13th PVRI Annual World Congress
on Pulmonary Vascular Disease

Date // 31 January - 3 February 2019

Hotel // The Crowne Plaza Hotel · Barcelona

WELCOME TO
BARCELONA
Pre-Congress MEETINGS

Wednesday 30 January 2019

PVRI Board of Directors Meeting
Chair:
// Paul Hassoun PVRI PRESIDENT 2018-2019

PVRI Imaging Task Force Meeting
Chairs:
// David Kiely UNIVERSITY OF SHEFFIELD, UK // Andrew Peacock UNIVERSITY OF GLASGOW, UK
// Andrew Swift UNIVERSITY OF SHEFFIELD, UK

09:00 - 17:00
10:00 - 14:30
13th PVRI Annual World Congress
on Pulmonary Vascular Disease

Thursday 31 January 2019

Welcome 08:00 - 08:10

Plenary 1

Moderators:
// Lan Zhao IMPERIAL COLLEGE, UK
// Olivier Boucherat UNIVERSITE LAVAL, CANADA

Adaptation to High Altitude - More than expected 08:10 - 10:10

Historical discovery of HPV and its physiological and pathophysiological importance
// Jason Yuan UNIVERSITY OF ARIZONA, USA

Redox signalling in pulmonary circulation: from HPV to pulmonary hypertension
// Jeremy Ward KING'S COLLEGE, UK

The role of vitamin D deficiency in PH
// Francisco Perez-Vizcaino UNIVERSITY OF MADRID, SPAIN

Mitochondria and oxygen sensing in pulmonary circulation
// Stephen Archer QUEEN'S UNIVERSITY, CANADA

Genetic adaptation to high altitude
// Qadar Pasha INSTITUTE OF GENOMICS & INTEGRATIVE BIOLOGY, INDIA

Discussion

BREAK 10:10 - 10:30

CME Credits
This event has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME) and is designed for a maximum of or up to 23 European CME credits (ECMEC). Physicians may convert EACCME® credits to an equivalent number ofAMA PRA Category 1 Credits™.
Best abstract oral presentations (four basic & four clinical research)

Moderators:
// Vinicio de Jesus Perez STANFORD UNIVERSITY, USA
// Kimio Satoh TOHOKU UNIVERSITY SCHOOL OF MEDICINE, JAPAN
// Gérard Simonneau HÔPITAUX UNIVERSITAIRES, PARIS-SUD, FRANCE
// Geoff Strange PULMONARY HYPERTENSION SOCIETY OF AUSTRALIA & NEW ZEALAND, AUSTRALIA
// Anna Hennes VANDERBILT UNIVERSITY, USA
// Sébastien Bonnet UNIVERSITÉ LAVAL, CANADA

Best abstracts presentation awards competition from our trainees.  
10 minutes presentation and 5 minutes questions. 4 awards for the top 2 in each category.

Pulmonary Circulation Editorial Board Meeting

12:30 - 13:30
LUNCH
12:30 - 13:30

Plenary 2

Moderators:
// Paul Hassoun JOHNS HOPKINS SCHOOL OF MEDICINE, USA
// Farid Rashidi TABRIZ UNIVERSITY OF MEDICAL SCIENCES, IRAN

Systemic disorders in pulmonary hypertension  
13:30 - 14:30
Non coding RNA and skeletal muscle disorders in PAH and consequences on exercise tolerance  
// Steeve Provencher UNIVERSITÉ LAVAL, CANADA
Senescence manifestations in COPD-PH  
// Serge Adnot INSTITUT MONDOR DE RECHERCHE BIOMÉDICALE, FRANCE
PVDOMICS  
// Jane Leopold HARVARD UNIVERSITY, USA
Novel comorbidities in PAH patients  
// Roham Zamanian STANFORD UNIVERSITY, USA

Discussion

BREAK  
14:30 - 14:45

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Plenary 3
Moderators:
// Werner Seeger - JU STU S LIEBIG UNIVERSITY OF GIESEN, GERMANY
// Harm-Jan Bogaard - VU UNIVERSITY, NETHERLANDS
// Adam Torbicki - ECZ-OTWOCK MEDICAL CENTRE FOR POST GRADUATE EDUCATION, POLAND

Pro and con debate: top issues and controversies in different groups of PH (14:45 - 16:45)

Pulmonary vascular alterations are an important driver of COPD (PRO)
// Norbert Weissman - JU STU S LIEBIG UNIVERSITY OF GIESEN, GERMANY

