



Date // 29 January - 2 February 2020

14th PVRI Annual World Congress

on Pulmonary Vascular Disease

Hotel // The Swissotel • Lima • Peru

WELCOME TO
LIMA • PERU



Our Scientific Planning Committee welcomes you to **Lima, Peru**



Max Gassmann

- Chair
- Chairman, Institute of Veterinary Physiology, Vetsuisse Faculty and Zurich Center for Integrative Human Physiology, University of Zürich, Switzerland



Harm-Jan Bogaard

- Co Chair
- VU University Medical Centre, Netherlands



Elena Goncharova

- Division of Pulmonary, Allergy and Critical Care Medicine, Pittsburgh, USA



David Montani

- Hopitaux Universitaires, Paris-Sud, France



Zhenguo Zhai

- China-Japan Friendship Hospital, China



Paul Corris

- PVRI Chief Medical Scientific Officer
- University of Newcastle, UK

Scientific programme overseen by



Werner Seeger

- PVRI President 2020/21
- Justus-Liebig University Giessen, Germany



Pre-Congress MEETINGS

Wednesday 29 January 2020

PVRI Board of Directors Meeting

09:00 - 17:00

Chair: Paul Hassoun PVRI President 2018/19 JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, USA
and official handover to Werner Seeger, PVRI President 2020/21 JUSTUS LIEBIG UNIVERSITY GIESSEN, GERMANY

PVRI Task Force Meetings including the:

- Exercise Task Force
- Imaging Task Force
- Infection & Pulmonary Hypertension Task Force

tbc

tbc

08:30 - 17:30





14th PVRI Annual World Congress

on Pulmonary Vascular Disease

Thursday 30 January 2020

WELCOME 08:15 - 08:20

Plenary 1

Moderators:

// Luis Efrén Santos-Martínez NATIONAL INSTITUTE OF CARDIOLOGY OF MEXICO, MEXICO

// Kurt Stenmark UNIVERSITY OF COLORADO, DENVER, USA

Hypoxia, mitochondria and metabolism - a dynamic triangle? 08:20 - 10:00

Target audience: All

Objectives:

This session will provide current updates on molecular mechanisms underlying hypoxic signalling, cellular metabolism and mitochondrial alterations in PH and RV dysfunction. This session will also address potential therapeutic implications of targeting mitochondrial and metabolic alterations, with directions for future research and translational focus.

Physiological and mitochondrial features that lead to a successful acclimatization to hypoxia 08:20 - 08:37

// Jorge Soliz LAVAL UNIVERSITY, CANADA

Discussion 08:37 - 08:45

Metabolic mechanisms in PAH 08:45 - 09:02

// Samar Farha CLEVELAND CLINIC ABU DHABI, UNITED ARAB EMIRATES

Discussion 09:02 - 09:10

ROS signalling in smoke-induced pulmonary hypertension and emphysema 09:10 - 09:27

// Natascha Sommer JUSTUS LIEBIG UNIVERSITY GIESSEN, GERMANY

Discussion 09:27 - 09:35

Best abstract presentation 09:35 - 09:52

// To be announced

Discussion 09:52 - 10:00

BREAK 10:00 - 10:30

Plenary 2

Moderators:

// Roberto Accinelli UNIVERSIDAD PERUANA CAYETANO HEREDIA, PERU

// Aaron Waxman BRIGHAM AND WOMEN'S HOSPITAL, HARVARD MEDICAL SCHOOL, USA

Lessons from high altitude for pulmonary hypertension

10:30 - 12:30

Target audience: All

Objectives:

Lessons from the naturally occurring hypoxic environment taking place at high altitude to reduce oxygenation at sea level, with special focus on the lung. Overall, humans are not designed to live at high altitudes and thus, evolution has come up with different strategies on how to adapt and reduce oxygenation. These mechanisms are different among the human population, e.g. South Americans adapt differently from the Himalayans. Accordingly, the pathologies are different between the ethnicities, and different lessons are to be learned for PH in general.

