Cover:

VITRUVIAN MAN, STUDY OF PROPORTIONS,
from Vitruvius’s De Architectura, Leonardo da Vinci, 1492
Gallerie dell’Accademia, Venice
SCIENTIFIC ORGANIZING COMMITTEE

EUROPE
Nazzareno GALLÈ, M.D. (Bologna, I)
Werner SEEGER, M.D. (Giessen, D)
Gérald SIMONNEAU, M.D. (Clamart, F)

USA
Robyn J. BARST, M.D. (New York, NY-USA)
Stuart RICH, M.D. (Chicago, IL-USA)
Lewis J. RUBIN, M.D. (La Jolla, CA-USA)

ORGANIZING SECRETARIAT

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SYMPOSIUM STRUCTURE

The field of Pulmonary Hypertension has witnessed a tremendous increase in knowledge over the past few years, and more is expected in the near future. Therefore, we believe it would be important to update the statements that were proposed in the Evian meeting in 1998. To fulfill these objectives, we have organized the 3rd World Symposium on Pulmonary Arterial Hypertension, a three-day meeting to be held in Venice, June 23rd-25th 2003 at Westin Excelsior Venice Lido Hotel.

The Format of the Symposium will include Task Force meetings (in the mornings) involving 85 Symposium Sponsored Experts in order to provide “consensus, recommendations and directions”, and Open Sessions (in the afternoons) with an additional 200 non-Symposium Sponsored Attendees, where the results of the Task Force meetings will be presented and further discussed.

The Task Forces are as follows:
- Pathology and Pathobiology
- Genetics
- Epidemiology, Nomenclature and Classification
- Diagnosis and Assessment
- Medical Treatments
- Interventional and Surgical Treatments
- Future Directions
The Committees of each Task Force consist of three Chairmen and a variable number of Experts that have worked together over the past few months to prepare the Agenda and several written reports, that will be the basis for the discussion during the meeting. A Secretary, selected from the three Chairmen, has coordinated the editorial process and the Agenda of the specific Task Force.

The Secretary has assigned the editing of specific Topics to single (or groups of) Task Force Members, including himself.

As a further contribution to the Symposium, two Poster Sessions, on Basic Science and Clinical Science, have been organized. The Poster Sessions will be held on June 23rd (Basic Science) and 24th (Clinical Science) from 10.00 to 12.00 a.m.

We look forward to meeting you in Venice.

On behalf of the Scientific Organizing Committee
Nazzareno Galiè, MD
09.00 • 12.30  Task Force Meetings

TASK FORCE ON PATHOLOGY
AND PATHOBIOLOGY
Only Task Force Members

COMMITTEE
Chairman and Secretary: Marc HUMBERT (Clamart, F)
Chairman: Giuseppe PIETRA (Castagnola, CH)
Chairman: Marlene RABINOVITCH (Stanford, CA-USA)
Chairman: Norbert F. VOELKEL (Denver, CO-USA)

Stephen L. ARCHER (Edmonton, CDN)
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Philippe HÉRVÉ (Le Plessis Robinson, F)
Irene LANG (Vienna, A)
Ornella LEONE (Bologna, I)
Margaret R. MACLEAN (Glasgow, UK)
Nick W. MORRELL (Cambridge, UK)
Lynne M. REID (Boston, MA-USA)
Kurt STENMARK (Denver, CO-USA)
Susan STEWART (Cambridge, UK)
Rubin TUDER (Baltimore, MD-USA)
E. Kenneth WEIR (Minneapolis, MN-USA)
Topics

New Findings on Cellular and Molecular Pathological and Pathobiological Changes
Modified Gene Expression
The Endothelium and the Intima
The Smooth Muscle Cells and the Media
The Extracellular Matrix, Inflammatory Cells and the Adventitia
The Current Role of the Pathologist
Ion Channels
Growth Factors and Angiogenesis
Cytokines and Inflammation
Vasoconstrictor and Vasodilatation Substances
Serotonin
Prostacyclin Pathways and cAMP
NO Pathways and cGMP
Endothelin
Coagulation Pathways
Cell Cycle Control and Apoptosis
TASK FORCE ON GENETICS
Only Task Force Members