Pulmonary vascular alterations are an important driver of COPD (CON)
// Isabel Blanco - HOSPITAL CLÍNIC, SPAIN

Targeting metabolic syndrome is a strategy to treat PH associated with left heart disease / HFpEF (PRO)
// Charly Lai - INDIANA UNIVERSITY SCHOOL OF MEDICINE, USA

Targeting metabolic syndrome is a strategy to treat PH associated with left heart disease / HFpEF (CON)
// Valentina Mercurio - FREDERICO II UNIVERSITY, ITALY

Defective angiogenesis is a major contributor of CTEPH (PRO)
// Rozenn Quarc - KU LEUVEN, BELGIUM

Defective angiogenesis is a major contributor of CTEPH (CON)
// Dijana Iloska - MAX PLANCK INSTITUTE FOR HEART AND LUNG RESEARCH, GERMANY

BREAK (16:45 - 17:00)

Late-breaking oral clinical abstract presentations (17:00 - 18:15)
// Paul Hassoun - JOHNS HOPKINS SCHOOL OF MEDICINE, USA
// Paul Corris - NEWCASTLE UNIVERSITY, UK

PVRI Annual General Meeting (18:15 - 19:15)

Welcome & Networking Reception (19:15 - 20:30)

END OF DAY 1 SCIENTIFIC SESSIONS
Friday 1 February 2019

Plenary 4

Moderators:
// Roxane Paulin UNIVERSITE LAVAL, CANADA
// Frédéric Perros INSERM UMR 999, UNIVERSITE PARIS-SACLAY, FRANCE

Epigenetics - from RV failure to pulmonary circulation: any therapeutic values? 08:10 - 10:10

PROFESSOR SHEILA GLENNIS HAWORTH LECTURE:
Cellular heterogeneity, epigenetic regulation and metabolic transitions in cardiopulmonary development and disease
// Thomas Braun MAX PLANCK INSTITUTE FOR HEART AND LUNG RESEARCH, GERMANY

10 years of miRNAs research in PAH: any therapeutic values?
// Stephen Chan UNIVERSITY OF PITTSBURGH, USA
Methylation acetylation disorders in PAH
// Soni Savai-Pullamsetti MAX PLANCK INSTITUTE FOR HEART AND LUNG RESEARCH, GERMANY

RUPERT SWIFT LECTURE:
Methylation and miRNAs in RV failure // François Potus QUEEN'S UNIVERSITY, CANADA

Bromodomain and PAH
// Kurt Stenmark UNIVERSITY OF COLORADO, DENVER SCHOOL OF MEDICINE, USA

Discussion

BREAK 10:10 - 10:30

Plenary 5

Moderators:
// Yuichi Tamura INTERNATIONAL UNIVERSITY OF HEALTH & WELFARE, JAPAN
// Jason Weatherald UNIVERSITY OF CALGARY, CANADA
// Hua Luo PEKING UNIVERSITY SHENZHEN HOSPITAL, CHINA
// Yuriy Sirenko STRAZHESKO INSTITUTE OF CARDIOLOGY, UKRAINE

What have we learned from national PH registries? 10:30 - 12:30

What have we learned from the existing PAH registries?
// Marc Humbert HÔPITAUX UNIVERSITAIRES, PARIS-SUD, FRANCE

Registries beyond PAH: what are the existing registries and where are the knowledge gaps?
// Pilar Escribano-Subias HOSPITAL UNIVERSITARIO 12 DE OCTUBRE, SPAIN

Pitfalls in interpreting cohort and registry data
// Geoff Strange PULMONARY HYPERTENSION SOCIETY OF AUSTRALIA & NEW ZEALAND, AUSTRALIA

Establishing registries in the developing world
// Abdullah al-Dalaan KING FAISAL SPECIALIST HOSPITAL & RESEARCH CENTRE, SAUDI ARABIA

Paediatric registries
// María Jesus del Cerro Marín RAMÓN Y CAJAL UNIVERSITY HOSPITAL, SPAIN

Discussion

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Plenary 6
Moderators:
// Stephen Archer QUEENS UNIVERSITY, CANADA
// Soni Savai-Pullamsetti MAX PLANCK INSTITUTE FOR HEART AND LUNG RESEARCH, GERMANY

Rapid fire oral presentation award session for basic science 12:30 - 12:55
3 minutes presentation and 2 minutes questions, 2 awards for the top 2.