Haemoglobin levels from low to high altitude in different ethnologies

10:30 - 10:47

// Max Gassmann VETSUISSE - FACULTY UNIVERSITY OF ZURICH, SWITZERLAND

Discussion

10:47 - 10:55

Chronic mountain sickness and PH

10:55 - 11:12

// Francisco Villafuerte UNIVERSIDAD PERUANA CAYETANO HEREDIA, PERU

Discussion

11:12 - 11:20

The molecular biology of the hypoxic lung

11:20 - 11:37

// Heimo Mairböurl UNIVERSITY OF HEIDELBERG, GERMANY

Discussion

11:37 - 11:45

High altitude pulmonary oedema: Mechanisms and insight from MRI imaging

11:45 - 12:02

// Sue Hopkins UNIVERSITY OF CALIFORNIA SAN DIEGO, USA

Discussion

12:02 - 12:10

Best abstract presentation

12:10 - 12:22

// To be announced

Discussion

12:22 - 12:30

Pulmonary Circulation Editorial Board Meeting

12:30 - 13:30

LUNCH

12:30 - 13:30



SHEILA GLENNIS HAWORTH LECTURE:

Mechanistic links between iron deficiency and pulmonary arterial hypertension

13:30 - 14:10

Moderator // Max Gassmann VETSUISSE - FACULTY UNIVERSITY OF ZURICH, SWITZERLAND

Speaker // Samira Lakhali-Littleton UNIVERSITY OF OXFORD, UK

30 minutes talk plus 10 minutes discussion

Pro-con debate session

14:10 - 15:30

Optimised risk assessment, non-invasive imaging and CPET will substitute right heart catheterisation in PH

Moderators:

// Harm-Jan Bogaard VU UNIVERSITY MEDICAL CENTRE, THE NETHERLANDS

// Vallerie McLaughlin UNIVERSITY OF MICHIGAN, USA

Pro // Raymond Benza TEMPLE UNIVERSITY SCHOOL OF MEDICINE, USA

14:10 - 14:25

Con // Aaron Waxman BRIGHAM AND WOMEN'S HOSPITAL, HARVARD MEDICAL SCHOOL, USA

14:25 - 14:40

Pro Rebuttal // Raymond Benza

14:40 - 14:45

Con Rebuttal // Aaron Waxman

14:45 - 14:50

TGF β signalling plays a crucial role in PH independent of BMPR2

Moderators:

// Marie-José Goumans LEIDEN UNIVERSITY, THE NETHERLANDS

// Martin Wilkins IMPERIAL COLLEGE LONDON, UK

Pro // Brian Graham UNIVERSITY OF COLORADO, USA

14:50 - 15:05

Con // Nick Morrell UNIVERSITY OF CAMBRIDGE, UK

15:05 - 15:20

Pro Rebuttal // Brian Graham

15:20 - 15:25

Con Rebuttal // Nick Morrell

15:25 - 15:30

BREAK

15:30 - 16:00



Plenary 3

Moderators:

// Gérald Simonneau HÔPITAUX UNIVERSITAIRES PARIS-SUD, FRANCE

// Rogerio Souza UNIVERSITY OF SAO PAULO, BRAZIL

PVOD and PCH - orphan of the orphans, or just a common trait in some forms of PAH?

16:00 - 18:00

Target audience: Clinicians, biologists, geneticists & pathologists

Objectives:

A comprehensive session to include different disciplines and provide a needed rescaling of the understanding of PVOD, after changes were made in the diagnostic classification at the World Symposium on PH in 2018. The session will cover what is known, what is new, and how scientific understanding, diagnostic approach and medical treatment of the disease can be optimised on consensus within the PH community.

Pulmonary veno-occlusive disease or PAH with predominant venous remodelling: The pathologist's view

16:00 - 16:17

// Peter Dorfmueller UNIVERSITY OF GIESSEN AND MARBURG LUNG CENTER, GERMANY

Discussion

16:17 - 16:25

Genetic and molecular mechanisms of pulmonary venous remodelling

16:25 - 16:42

// Frédéric Perros INSERM UMR_S999, UNIVERSITÉ PARIS-SACLAY, FRANCE

Discussion

16:42 - 16:50

Relevance of the Apelin receptor in PH: PVOD, PAH, or both?

16:50 - 17:07

// Patricia Thistlethwaite UNIVERSITY OF CALIFORNIA SAN DIEGO, USA

Discussion

17:07 - 17:15

Characterising and phenotyping patients with sporadic and heritable PVOD

17:15 - 17:32

// David Montani INSERM UMR_S 999, HÔPITAL DE BICÊTRE, ASSISTANCE PUBLIQUE HÔPITAUX DE PARIS, FRANCE

Discussion

17:32 - 17:40

Best abstract presentation

17:40 - 17:52

// To be announced

Discussion

17:52 - 18:00



Please stay on for our AGM
and hear about all the exciting opportunities
planned for 2020 and beyond!