COMMITTEE
Chairman and Secretary: Gregory ELLIOTT (Salt Lake City, UT-USA)
Chairman: John H. NEWMAN (Nashville, TN-USA)
Chairman: Richard C. TREMBATH (Leicester, UK)

Serge ADNOT (Créteil, F)
Fabio COCCOLO (Bologna, I)
Oliver EICKELBERG (Giessen, D)
Ekkehard GRUENIG (Heidelberg, D)
James A. KNOWLES (New York, NY-USA)
James E. LOYD (Nashville, TN-USA)
Jane H. MORSE (New York, NY-USA)
William C. NICHOLS (Cincinnati, OH-USA)
John A. PHILLIPS III (Nashville, TN-USA)
Werner SEEGER (Giessen, D)
Carlo VENTURA (Sassari, I)
TOPICS

BMPR2 Mutations
ALK1 Mutations
TGF-Beta Receptors Somatic Mutations
Polymorphisms
Screening of Sporadic Cases
Immunogenetics
Counselling Families/Individuals with PPH-Linked Mutations
Strategies for New PPH Genes
10.00 • 12.00  Poster Session on Basic Science  
**FOYER**  
*Task Force Members and Plenary Sessions Attendees*  
Chairman: Vallerie V. McLAUGHLIN (*Chicago, IL-USA*)  
Chairman: Horst OLSCHEWSKI (*Giessen, D*)

12.30 • 14.30  Slide Preparation and Lunch  
*Only Task Force Members*

14.30 • 16.00  Plenary Session on GENETICS  
**SALA CONGRESSI**  
*Task Force Members and Plenary Sessions Attendees*  
Three 15-min presentations of results by task force members followed by 15-min plenary discussion

14.30 • 15.00  PPH Genes: Current Epidemiology of Mutations, Genomic Searches, Alternative Genetic Approaches and Modifier Genes  
Richard C. TREMBATH (*Leicester, UK*)

15.00 • 15.30  Genetic Testing and Counselling, Presymptomatic Screening, Nomenclature of Genetic PAH  
John H. NEWMAN (*Nashville, TN-USA*)

15.30 • 16.00  Biology of Inherited PPH  
Oliver EICKELBERG (*Giessen, D*)

16.00 • 16.30  Coffee Break
16.30 • 18.00 Plenary Session on PATHOLOGY AND PATHOBIOLOGY
SALA CONGRESSI
Task Force Members and Plenary Sessions Attendees
Three 15-min presentations of results by task force members followed by 15-min plenary discussion

16.30 • 17.00 Pathological Classification of PAH
Giuseppe PIETRA (Castagnola, CH)

17.00 • 17.30 What's New on Ion Channels, NO, PGI2, ET-1, Growth Factors, etc.
Stephen L. ARCHER (Edmonton, CDN)

17.30 • 18.00 What's New on TGF-Beta, Serotonin and Inflammation
Marc HUMBERT (Clamart, F)
09.00 • 12.30 Task Force Meetings

**TASK FORCE ON EPIDEMIOLOGY, NOMENCLATURE AND CLASSIFICATION**

*Only Task Force Members*

**COMMITTEE**

Chairman and Secretary: Gérald SIMONNEAU *(Clamart, F)*
Chairman: Lucien ABENHAIM *(Paris, F)*
Chairman: Alfred P. FISHMAN *(Philadelphia, PA-USA)*

Guido DOMENIGHETTI *(Locarno, CH)*
Nazzareno GALIÈ *(Bologna, I)*
Simon GIBBS *(London, UK)*
Miguel A. GOMEZ-SANCHEZ *(Madrid, E)*
David LANGLEBEN *(Montréal, CDN)*
Didier LEBREC *(Clichy, F)*
Nick W. MORRELL *(Cambridge, UK)*
Robert NAEIJJE *(Brussels, B)*
Stuart RICH *(Chicago, IL-USA)*
Lewis J. RUBIN *(La Jolla, CA-USA)*
Werner SEEGER *(Giessen, D)*
Rudolf SPEICH *(Zurich, CH)*
Topics

