
# 2026 PH Scientific Sessions Program

*(subject to change)*

**Scientific Sessions:** Friday, September 25, 2026, 7:00 AM – 5:00 PM

All times are shown in Pacific time. Compare your time zone here.

In person: Sheraton Vancouver Airport Hotel
Zoom: https://us06web.zoom.us/j/84705571703?pwd=VqM6b6jqI3dawuGYQgF1XzsywXhrw1.1
Meeting ID: 847 0557 1703 | Passcode: 426404

This program is co-developed by the Pulmonary Hypertension Association of Canada and the Canadian Thoracic Society and is planned to achieve scientific integrity, objectivity, and balance.

## Friday, September 25 Scientific Sessions

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program (MOC) of The Royal College of Physicians and Surgeons of Canada and approved by the Canadian Thoracic Society. You may claim a maximum of 6.5 hours.

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| | **7:00 – 8:00 AM** | **Breakfast, registration & networking** |
| | 8:00 – 8:15 AM | ***Welcome, land acknowledgement & introduction***<br>Jamie Myrah, PHA Canada |
| | ***Session Chair: Jamie Myrah*** | |
| 45 | 8:15 – 9:00 AM<br><br>Evaluation: | ***Keynote: The role of inflammation in pulmonary arterial hypertension***<br>Dr. Stephen Archer & Dr. Patricia Lima, Queen's University<br>At the end of this session, participants will be able to:<br>1. Describe the characteristics of inflammation in RVF associated with PAH.<br>2. Describe the pivotal role of the NLRP3 inflammasome in the sterile inflammation triggered by damage-associated molecular patterns (DAMPs) in RVF within PAH.<br>3. Explain why targeting inflammation presents a significant alternative for therapy in PAH. |
| 30 | 9:00 – 9:30 AM<br><br>Evaluation: | ***Exploring integrin a5B1 as a potential therapeutic target for PAH***<br>Sarah-Eve Lemay, MSc, Laval University<br>At the end of this session, participants will be able to:<br>1. Describe the contribution of integrin α5β1 signaling to pulmonary vascular and right ventricular remodeling in pulmonary arterial hypertension.<br>2. Evaluate the evidence supporting integrin α5β1 as a therapeutic target in experimental models and human tissues.<br>3. Discuss the translational potential and future clinical applications of integrin α5β1-targeted therapies in pulmonary arterial hypertension |
| 30 | 9:30 – 10:00 AM<br><br>Evaluation: | ***Endothelial senescence as a therapeutic target in PAH***<br>Dr. Duncan Stewart, Ottawa Heart Institute<br>At the end of this session, participants will be able to:<br>1. Describe the biology of cellular senescence.<br>2. Discuss the role of endothelial cell senescence in the pathogenesis of pulmonary arterial hypertension.<br>3. Analyze the potential of senolytic therapy in pulmonary arterial hypertension. |
| | **10:00 – 10:30 AM** | **Refreshment break -** Visit our exhibitors! |

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***Session Chair: Mitesh Thakrar***

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| 30 | 10:30 – 11:00 AM<br><br>Evaluation:<br>  | ***Spotting CTEPH***<br>Dr. Micheal McInnis, University of Toronto<br>At the end of this session, participants will be able to:<br>1. Identify the key radiologic findings of CTEPH and mimics.<br>2. Describe the relationship between imaging findings and choice of therapy.<br>3. Apply imaging signs to predict patient outcome after intervention. |
| 30 | 11:00 – 11:30 AM<br><br>Evaluation:<br>  | ***The hemodynamics and pulmonary vascular physiology of Group 4 PH***<br>Dr. Susanna Mak, University of Toronto<br>At the end of this session, participants will be able to:<br>1. Describe pulsatile and resistive pulmonary vascular afterload.<br>2. Identify the role of provocative hemodynamic testing in the assessment of chronic thromboembolic pulmonary vascular disease. |
| 30 | 11:30 – 12:00 PM<br><br>Evaluation:<br>  | ***Pulmonary vascular recruitment during exercise***<br>Dr. Jason Weatherald, University of Alberta<br>At the end of this session, participants will be able to:<br>1. Compare different techniques for measuring pulmonary vascular recruitment.<br>2. Describe pulmonary diffusing capacity recruitment during exercise in health and in lung and pulmonary vascular diseases.<br>3. Discuss the effects of therapies on pulmonary diffusing capacity recruitment in PAH. |
| | **12:00 – 1:00 PM** | **Lunch break** |

