

**Tenth John Vane Memorial Symposium  
on Prostacyclin Science and  
Pulmonary Vascular Disease  
6-7 March 2015**



# Foreword by Professor Chris Thiemermann, FMedSci



I would like to warmly welcome you to the Tenth John Vane Memorial Symposium, which has once again been made possible by an unrestricted educational grant from United Therapeutics.

Over the last ten years, the symposium has grown to become an important fixture on the international congress calendar for all those working in the area of pulmonary arterial hypertension (PAH). We are delighted to continue to provide participants with the valued opportunity to hear the latest clinical and basic science developments in this area, as well as a forum to meet and catch-up with colleagues from across the world.

To celebrate the 10th symposium in the series, we have invited Lady Vane, who is well known to many of you who have attended past symposia, to share her personal thoughts on the series and what these symposia would have meant to her husband, Sir John Vane. Please do take a moment to read her message to us all.

This year's scientific programme covers a variety of highly relevant topics. These include sessions on the pathophysiology and treatment of PAH and its association with congenital heart disease in particular, as well as the role of inflammation, endothelial dysfunction and immune dysregulation in the pathophysiology of PAH. There are two debates; one focused on whether right heart catheterisation is essential for the diagnosis of pulmonary hypertension and the other on whether oral prostacyclins are a suitable alternative to parenteral therapy with prostacyclins in the treatment of PAH.

On behalf of everyone at William Harvey Research Limited, I would like to thank you for joining us at this milestone symposium and very much look forward to meeting and talking with you in the coming days.

I wish you an informative and enjoyable symposium

A handwritten signature in black ink, appearing to be 'C. Thiemermann'.

**Professor Chris Thiemermann, MD PhD FBPhS FRCP FMedSci  
Chief Executive Officer, William Harvey Research Limited**

# Comment from Lady Vane

John would have welcomed these Symposia over the past ten years as they have focused on his concept of Blue Sky Research leading to new medicines.

Since 2006, the symposia have increased our knowledge of PAH and the potential treatment options for those affected. Agendas have been well-balanced between scientific and clinical studies, debate and discussion have enlivened each session and social gatherings have enhanced the evenings. Year on year the number of delegates has increased, especially from the Far East.

The Symposia are a "Living Memorial" based on the constancy of support from United Therapeutics and the William Harvey Research Limited/Institute. This achievement is now recognised and respected worldwide.

*Lady Vane*



# 6 March 2015

**8.45-9.30am** Registration, tea and coffee

**9.30am** Welcome  
**Chris Thiemermann, Queen Mary University of London, London, UK**

## Basic Science and Clinical Aspects

**Chairs: Lucie Clapp, University College London, London, UK**  
**Brendan Whittle, Queen Mary University of London, London, UK**

**9.50am** Type I Interferon and PAH  
**Peter George, Imperial College, London, London, UK**

**10.20am** Novel Cellular Pharmacology of the Prostacyclins  
**Lucie Clapp, University College London, London, UK**

**10.50am** Refreshments

**11.10am** Riociguat for Pulmonary Hypertension  
**Ardeschir Ghofrani, University Giessen, Giessen, Germany**

**11.40am** Which Biomarker in PAH?  
**Dario Vizza, La Sapienza University of Rome, Rome, Italy**

**12.10pm** Lessons Learnt from the RAPID Study  
**Ekkehard Gruenig, University Hospital Heidelberg, Heidelberg, Germany**

**12.40pm** Lunch

## Clinical Aspects of PAH

**Chairs: Stephan Rosenkranz, University of Cologne, Cologne, Germany**  
**Robert Naeije, Université Libre de Bruxelles, Brussels, Belgium**