PVRI Annual General Meeting

18:00 - 19:15

Including: // Launch of the PVRI Digital Clinic (12 patient cases)
// PVRI Dinosaur Trust Sponsored Research Grants

Welcome

18:00 - 18:05

// Paul Hassoun PVRI PRESIDENT 2018/19, JOHN HOPKINS UNIVERSITY USA

Overview of the year 2019

18:05 - 18:20

// Stephanie Barwick PVRI CEO

PVRI Digital Clinic 12 patient cases

18:20 - 18:35

// Martin Johnson UNIVERSITY OF GLASGOW, UK

// Colin Church UNIVERSITY OF GLASGOW, UK

// Aaron Shefras PVRI MARKETING MANAGER

The Dinosaur Trust sponsored Research Grant

18:35 - 18:40

// Sébastien Bonnet LAVAL UNIVERSITY, CANADA

// Frédéric Perros INSERM, UNIVERSITÉ PARIS SUD, FRANCE

The Dinosaur Trust sponsored Research Grant

18:40 - 18:45

// Hyung Chun YALE UNIVERSITY, USA

PVRI Research Grant

18:45 - 18:50

// Presented by Paul Corris on behalf of Lucilla Piccari HOSPITAL DEL MAR, SPAIN

PVRI goals 2020/21 & Global Registry Initiative

18:50 - 19:15

// Werner Seeger PVRI PRESIDENT 2020/21, JUSTUS LIEBIG UNIVERSITY GIESSEN, GERMANY

Welcome & Networking Reception

19:15 - 21:00

END OF DAY 1 SCIENTIFIC SESSIONS

Friday 31 January 2020

PVRI Innovative Drug Development Initiative breakfast meeting for members of the IDDI Working Group

06:30-07:45

Plenary 4

Moderators:

// Gabriel Diaz UNIVERSIDAD NACIONAL DE COLOMBIA, COLOMBIA

// Soni Savai-Pullamsetti MAX-PLANCK-INSTITUTE FOR HEART AND LUNG RESEARCH, GERMANY

PH in neonates and children development

08:00 - 10:00

Target audience: All

Objectives:

Interdependency between lung disease and PH from neonates to children - does this have impact on adult life? How to optimally treat newborns and children, and what are the trajectories for adult life?

Lung vascular changes in bronchopulmonary dysplasia

08:00 - 08:17

// Anne Hilgendorff LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN, GERMANY

Discussion

08:17 - 08:25

Perivascular cells: The culprit in pediatric pulmonary hypertension and potential target for therapy

08:25 - 08:42

// Robbert Rottier ERASMUS UNIVERSITY MEDICAL CENTER, THE NETHERLANDS

Discussion

08:42 - 08:50

Some neonates say no to NO. We are looking for YES drugs for treating the pulmonary hypertension of the newborn.

08:50 - 09:07

// Anibal Llanos UNIVERSITY OF CHILE, CHILE

Discussion

19:07 - 19:15

Trajectory of PH in newborns: persistence in childhood, recurrence in adulthood

09:15 - 09:32

// Sheila Glennis Haworth GREAT ORMOND STREET CHILDREN'S HOSPITAL LONDON, UK

Discussion

09:32 - 09:40

Best abstract presentation

09:40 - 09:52

// To be announced

Discussion

09:52 - 10:00

BREAK

10:00 - 10:30

STUART RICH LECTURE:

10:30 - 11:10

Gene editing - ready for translation into clinical medicine

Moderator // Roham Zamanian STANFORD UNIVERSITY, USA

Speaker // Mark Geraci UNIVERSITY OF COLORADO DENVER, USA

30 minutes talk plus 10 minutes discussion

Paediatric & Congenital Heart Disease Task Force meeting

11:15 - 16:00

Rapid fire poster presentation (6 selected posters)

11:10 - 11:40

3 minutes presentation plus 2 minutes discussion for each poster, mixed clinical plus basic

Moderators:

// Tim Lahm MEDICAL CENTER INDIANAPOLIS, USA

// Anna Hemnes VANDERBILT UNIVERSITY MEDICAL CENTER, USA

Moderated poster session 1

11:40 - 13:00

80 minutes

Moderators:

// Vallerie McLaughlin // Raymond Benza // Nick Morrell // Martin Wilkins // Christophe Guignabert

// Vinicio de Jesus Perez // Gaurav Choudhary // Patricia Thislethwaite // Brian Graham // Rogerio Souza