***Session Chair: Sanjay Mehta***

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| 45 | 1:00 – 1:45 PM<br><br>Evaluation:<br>  | ***Keynote: Disentangling the central, peripheral and hematological mechanisms of benefit from sotatercept***<br>Dr. Yogesh Reddy, MBBS, MSc, Mayo Clinic<br>At the end of this session, participants will be able to:<br>1. Identify the cardiac determinants of exercise improvement after sotatercept.<br>2. Describe the hematological mechanisms of physiological alteration after sotatercept.<br>3. Interpret peripheral mechanisms of benefit after sotatercept. |

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| 30 | 1:45 – 2:15 PM<br><br>Evaluation: | ***Looking further into pulmonary vascular structure and function with quantitative lung imaging***<br>Stephen Wright, PhD, University of British Columbia<br>At the end of this session, participants will be able to:<br>1. Describe how computed tomography can be used to assess distal pulmonary vascular structure<br>2. Describe how magnetic resonance imaging can be used to assess distal pulmonary vascular function |
| 30 | 2:15 – 2:45 PM<br><br>Evaluation: | ***Seeing the right heart: AI-derived RV function and PH screening from standard echocardiography***<br>Dr. Tyler Pitre, University of Toronto *(presenting virtually)*<br>At the end of this session, participants will be able to:<br>1. Explain why right ventricular function, not left ventricular ejection fraction, governs survival in pulmonary hypertension, and why current echo AI overlooks the chamber that matters most.<br>2. Describe a deep learning pipeline that segments all four chambers and derives RV function from a standard apical four-chamber clip, without proprietary speckle-tracking software.<br>3. Benchmark the model's RVEF estimates against 3D-echo reference standards and its geometry-only PH detection against Doppler-based tools, with an honest account of where the approach delivers and where it falls short, function, not afterload.<br>4. Map the path to clinical use: external validation, calibration, and integration with right-heart catheterization. |
| | **2:45 – 3:15 PM** | **Refreshment break**<br>Visit our exhibitors! |
| ***Session Chair: John Granton*** | | |
| 15 | 3:15 – 3:30 PM<br><br>Evaluation: | ***Critical contribution of cardiac myofibroblasts in right ventricular failure and the role of UCP2 SNPs in the predisposition to RV decompensation in PAH***<br>Yongneng Zhang, MBBS, PHD, University of Alberta<br>At the end of this session, participants will be able to:<br>1. Explain the importance of myofibroblast activation as key drivers of RV failure in PAH.<br>2. Explain how reduced UCP2 expression and UCP2 genetic variants (SNPs) contribute to RV maladaptation through metabolic reprogramming and fibroblast activation.<br>3. Discuss the translational implications of targeting cardiac myofibroblasts and UCP2-mediated metabolic pathways as potential therapeutic strategies and biomarkers for RV failure in PAH. |

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| 15 | 3:30 – 3:45 PM<br><br>Evaluation: | ***Targeting cancer-like endothelial cell growth in PAH using CAR-NK cell immunotherapy***<br>Elmira Safaie Qamsari, MSc, Medical Immunologist, PhD Candidate<br>At the end of this session, participants will be able to:<br>1. Describe endothelial cell (EC) heterogeneity in the development of pulmonary arterial hypertension (PAH).<br>2. Explain how a novel marker of a growth-dysregulated EC population may provide a potential therapeutic target for PAH.<br>3. Discuss the potential of CAR-T cell immunotherapy as a strategy to reverse PAH. |
| 30 | 3:45 – 4:15 PM<br><br>Evaluation: | ***The nexus between the vasculature and fibrosis – innovations in Group 3 PH***<br>Dr. Nathan Hambly, McMaster University<br>At the end of this session, participants will be able to:<br>1. Recognize the intimate association between the pulmonary vasculature and parenchyma<br>2. Discuss the prognostic importance of pulmonary hypertension in the setting of pulmonary fibrosis<br>3. Describe the evolving treatment paradigm in the setting of Group 3 PH |
| 30 | 4:15 – 4:45 PM<br><br>Evaluation: | ***Update on portopulmonary hypertension***<br>Dr. Rhea Varughese, MD MSc FRCPC, University of Alberta<br>At the end of this session, participants will be able to:<br>1. Diagnose portopulmonary hypertension.<br>2. Describe current therapies for portopulmonary hypertension.<br>3. Discuss potential future therapies for portopulmonary hypertension. |
| | 4:45 – 5:00 PM | ***Closing remarks***<br>Jamie Myrah |