**2.10pm** Lessons Learnt from Selexipag Trials  
**Olivier Sitbon, Université Paris-Sud, Paris, France**

**2.40pm** Connective Tissue Disease and PAH  
**Gerard Coghlan, Royal Free Hospital, London, United Kingdom**

**3.10pm** Refreshments

## Debate: Right Heart Catheterisation is Essential for the Diagnosis of Pulmonary Hypertension!

**Moderator: Jim White, University of Rochester Medical Center, Rochester, USA**

**3.30pm** Pro Debate  
**Stephan Rosenkranz, University of Cologne, Cologne, Germany**

**3.50pm** Con Debate  
**Robert Naeije, Université Libre de Bruxelles, Brussels, Belgium**

**4.10pm** Debate Discussion

**4.30pm** Adjournment

**7.30pm** Conference Dinner

---

# 7 March 2015

## Pathophysiology and Treatment of PAH

**Chairs: Irene Lang, University of Vienna, Vienna, Austria**

**Jim White, University of Rochester Medical Center, Rochester, USA**

- 9.30am** A Distinctive Pulmonary Vasculopathy: A Quantitative Histological Analysis  
**Rajan Saggar, University of California, Los Angeles, Los Angeles, USA**
- 10.00am** High-dose Prostacyclins in I/HPAH  
**Hiromi Matsubara, National Hospital Organization Okayama Medical Center, Okayama, Japan**
- 10.30am** Congenital Heart Disease and PAH  
**Michele D'Alto, Second University of Naples, Naples, Italy**
- 11.00am** Inflammation, Endothelial Dysfunction and Immune Dysregulation in PAH  
**Marc Humbert, Université Paris-Sud, Paris, France**
- 11.30am** Refreshments

## Debate: Can Oral Prostacyclins Replace Parenteral Therapy?

**Moderator: Robert Naeije, Université Libre de Bruxelles, Brussels, Belgium**

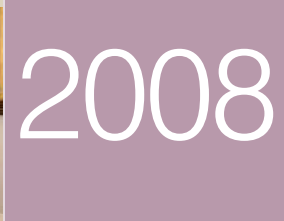
- 12.00pm** Pro Debate  
**Jim White, University of Rochester Medical Center, Rochester, USA**
- 12.20pm** Con Debate  
**Irene Lang, University of Vienna, Vienna, Austria**
- 12.40pm** Debate Discussion
- 1.00pm** Lunch
- 2.30pm** Close of meeting

# John Vane Memorial Symposium 2006-2014

2006



2007



2008





2009



2010



2011



# John Vane Memorial Symposium 2006-2014

2012



2013



2014





# Sir John Vane, FRS, Nobel Laureate

## In Photographs



# Sir John Vane, FRS, Nobel Laureate

## In Photographs

As we celebrate 10 years of the symposium which commemorates the work of Sir John Vane FRS, we look back on his life through the collection of photographs shown on the previous page.

From top left to bottom right:

1. (1995). Honorary Doctor of Science of the University of London awarded by Princess Anne.
2. (c.1980). Sir John in his office during his time as R&D Director at the Wellcome Foundation, Beckenham, Kent.
3. (Late 1980s). With friend and colleague Peter Ramwell.
4. (c.1975-1985). Sir John 'pulling pints' on the occasion of the re-opening of the Sports and Social Club at Wellcome.
5. (Mid 1970s). Sir John with other scientists at Wellcome. Includes Sergio Ferreira, Alan Boura, Phil Needleman, Jack McGiff, Miles Weatherall, Peter Goodford, Alan Green, Audrey Hanbury-Grassick (his PA) and Josh Burn, his former mentor at Oxford. The occasion was a science review.
6. (1982) Sir John at the Nobel Prize ceremony receiving the award from the King of Sweden and with other laureates.
7. (Late 1970s). Sir John with Pedro Cuatrecasas (Head of Wellcome in North Carolina at the time).
8. (c.1965). Sir John as a young man on the set of a spoof career film made in the lab entitled 'A Career in Pharmacology'.
9. (1997). With Dr T.H. Tannenbaum during lecture in Montreal.
10. (1998). With lifetime friend and colleague, Gus Born at a prostaglandin symposium in Dusseldorf.
11. (Mid 1990s). With Tony Ford-Hutchinson (then R&D director of Merck-Frosst) at a prostaglandin meeting in Poland.
12. (1974). Portrait taken in 1974 following his election at the Royal Society.
13. (2000). With Nobel Laureate Lou Ignarro in Los Angeles.
14. (1982) Sir John at the Nobel Prize ceremony receiving the award from the King of Sweden and with other laureates.
15. (1995). Honorary Doctor of Science of the University of London awarded by Princess Anne.
16. (c.1965). Sir John as a young man on the set of a spoof career film made in the lab entitled 'A Career in Pharmacology'.
17. (Early 1970s). With former Australian colleague Bob Hodge in his lab at the Royal College of Surgeons.
18. (c.1982). With Stuart Bunting at a reception to honour his Nobel Prize given by the Chairman of the Wellcome Foundation.
19. (c.1965). Sir John as a young man on the set of a spoof career film made in the lab entitled 'A Career in Pharmacology'.
20. (1982). Sir John in his lab at Wellcome following the award of the Nobel Prize.
21. (1983). Sir John pictured at a meeting in Hawaii.
22. (1995). Honorary Doctor of Science of the University of London awarded by Princess Anne. With Lady Vane.
23. (c.1984). Sir John with Graham Lewis (left) and Josh Burn (middle) on the occasion of an anniversary of his old lab at the Royal College of Surgeons.
24. (c.1980s). Sir John with friend Gerry Weismann in Virgin Gorda.
25. (c. 1965). Sir John Vane, FRS.

# William Harvey Research<sup>®</sup> Limited

Founded in 1990 by Sir John Vane FRS, Nobel Laureate, William Harvey Research<sup>®</sup> Limited (WHRL) is a not-for-profit organisation whose surplus is gifted to our parent shareholder, William Harvey Research<sup>®</sup> Foundation ([www.whrf.org](http://www.whrf.org)) a registered charity 803012. The aim of the Foundation is to support basic medical research by funding research projects and PhD studentships primarily in cardiovascular and inflammatory diseases. Since 2000 the Foundation has provided over £10.9m in funding.

Our labs are based at the largest pharmacological research institute in the UK, The William Harvey Research Institute (WHRI), part of Queen Mary University of London and our 40% shareholder. Many of our scientists are recognised as world leading (REF2014) or amongst the top 100 most cited scientists (Thomson ISI). WHRI was also founded by Sir John Vane, in 1986 and it has since grown to more than 350 researchers today.

Our core business currently consists of Contract Research and Industrial Sponsorship, Consultancy and Conference Organisation.

William Harvey Research<sup>®</sup> is a registered trademark. The Company also owns a number of other trademarks including William Harvey Conferences<sup>®</sup>, William Harvey Consulting<sup>®</sup>, William Harvey Heart<sup>®</sup> and William Harvey Press<sup>®</sup>.

## Contract Research: Tailor Made Solutions for Drug Discovery

WHRL is internationally recognised as a leading provider of preclinical contract research for the Biotech and Pharmaceutical industry and aims to facilitate interaction between industry and academia. We supply a broad range of high quality studies specialising in cardiovascular and inflammatory diseases.

We offer a professional service to our clients: development of bespoke study design and advice alongside high quality reporting and academic input.

Our catalogue lists more than 100 preclinical disease models covering:

- Myocardial Infarction • Heart Failure • Acute and Chronic Renal Failure • Shock • Trauma • Spinal Cord Injury • Colitis • Arthritis • Peritonitis • Adhesion and PMN-recruitment • Multiple Sclerosis (EAE) • Acute Lung Injury • Pleuritis • Asthma • Pulmonary Hypertension • Stroke • Pain

We also offer industry the opportunity to fund PhD-level studentships in support of specific research projects at the William Harvey Research<sup>®</sup> Institute and to benefit from such students spending time with them.