Meet the Editors of Pulmonary Circulation 13:00 - 14:00

Paediatric & Congenital Heart Disease Task Force Meeting 13:00 - 19:45
Chairs:
// María Jesus del Cerro RAMON Y CAJAL UNIVERSITY HOSPITAL, SPAIN,
// Shahin Moledina GREAT ORMOND STREET HOSPITAL, UK,
// Steven Abman UNIVERSITY OF COLORADO DENVER SCHOOL OF MEDICINE, USA

Innovative Drug Development Initiative Working Group Meeting 14:00 - 18:00
Chairs:
// Paul Corris NEWCASTLE UNIVERSITY, UK
// Sylvia Nikkhoo BAYER, GERMANY
// Peter Fernandes BELLEROPHON THERAPEUTICS USA

We thank all our pharma companies for their sponsorship and contributions.

END OF DAY TWO SCIENTIFIC SESSIONS

Sightseeing and tours will be offered in the afternoon and evening

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Saturday 2 February 2019

Plenary 7
Moderators:
// Allan Lawrie UNIVERSITY OF SHEFFIELD, UK
// Olga Tura IDIBAPS, SPAIN

Metabolic disorders: tomorrows heart failure and PAH therapeutic targets? 08:10 - 10:10

PROFESSOR STUART RICH LECTURE:
Potential usefulness of sound wave therapies for circulatory disorders - From angina to dementia
// Hiroaki Shimokawa TOHOKU UNIVERSITY, JAPAN

Pkm2 and heart failure: what can we learn from that?
// Gopinath Sutendra UNIVERSITY OF ALBERTA, CANADA

AMPK and PAH
// Mark Evans UNIVERSITY OF EDINBURGH, UK

Selenoprotein P and mitochondrial dysfunction in PAH
// Nubuhiro Kikuchi TOHOKU UNIVERSITY, JAPAN

The breath volatolome as a snapshot of body metabolism: Not to be neglected in PAH
// Sylvia Cohen-Kaminsky INSERM UMR-S999, UNIVERSITE PARIS-SACLAY, FRANCE

Metabolic modulators and PAH clinical trials: from DCA to Ranolazine
// Evangelos Michelakis UNIVERSITY OF ALBERTA, CANADA

Discussion

BREAK 10:10 - 10:30

Plenary 8
Moderators:
// Marc Humbert HÔPITAUX UNIVERSITAIRES, PARIS-SUD, FRANCE
// Steeve Provencher UNIVERSITE LAVAL, CANADA

New definitions and interpretations of haemodynamic data 10:30 - 12:30

Normal PAP in healthy subjects and beyond
// Gabor Kovacs MEDICAL UNIVERSITY OF GRAZ, AUSTRIA

What is the impact of mild PAP elevation?
// Horst Olschewski MEDICAL UNIVERSITY OF GRAZ, AUSTRIA

PROs and CONs of the novel definition of PH
// Robert Naeije UNIVERSITE LIBRE DE BRUXELLES, BELGIUM

PAWP versus LVEDP: does it really matter?
// Ryan Tedford MEDICAL UNIVERSITY OF SOUTH CAROLINA, USA

PAH with marginal PAWP: a different disease, different phenotype or a misclassification
// Evan Brittain VAN DERBILT UNIVERSITY, USA

Discussion

LUNCH 12:30 - 13:30
### Plenary 9

**Moderators:**
- Ralph Schermuly, Justus-Liebig University of Gießen, Germany
- Micheala Aldred, Indiana University, USA

#### Progenitor cells in PH: good, bad and reformable

**13:30 - 15:30**

**Pericytes in PAH**
- Vinicio de Jesus Perez, Stanford University, USA

**The impact of BMPR2 loss on endothelial-immune interactions in PAH**
- Mark Ormiston, Queen's University, Canada

**Role of circulating progenitors in pulmonary vascular repair and remodelling**
- Duncan Stewart, Ottawa Hospital Research Institute, Canada

**Resident progenitors contribute to pulmonary vascular remodelling**
- Daniel Greif, Yale University, USA

**Exosomes - outlook for future cell-free PH therapy?**
- James Klinger, Brown University, USA

#### Discussion

### BREAK

**15:30 - 15:50**

### Plenary 10

**Moderators:**
- Bradley Maron, Brigham and Women's Hospital, Harvard Medical School, USA
- Joan Albert Barbera, Hospital Clinic of Barcelona, Spain
- Paul Williams, Centre for Chest Disease and Critical Care, South Africa
- Reda Girgis, Spectrum Health, USA

#### Rapid fire oral presentation award session clinical research

3 minutes presentation and 2 minutes questions. 2 awards for the top 2.