Your thoughts and suggestions will help us plan next year's Scientific Sessions. **Please take a few minutes to evaluate the overall program:**

**https://www.surveymonkey.com/r/PHScientificSessions2026**

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## Speaker Biographies

View all speaker biographies on our website:

**https://www.phacanada.ca/speakerslist**

## Keynote Speaker: Stephen Archer

Dr. Stephen Archer is the Director of the Translational Institute of Medicine (TIME) and holds the C. Franklin and Helene K. Bracken Chair. He formerly served as the Head of the Department of Medicine at Queens University from 2012 - 2023. He is a physician scientist and a practicing cardiologist who specializes in the care of patients with various forms of pulmonary hypertension. After training at the Royal Columbian Hospital in BC and the Minneapolis Veteran Affairs Medical Center he joined the faculty at the University of Minnesota in 1988. He spent a decade on faculty and attained the rank of Professor under the guidance of his mentor and friend, Dr. E.K. Weir. He then served as Chief of Cardiology and Heart & Stroke Chair for Northern Alberta at the University of Alberta (1998-2007) and Chair of Cardiology and Harold Hines Jr Professor at the University of Chicago (2007-12).

Dr. Archer then returned to Queen's University as the Head of Medicine and Program Medical Director for Kingston Health Sciences Centre.

He runs a CIHR funded research laboratory that develops experimental therapies for pulmonary hypertension and cancer. His research has garnered an h-index of 120 and his publications have been cited over 60,000 times. His translational cardiovascular research has been recognized with numerous awards, including being elected as a Fellow of the Royal Society of Canada and being awarded Distinguished Scientist Awards from the American Heart Association and American College of Cardiology. He received the AFMC President's **A**ward for Exemplary National Leadership in Academic Medicine and was named the Chicago American Heart Association Coeur d'Or recipient in 2013 for leading the establishment of a prehospital STEMI care network in Chicago.

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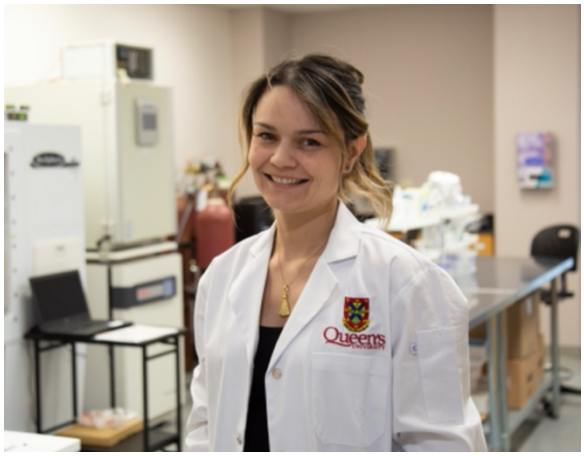
## Keynote Speaker: Patricia Lima



Dr. Lima is a scientist at the Translational Institute of Medicine (TIME) at Queen's University, Kingston, ON. Her specialized training in immunology, particularly focused on the immune response to natural physiological changes or disease-specific adversity, enhances her capacity to investigate unresolved inflammatory characteristics in pulmonary arterial hypertension (PAH).

Her research interests are focused on disease pathophysiology, particularly regarding the immune microenvironment of the right ventricle (RV) and its contribution to maladaptive tissue remodelling that results in RV failure. Dr. Lima has dedicated nearly a decade to this field and seeks to elucidate specific research questions regarding the triggers of NLRP3 inflammasome activation in sterile inflammation caused by damage-associated molecular patterns.

Additionally, she holds a strong passion for mentoring newcomers to biotechnology, facilitating advances in areas such as spatial biology and high-dimensional flow cytometry. As an early-career researcher (ECR), she devotes significant time to training the next generation of scientists, including undergraduate, master's, and PhD students. Although still in the early stages of her career, she remains committed to the study of PAH, aiming to develop alternative strategies to mitigate chronic adverse inflammatory responses in patients. Her overarching goal is to advance understanding of this disease and foster the development of novel therapies to prevent right ventricular failure.