## WILLIAM HARVEY | CONSULTING

Investing in preclinical research can be costly both financially and in terms of time with results often not meeting expectations. It is therefore often prudent, to seek professional advice on the best route to achieve desired outcomes prior to committing to a research study. We therefore offer consultancy advice as a standalone paid for service.

Our team of experienced scientists offer advice in the fields of pharmacology for:

- Inflammation • Vascular Inflammation • Cardiovascular • Hypertension • Gastrointestinal • Renal • Lung • Diabetes • Allograft • Experimental Allergic Encephalomyelitis • Cellular Assays • Immunization (vaccine) • Immunosuppression • Cell Activation, Homing and Tolerance (*in vivo*).

## WILLIAM HARVEY | CONFERENCES

Since its inception, WHRL has organised successful conferences, from one-day symposia to more comprehensive three-day meetings, handled by William Harvey Conferences<sup>®</sup>. Always driven by scientific and clinical topics these prestigious scientific meetings are geared around recent developments in biomedical research.

William Harvey Conferences have held meetings both nationally and internationally for more than 15 years. Our Conference team are experts in organising high quality, scientific meetings which provide a memorable and informative experience.

Our Conference services include:

- Programme development • Speaker invitations and co-ordination of speaker arrangements • Registration management • CPD applications • Design and print production • Welcome packs for speakers and delegates • Name badges • marketing and promotion • Arranging meeting venues and accommodation • Negotiating contracts • Hospitality • Insurance • On-site hosting • Transportation • Event Photographer

More information on our Conference Organisation services can be found on our website, [www.williamharvey.co.uk/conferences](http://www.williamharvey.co.uk/conferences) or by contacting our Events team at [whrl@qmul.ac.uk](mailto:whrl@qmul.ac.uk).

# The Royal Society, 6-9 Carlton House Terrace, London, SW1Y 5AG, UK

## Faculty Chair

**Professor Chris Thiemermann**, Queen Mary University of London, London, UK

## Faculty

**Professor Lucie Clapp**, University College London, London, UK

**Professor Irene Lang**, University of Vienna, Vienna, Austria

**Professor Robert Naeije**, Université Libre de Bruxelles, Brussels, Belgium

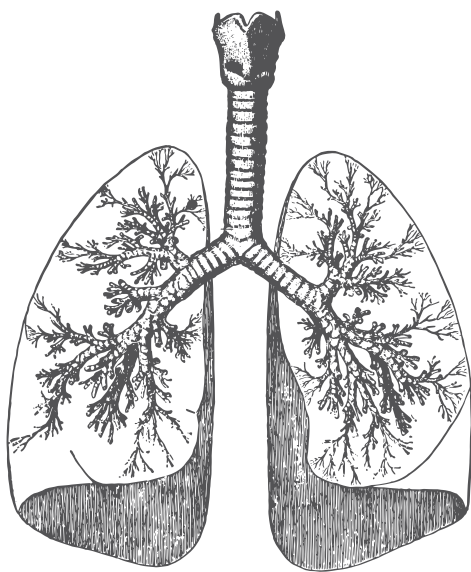
**Professor Stephan Rosenkranz**, University of Cologne, Cologne, Germany

**Professor James White**, University of Rochester Medical Center,  
Rochester, USA

**Professor Brendan Whittle**, Queen Mary University of London,  
London, UK

Allocated 7 CPD credits by Royal College of Physicians

[www.williamharvey.co.uk](http://www.williamharvey.co.uk)



William Harvey Research Limited  
John Vane Science Centre  
Charterhouse Square  
London  
EC1M 6BQ  
United Kingdom  
Tel: +44 (0)20 7882 8808  
Fax: +44 (0)20 7882 6016  
email: [whrl@qmul.ac.uk](mailto:whrl@qmul.ac.uk)

Registered in England – Registration No 2437946  
Registered office: Charterhouse Square, London EC1M 6BQ