Epidemiology
Registries
Risk Factors
Updating the 1998 Diagnostic Classification
TASK FORCE ON DIAGNOSIS AND ASSESSMENT

Only Task Force Members

COMMITTEE

Chairman and Secretary: Robyn J. BARST (New York, NY-USA)
Chairman: Michael D. McGOON (Rochester, MN-USA)
Chairman: Adam TORBICKI (Warsaw, PL)

Joan Albert BARBERA (Barcelona, E)
Richard N. CHANNICK (La Jolla, CA-USA)
Gerry COGLIAN (London, UK)
Marion DELCROIX (Leuven, B)
Peter F. FEDULLO (La Jolla, CA-USA)
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Marius M. HOEPER (Hannover, D)
Marc HUMBERT (Clamart, F)
Meinhard K NEUSSL (Vienna, A)
Michael J. KROWKA (Rochester, MN-USA)
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Ronald J. OUDIZ (Torrance, CA-USA)
Andrew J. PEACOCK (Glasgow, UK)
Joanna PEPKE-ZABA (Cambridge, UK)
Ivan M. ROBBINS (Nashville, TN-USA)
Olivier SITBON (Clamart, F)
Victor F. TAPSON (Durham, NC-USA)
Jean-Luc VACHIÉRY (Brussels, B)
Carmine Dario VIZZA (Rome, I)
Topics

Diagnostic Algorithms
Early Diagnosis
Functional Capacity Tests
Functional Classification
Invasive Hemodynamics and Vasoreactivity Test
Echocardiography and other Imaging Tests
Indicators of Severity
10.00 • 12.00  Poster Session on Clinical Science  
**FOYER**  
*Task Force Members and Plenary Sessions Attendees*  
Chairman: David B. BADESCH *(Denver, CO-USA)*  
Chairman: Olivier SITBON *(Clamart, F)*

12.30 • 14.30  Slide Preparation and Lunch  
*Only Task Force Members*

14.30 • 16.00  Plenary Session on EPIDEMIOLOGY, NOMENCLATURE AND CLASSIFICATION  
**SALA CONGRESSI**  
*Task Force Members and Plenary Sessions Attendees*  
Three 15-min presentations of results by task force members followed by 15-min plenary discussion

14.30 • 15.00  A Critical Appraisal of the Evian Classification also Based on the Poll Results  
Alfred P. FISHMAN *(Philadelphia, PA-USA)*

15.00 • 15.30  Overview of Risk Factors in PAH  
David LANGLEBEN *(Montréal, CDN)*

15.30 • 16.00  Proposal for a New Diagnostic Classification: “The 2003 Venice Classification”  
Gérald SIMONNEAU *(Clamart, F)*

16.00 • 16.30  Coffee Break
16.30 • 18.00 Plenary Session on DIAGNOSIS AND ASSESSMENT
SALA CONGRESSI
Task Force Members and Plenary Sessions Attendees
Three 15-min presentations of results by task force members followed by 15-min plenary discussion

16.30 • 17.00 Diagnostic Algorithms
Michael D. McGoon (Rochester, MN-USA)

17.00 • 17.30 Acute Vasoreactivity Testing
Olivier Sitbon (Clamart, F)

17.30 • 18.00 Exercise Assessment and Indicators of PAH Severity
Robyn J. Barst (New York, NY-USA)
09.00 • 12.30  Task Force Meetings

TASK FORCE ON MEDICAL TREATMENTS
Only Task Force Members

COMMITTEE

Chairman and Secretary: Nazareno GALIÈ (Bologna, I)
Chairman: Lewis J. RUBIN (La Jolla, CA-USA)
Chairman: Werner SEEGER (Giessen, D)

