audience to interact with our expert speakers.



Images © 2016 Tim Peters and Company, Inc.
87 Main Street, Peapack, NJ 07977.
All Rights Reserved

2026 Speakers

Dr. Satyan Lakshminrusimha
Chair and Professor of Pediatrics,
Executive Associate Dean, *UC Davis*

Dr. Satyan Lakshminrusimha is Chair of Pediatrics and a neonatologist at UC Davis Children's Hospital, serving as Pediatrician-in-Chief and Executive Associate Dean. Trained in India and the U.S., his research focuses on neonatal transition, resuscitation, and therapies for pulmonary hypertension in newborns. He has authored 390+ papers and extensive medical illustrations. His honors include major research, mentorship, and education awards, including the 2025 AAP Apgar Award recognizing his outstanding contributions to Neonatal-Perinatal medicine.

Dr. Audrey Hebert
Neonatologist and Associate Professor,
CHU de Québec - University Laval

Dr. Hébert completed her neonatal hemodynamics and targeted neonatal echocardiography training at BC Children's in Vancouver and Hospital for Sick Children in Toronto. She also earned a Master's degree in Health Sciences from the University of British Columbia. Dr. Hébert is the director of the neonatal hemodynamics program at CHU de Québec, where she leads clinical and research initiatives focused on advancing neonatal cardiovascular care and improving outcomes for critically ill newborns.

Chairs

Dr. Shazia Bhombal
Associate Professor of Pediatrics, *Emory University/Children's Healthcare of Atlanta*

Dr. Bhombal is an Associate Professor of Pediatrics at Emory University & Medical Director of Neonatal Services at Children's Healthcare of Atlanta. She is dually trained in Neonatal-Perinatal medicine & pediatric cardiology, focusing her career on enhancing neonatal cardiovascular care. Her clinical and research interests include transitional cardiac physiology, pulmonary hypertension in the chronic lung disease population, and utilizing bedside ultrasound in the Neonatal ICU.

Dr. Patrick McNamara
Chief of Neonatology, Professor of Pediatrics, *University of Iowa Health Care*

Dr. McNamara is the co chair of the Hemodynamics SIG at the American Society of Echocardiography. In 2018, he became Chief of Neonatology at the University of Iowa and established the largest Hemodynamic program in the US. His clinical and research interests include myocardial performance, the hemodynamically significant PDA, pulmonary hypertension and targeted neonatal echocardiography.