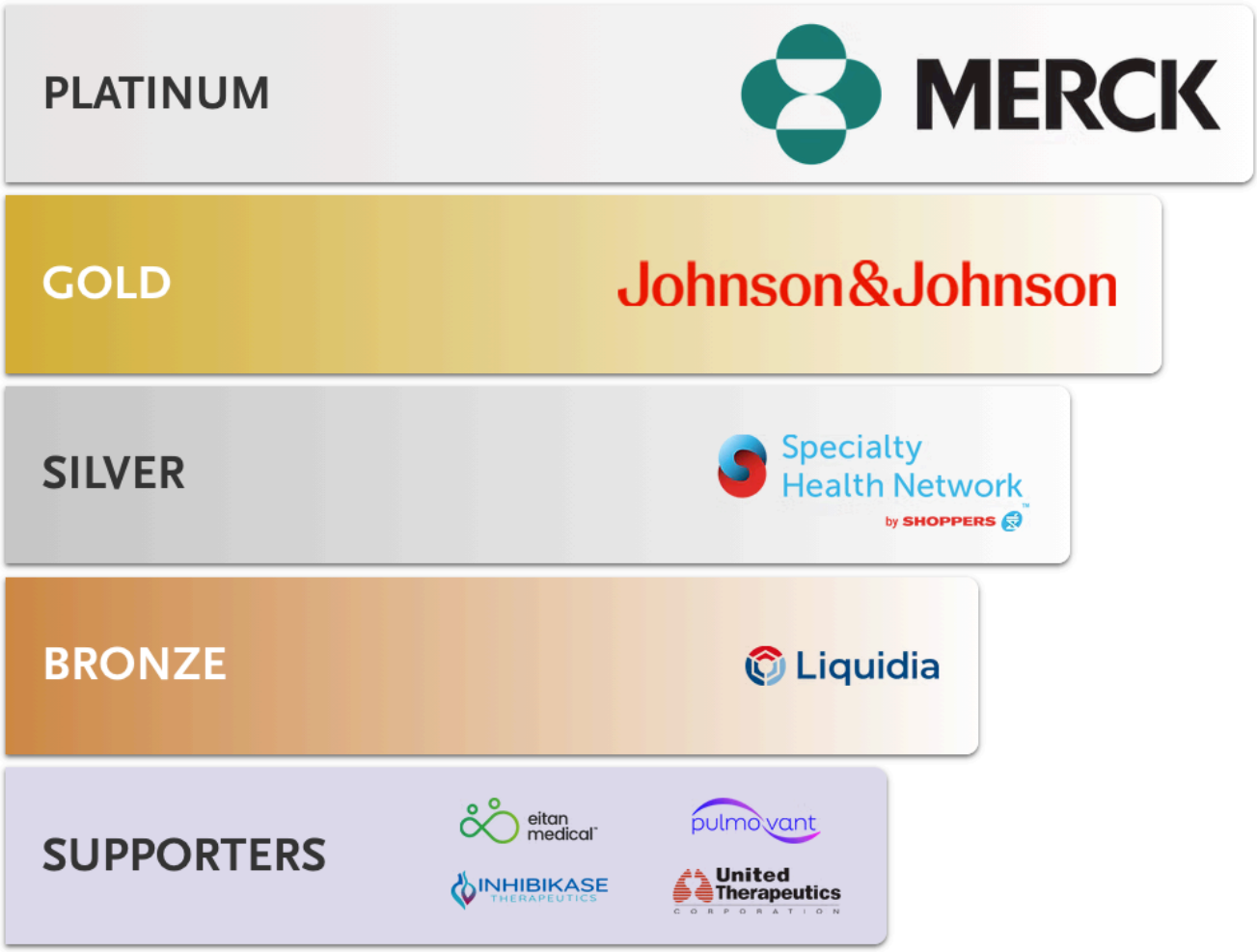
## Keynote Speaker: Yogesh Reddy

Dr. Reddy is board certified in internal medicine, cardiology, advanced heart failure and critical care. His clinical and research interests are focused on the evaluation of heart failure and pulmonary hypertension with particular focus on invasive evaluation of exercise performance as an explanation for patient symptoms. His research program is focused on exercise physiology and diagnostic approaches to pulmonary arterial hypertension, a relatively rare disease of the lung blood vessels that leads to right heart failure.

He is currently pursuing a number of studies to optimize diagnostic approaches, treatment and our understanding of the physiology of exercise intolerance in pulmonary arterial hypertension and response to therapy.

In addition to caring for patients with pulmonary hypertension and heart failure, Dr. Reddy also practices in the cardiac critical care unit and performs complex hemodynamic cardiac catheterizations for the evaluation of unexplained symptoms.

This program has received an educational grant or in-kind support from:

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