### Plenary 11

**Moderators:**
- Joe GN "Skip" Garcia, University of Arizona, USA
- Evangelos Michelakis, University of Alberta, Canada

#### From preclinical studies to drug approval in PAH: a long unpaved road

**16:35 - 18:15**

**The industry overview of clinical development for novel targets in PAH: Considerations and expectations before initiating early-stage clinical programmes**
- Michael Callahan, Harvard Medical School, USA

**Repurposing drugs for an orphan disease: opportunities and pitfalls**
- Edda Frauke Spiekerkoetter, Stanford University, USA

**The landscape of clinical trials has changed in PAH: stakeholders are raising the bar**
- Josep Torrent-Farnell, Autonomous University of Barcelona, Spain

**Choosing the best of the best: How do we select the most promising drugs for trials in human pulmonary hypertension?**
- Ardeschir Ghofrani, Justus-Liebig University of Gießen, Germany

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Future clinical trials in PAH: what innovative strategies will be needed to succeed?  
// Frances de Man VU UNIVERSITY, NETHERLANDS

The impact and financial burden of pulmonary arterial hypertension on patients and caregivers: Results from a national survey  
// Zhenguo Zhai CHINA-JAPAN FRIENDSHIP HOSPITAL, CHINA

Moderated Poster Session  
18:15 - 19:30

END OF DAY THREE SCIENTIFIC SESSIONS

PVRI GALA DINNER (All welcome, including partners & guests)  
20:00 onwards

Buy your ticket at the Reception Desk

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Sunday 3 February 2019

Plenary 12
Moderators:
// Hiromi Matsubara DEPARTMENT OF CARDIOLOGY, OKAYAMA MEDICAL CENTER, JAPAN
// Farid Rashidi TABRIZ UNIVERSITY OF MEDICAL SCIENCES, IRAN

The changing landscape of treatment armamentarium: is standard of care in pulmonary hypertension still debatable? 08:10 - 10:10
Initial double combination therapy is now standard of care for PAH
// Olivier Sitbon HÔPITAUX UNIVERSITAIRES, PARIS-SUD, FRANCE
Rapid goal-oriented sequential therapy remains the standard for most non-high-risk PAH patients
// Richard Channick PULMONARY & CRITICAL CARE MEDICINE, MASSACHUSETTS GENERAL HOSPITAL, USA
BPA is now the treatment of choice in CTEPH patients with non-surgically accessible disease
// David Poch UNIVERSITY OF SAN DIEGO, USA
BPA should be reserved for inoperable CTEPH refractory to medical therapy
// Joanna Pepke-Zaba Papworth Hospital NHS Foundation Trust, UK

Discussion

BREAK 10:10 - 10:30

Plenary 13
Moderators:
// Anna Hennes VANDELBILT UNIVERSITY, USA
// Stefano Ghio POLICLINICO SAN MATTEO PAVIA FONDAZIONE IRCCS, ITALY

Early screening in patients at risk of PAH: Are we doing enough? Are we doing too much? 10:30 - 13:30
Systematic annual screening of all scleroderm a patients with PFTs, imaging and circulating biomarkers is mandatory // Stephen Mathai JOHNS HOPKINS SCHOOL OF MEDICINE, USA
The importance of risk stratification in scleroderma-associated PAH: Designing your optimal crystal ball // Paul Hassoun JOHNS HOPKINS SCHOOL OF MEDICINE, USA
Stress echo/haemodynamics identifies a subgroup of patients with pulmonary vascular disease that should be treated // Rebecca Vanderpool UNIVERSITY OF ARIZONA COLLEGE OF MEDICINE, USA
Stress echo/haemodynamics most commonly identifies left heart dysfunction and has poor specificity for pulmonary vascular disease // Jean-Luc Vachiery HOPITAL ERASME, UNIVERSITY OF BRUXELLES, BELGIUM
Screening of pulmonary arterial hypertension in BMPR2 mutation carriers
// David Montani HÔPITAL BICÊTRE, HÔPITAUX UNIVERSITAIRES, PARIS-SUD, FRANCE

Discussion

PROFESSOR GHAZWAN BUTROUS LECTURE:
Noncoding RNAs as novel treatment targets during cardiac remodelling
// Thomas Thum IMTTS, HANOVER MEDICAL SCHOOL, HANOVER, GERMANY

END OF CONGRESS

PVRI Digital Clinic e-learning Phase 2: patient cases discussion 14:00 - 16:00

WE LOOK FORWARD TO SEEING YOU IN BARCELONA

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

The meeting immediately follows the PVRI 13th 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