// Kurt Stenmark

LUNCH

13:00

END OF DAY TWO SCIENTIFIC SESSIONS

**Sightseeing and tours will be available
to all delegates in the afternoon**



Saturday 1 February 2020

Plenary 5

Moderators:

// Ardeschir Ghofrani JUSTUS LIEBIG UNIVERSITY GIESSEN, GERMANY

// Mark Gladwin UNIVERSITY OF PITTSBURGH MEDICAL CENTRE, USA

Targeting growth suppressors in PH: current progress and therapeutic prospects

08:00 - 10:00

Target audience: All

Objectives:

Learning from cancer, paving the avenue to true “reverse remodelling” therapy. Different strategies to achieve one common goal, the restoration of normal lung vascular architecture.

FoxO re-activation and and beyond – the epigenetic treatment arsenal

08:00 - 08:17

// Soni Savai-Pullamsetti MAX-PLANCK-INSTITUTE FOR HEART AND LUNG RESEARCH, GERMANY

Discussion

08:17 - 08:25

GATA6 deficiency as a molecular target for PAH

08:25 - 08:42

// Maria Trojanowska BOSTON UNIVERSITY, USA

Discussion

08:42 - 08:50

TSC2: New molecular target for therapeutic intervention in PAH

08:50 - 09:07

// Elena Goncharova UNIVERSITY OF PITTSBURGH, USA

Discussion

09:07 - 09:15

Cyclin-dependent kinase inhibition as new treatment concept in PH

09:15 - 09:32

// Ralph Schermuly UNIVERSITY OF GIESSEN AND MARBURG LUNG CENTER, GERMANY

Discussion

09:32 - 09:40

Best abstract presentation

09:40 - 09:52

// To be announced

Discussion

09:52 - 10:00

BREAK

10:00 - 10:30



Plenary 6

Moderators:

// Paul Corris NEWCASTLE UNIVERSITY, UK

// Stuart Rich NORTHWESTERN UNIVERSITY FEINBERG SCHOOL OF MEDICINE, USA

The global burden of PH - Time to engage with global health

10:30 - 12:30

Target audience: All

Objectives:

PH to be addressed from a global perspective. Engagement of the PVRI in global health organisations: The PVRI has a major focus on raising the profile of PH to a global audience as part of our strategy over next 5 years and we are engaged with the WHF, WHO, NCDA and the UN.

PH in Latin America

A) Management of the RELAHP II Registry

10:30 - 10:40

// Luis Efrén Santos-Martínez NATIONAL INSTITUTE OF CARDIOLOGY OF MEXICO, MEXICO

B) RELAHP II Registry. Preliminary data

10:40 - 10:50

// Ricardo Adrián Gómez Tejada UNIVERSITY OF BUENOS AIRES, ARGENTINA

Discussion

10:50 - 11:00

ECHO based worldwide screening for PH

11:00 - 11:17

// Geoff Strange UNIVERSITY OF NOTRE DAME | FCSAN, AUSTRALIA

Discussion

11:17 - 11:25

Challenges in establishing centres of cardiology excellence in the developing world

11:25 - 11:42

// Mark Huffman NORTHWESTERN UNIVERSITY FEINBERG SCHOOL OF MEDICINE, USA

Discussion

11:42 - 11:50

Modelling the global burden of disease. Current progress in PH

11:50 - 12:05

// Sophia Emmons-Bell INSTITUTE FOR HEALTH METRICS AND EVALUATION SEATTLE, USA

Discussion

12:05 - 12:13

Best abstract presentation

12:13 - 12:25

// To be announced

Discussion

12:25 - 12:30

LUNCH

12:30 - 13:30



Plenary 7

Moderators:

// Werner Seeger JUSTIUS-LEIBIG UNIVERSITY GIESSEN, GERMANY

// Bradley Maron BRIGHAM AND WOMEN'S HOSPITAL, HARVARD MEDICAL SCHOOL, USA

The right ventricle - forgotten no more

13:30 - 15:30

Target audience: Clinicians, radiologists, basic scientists

Objectives:

To discuss the current methods to assess the function of the right ventricle and its impact on prognosis in pulmonary hypertension. Furthermore, the session aims to cast light on current measures of the RV-PA-Unit and to critically reflect its clinical relevance in comparison to conventional parameters of RV function. Additionally, new and well-known therapeutic approaches of RV failure will be discussed.

Methods to assess RV contractility and diastolic stiffness. From gold-standard PV-loops to surrogates.