David B. BADESCH (Denver, CO-USA)
Joan Albert BARBERA (Barcelona, E)
Robyn J. BARST (New York, NY-USA)
Ardeschir GHOFRANI (Giessen, D)
Sheila G. HAWORTH (London, UK)
Marius M. HOEPER (Hannover, D)
Marc HUMBERT (Clamart, F)
Anne KEOGH (Sydney, AUS)
Vallerie V. McLoughlin (Chicago, IL-USA)
Horst OLSCHEW SKI (Giessen, D)
Ronald J. OUDIZ (Torrance, CA-USA)
Andrew J. PEACOCK (Glasgow, UK)
Gérald SIMONNEAU (Clamart, F)
Olivier SITBON (Clamart, F)
Gianni TOGNONI (Milan, I)
Adam TORBICKI (Warsaw, PL)
TOPICS
Conventional Treatments
Prostanoids
Endothelin Receptor Antagonism
PDE5 Inhibition
NO
L-Arginine
End-points for Clinical Trials
Treatment Algorithm
Combination Therapy
Experimental Drugs
Interaction with Pharmaceutical Companies
TASK FORCE ON INTERVENTIONAL AND SURGICAL TREATMENTS

Only Task Force Members

COMMITTEE

Chairman and Secretary: Paul CORRIS (Newcastle, UK)
Chairman: Stuart W. JAMIESON (San Diego, CA-USA)
Chairman: Walter KLEPETKO (Vienna, A)

Philippe DARTEVELLE (Le Plessis Robinson, F)
Peter F. FEDULLO (La Jolla, CA-USA)
Michael J. LANDZBERG (Boston, MA-USA)
Irene LANG (Vienna, A)
Eckhard MAYER (Mainz, D)
Joanna PEPKE-ZABA (Cambridge, UK)
Julio SANDOVAL (Mexico City, MEX)
Elbert P. TRULOCK (St. Louis, MO-USA)
Jean-Luc VACHIÉRY (Brussels, B)
TOPICS

Balloon Atrial Septostomy
Lung and Heart-lung Transplantation
Waiting List
Thromboendoarterectomy
Percutaneous Balloon Dilatation of Pulmonary Arteries
TASK FORCE ON FUTURE DIRECTIONS

Only Task Force Members

COMMITTEE

Chairman and Secretary: Stuart RICH (Chicago, IL-USA)
Chairman: Robert NAEIJJE (Brussels, B)
Chairman: Andrew J. PEACOCK (Glasgow, UK)

Brian CHRISTMAN (Nashville, TN-USA)
Gerry COGHLAN (London, UK)
Oliver EICKELBERG (Giessen, D)
Sean P. GAINE (Dublin, EIR)
Friedrich GRIMMINGER (Giessen, D)
Tim HIGENBOTTAM (Sheffield, UK)
Stefan JANSSENS (Leuven, B)
John H. NEWMAN (Nashville, TN-USA)
Marlene RABINOVITCH (Stanford, CA-USA)
Richard C. TREMBATH (Leicester, UK)
Norbert F. VOELKEL (Denver, CO-USA)
E. Kenneth WEIR (Minneapolis, MN-USA)
Topics

Future Directions for Basic Science, Pathobiology, Pathophysiology
Future Directions for Genetics
Future Directions for Drugs Development
Gene Therapy
12.30 • 14.30 Slide Preparation and Lunch
Only Task Force Members

14.30 • 16.00 Plenary Session on MEDICAL TREATMENTS
SALA CONGRESSI
Task Force Members and Plenary Sessions Attendees
Three 15-min presentations of results by task force members followed by 15-min plenary discussion

14.30 • 15.00 Evidence from Clinical Trials
Werner SEEGER (Giessen, D)

15.00 • 15.30 End Points for Clinical Trials Clinical/Regulatory
Lewis J. RUBIN (La Jolla, CA-USA)

15.30 • 16.00 Treatment Algorithm
Nazzareno GALIÈ (Bologna, I)

16.00 • 16.30 Coffee Break
16.30 • 18.00  
**Plenary Session on SURGICAL TREATMENTS AND FUTURE DIRECTIONS**  
**SALA CONGRESSI**  
*Task Force Members and Plenary Sessions Attendees*  
Four presentations: three 10-min presentations followed by 10-min plenary discussion; one 30-min presentation without discussion

16.30 • 16.50  
**Ballon Atrial Septostomy**  
*Julio Sandoval (Mexico-City, MEX)*

16.50 • 17.10  
**Lung Transplantation**  
*Walter Klepetko (Vienna, A)*

17.10 • 17.30  
**Thromboendoarterectomy**  
*Eckhard Mayer (Mainz, D)*

17.30 • 18.00  
**Future Directions on PAH**  
*Robert Naef (Brussels, B)*
**Scientific Information**

**Posters**
- **Poster Session on Basic Science:** Monday, June 23rd 2003, 10.00 • 12.00
- **Poster Session on Clinical Science:** Tuesday, June 24th 2003, 10.00 • 12.00

Posters will be displayed in the Foyer by the meeting room. The admitted size is 2.00 mt wide and 1.50 mt high.

Posters on Basic Science have to be exhibited on Monday, June 23rd by 9.00 and removed by 18.30 of the same day.

Posters on Clinical Science have to be exhibited on Tuesday, June 24th by 9.00 and removed by 18.30 of the same day.

**Registration**

Only invited participants will be admitted to the Symposium.

**Badges**

Registered participants will receive a personal badge which has to be worn to be admitted to the scientific sessions.

**Official Language**

English is the Symposium official language. Simultaneous translation will not be provided.
GENERAL INFORMATION

SYMPOSIUM VENUE
The Westin Excelsior, Venice Lido
Lungomare Marconi, 41 • Venice Lido • Italy 30126
Phone +39 041 526 0201 • Fax +39 041 526 7276
Sala Congressi, Business & Congress Center, 3rd floor

HOW TO REACH THE VENUE

By car  Take highway A-4 and leave at Venezia exit. Proceed to Piazzale Roma car terminal where you can take water bus ACTV - no.51, 61, 82 (€ 3,50) or a private water taxi to Lido Island. In case you wish to bring your car with you proceed to Tronchetto island car terminal, where you can take the ferry boat.

By plane  From Marco Polo International Airport you can take a private water taxi to get directly to the hotel or water bus Alilaguna to Lido Island (€ 9,81) and get off at S.ta M. Elisabetta stop, where you can take bus V (€ 1,50) which will leave you in front of the Westin Excelsior.

By train  From Santa Lucia Railway Station you can take a private water taxi to get directly to the hotel or water bus ACTV - no.51 to Lido Island and get off at S.ta M. Elisabetta stop, where you can take bus V which will leave you in front of the Westin Excelsior.

ORGANIZING SECRETARIAT
I&C srl, Via A. Costa, 2 - 40134 Bologna, Italy, tel +39 051 6144004, fax +39 051 6142772, e-mail: 3rdwspah@iec-srl.it
The Organizing Secretariat will be in attendance according to the Symposium schedule.

HOTEL RESERVATION
For assistance please contact the Organizing Secretariat.
SOCIAL PROGRAM

GALA DINNER
The Symposium Gala Dinner will take place on June 24th at 20.00 at the Westin Excelsior, Salone degli Stucchi, Lungomare Marconi 41, Venice Lido. The cost is € 130 + VAT 20%. Reservation is mandatory. Please contact the Organizing Secretariat for further information.

EXCURSIONS
Excursions to Venice and the Lagoon will be organized for accompanying people. Please contact the Organizing Secretariat for detailed program and reservations.
The Organizing Committee would like to thank the following companies for their support to the Symposium

**Gold**

- Actelion
- GlaxoSmithKline
- Pfizer
- Schering

**Silver**

- United Therapeutics

**Bronze**

- Aventis
- Encysive

**Others**

- AstraZeneca
- Myogen
- Deltec
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