13:30 - 13:47

// Khodr Tello UNIVERSITY HOSPITAL OF GIESSEN AND MARBURG, GERMANY

Discussion

13:47 - 13:55

Right ventricular fibrosis and right ventricular function in pulmonary hypertension

13:55 - 14:12

// Gaurav Choudhary PROVIDENCE MEDICAL CENTER, USA

Discussion

14:12 - 14:20

Oestrogens and RV failure in PAH

14:20 - 14:37

// Tim Lahm MEDICAL CENTER INDIANAPOLIS, USA

Discussion

14:37 - 14:45

Right ventricular failure - new therapeutic avenue/approaches

14:45 - 15:02

// Rebecca Vanderpool UNIVERSITY OF ARIZONA COLLEGE OF MEDICINE, USA

Discussion

15:02 - 15:10

Best abstract presentation

15:10 - 15:22

// To be announced

Discussion

15:22 - 15:30

BREAK

15:30 - 15:45

Rapid fire poster presentation (6 selected posters)

15:45 - 16:15

3 minutes presentation plus 2 minutes discussion for each poster, mixed clinical plus basic

// Ralph Schermuly UNIVERSITY OF GIESSEN AND MARBURG LUNG CENTER, GERMANY

// Marco Guazzi IRCCS POLICLINICO SAN DONATO, UNIVERSITY OF MILANO, ITALY

Moderated poster session 2

16:15 - 17:15

60 minutes

Moderators:

// David Montani // Bradley Maron // Nick Morrell // Ekkehard Grünig // Christophe Guignabert

// Vinicio de Jesus Perez // Gaurav Choudhary // Tim Lahm // Brian Graham // Elena Goncharova

// Rogerio Souza // Kurt Stenmark

Plenary 8

Moderators:

// George Giannakoulas AHEPA UNIVERSITY GENERAL HOSPITAL ARISTOTLE UNIVERSITY OF THESSALONIKI, GREECE

// Ryan Tedford MEDICAL UNIVERSITY OF SOUTH CAROLINA, USA

This is a joint session with the ESC Working Group on Pulmonary Circulation and Right Ventricular Function

17:15 - 18:55



PH and HFpEF - driving forces, ventricular interplay and therapeutic options

Target audience: All

Objectives:

To discuss the current knowledge on the mechanisms involved in the development of pulmonary hypertension and their impact on prognosis in heart failure with preserved ejection fraction (HFpEF). Furthermore, the session will handle measures of the RV/PA unit in this context under resting conditions and during exercise, highlighting RV dysfunction even at early stages of HFpEF. Finally, the potential role of established PH targeted therapies, as well as new approaches to improve PH and RV function in HFpEF will be discussed, focusing on specific haemodynamic phenotypes.

Driving forces of PH in heart failure with preserved ejection fraction - what can we learn from animal models?

// Mark Gladwin UNIVERSITY OF PITTSBURGH MEDICAL CENTRE, USA

17:15 - 17:32

Discussion

17:32 - 17:40

Driving forces of PH in heart failure with preserved ejection fraction - what is established in humans?

// Marco Guazzi IRCCS POLICLINICO SAN DONATO, UNIVERSITY OF MILANO, ITALY

17:40 - 17:57

Discussion

17:57 - 18:05

The right ventricle in HFpEF - RV/PA coupling at rest and during exercise.

// Ryan Tedford MEDICAL UNIVERSITY OF SOUTH CAROLINA, USA

18:05 - 18:22

Discussion

18:22 - 18:30

Is there a role for PH targeted therapies in HFpEF? Haemodynamic phenotypes and therapeutic responses

// Stephan Rosenkranz UNIVERSITY OF COLOGNE, GERMANY

18:30 - 18:47

Discussion

18:47 - 18:55

PVRI Gala Dinner with salsa music

Saturday 1 February 2020

19:30 onwards

(All welcome, including partners & guests)

Buy your ticket at the Reception Desk



Sunday 2 February 2020

GHAZWAN BUTROUS LECTURE:

The global burden of cardiovascular diseases. What do we know about heart failure and pulmonary hypertension?

Moderator // Paul Corris UNIVERSITY OF NEWCASTLE, UK

Speaker // Greg Roth UNIVERSITY OF WASHINGTON, USA

30 minutes talk plus 10 minutes discussion

08:00 - 08:40

MEMBER OF



Member of



Plenary 9

Moderators:

// Stephan Chan UNIVERSITY OF PITTSBURGH MEDICAL CENTER, USA

// Anton Vonk Noordegraaf DEPARTMENT OF PULMONARY DISEASES, VU UNIVERSITY MEDICAL CENTER, THE NETHERLANDS

Imaging in PH - from rodents to men - new insights from new technologies?

08:40 - 10:40

Target audience: Basic scientists, clinicians, physiologists, radiologists.

Objectives:

To discuss the methods and approaches for non-invasive evaluation of the right ventricular and lung function/morphology. This includes pre-clinical, translational, and clinical research on novel imaging methodologies, imaging biomarkers and probes, as well as new molecular imaging applications in diagnoses and prognoses of experimental and human pulmonary hypertension. The session will provide a platform for knowledge exchange covering basic sciences, translational aspects, as well as clinical applications.

Imaging biomarkers in experimental PH

08:40 - 08:57

// Baktybek Kojonazarov UNIVERSITY HOSPITAL OF GIESSEN AND MARBURG, GERMANY

Discussion

08:57 - 09:05

Artificial intelligence to make more of clinical technologies for cardiac imaging

09:05 - 09:22

// Declan O'Regan MRC LONDON INSTITUTE OF MEDICAL SCIENCES, IMPERIAL COLLEGE LONDON, UK

Discussion

09:22 - 09:30

Right ventricle and lung 18FLT and 18FDG PET in experimental and human PH

09:30 - 09:47

// Lan Zhao IMPERIAL COLLEGE LONDON, UK

Discussion

09:47 - 09:55

Ventricular mass as a prognostic imaging biomarker in incident PAH

09:55 - 10:12

// Paul Hassoun JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, USA

Discussion

10:12 - 10:20

Best abstract presentation

10:20 - 10:32

// To be announced

Discussion

10:32 - 10:40

BREAK

10:40 - 11:10

Plenary 10

Moderators:

// James Klinger BROWN UNIVERSITY, USA

// Sébastien Bonnet UNIVERSITÉ LAVAL, CANADA

RNA therapeutics in PH - fact, future or fantasy?

11:10 - 13:10

Target audience: All

Objectives:

Advances in RNA-sequencing techniques have led to the discovery of thousands of non-coding transcripts with unknown functions. There are several types of non-coding linear RNAs, such as microRNAs (miRNA) and long non-coding RNAs (lncRNA), as well as circular RNAs (circRNA) consisting of a closed continuous loop. Among these types, lncRNAs have emerged as critical regulators of gene expression in both normal and diseased states. This session will highlight current knowledge of the function of lncRNAs in pulmonary hypertension and right ventricle (RV) hypertrophy and failure. This session will also address potential therapeutic implications and the challenges of lncRNA research, with directions for future research and translational focus.

Network analysis of the expanding RNA landscape in PH

11:10 - 11:27

// Stephen Chan UNIVERSITY OF PITTSBURGH MEDICAL CENTER, USA

Discussion

11:27 - 11:35

Role of lncRNA in pulmonary hypertension and RV failure

11:35 - 11:52

// Sébastien Bonnet UNIVERSITY LAVAL, CANADA

Discussion

11:52 - 12:00

RNA-mediated regulation of BMPR2 in heritable and idiopathic pulmonary arterial hypertension

12:00 - 12:17

// James West VANDERBILT CHILDREN'S NASHVILLE, USA

Discussion

12:17 - 12:25

Right ventricular long non-coding RNA expression in human heart failure

12:25 - 12:42

// Anna Hemnes VANDERBILT UNIVERSITY MEDICAL CENTER, USA

Discussion

12:42 - 12:50

Best abstract presentation

12:50 - 13:02

// To be announced

Discussion

13:02 - 13:10

CLOSING REMARKS

13:10 - 13:30

END OF CONGRESS



**FOR THOSE WHO WANT
MORE SCIENCE...**

Following on immediately after the PVRI Congress!



Date // 2 -3 February 2020

2nd International Consortium for Genetic Studies in PAH

Hotel // The Swissotel • Lima • Peru

We are pleased to announce that the second scientific meeting of the International Consortium for Genetic Studies in PAH (PAH-ICON <http://www.pahicon.com>) will be held in Lima, sponsored by the PVRI.

The meeting immediately follows the PVRI 14th Annual World Congress and will be held at the same venue.

The meeting will include presentations and abstracts from researchers in the field of PAH genetics, and will provide an opportunity for collaborative networking and participating in future international collaborations in this rapidly evolving field.

For further information go to www.pvrinstitute.org

...STAY IN

LIMA • PERU