

# International Symposium on Acute Pulmonary Injury Translational Research

## INSPIRES



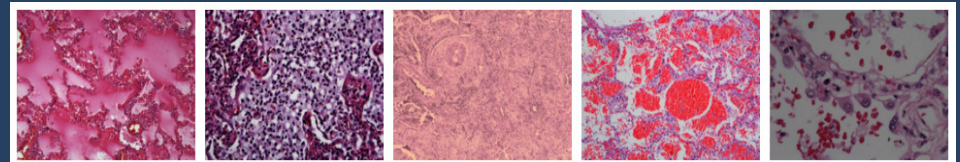
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[www.hospitaluniversitariodegetafe.org](http://www.hospitaluniversitariodegetafe.org)

**November 2<sup>nd</sup> – 3<sup>rd</sup> 2016**

**Organized by the  
Intensive Care Unit**



## Organizing Committee

Oscar Peñuelas  
José A. Lorente  
Federico Gordo  
Arnaud W. Thille

## Scientific Committee

Fernando Frutos-Vivar  
Nicolás Nin  
Guillermo Muñiz-Albaiceta

### Summary of Meeting

The prevalence of acute lung injury (ALI) in the ICU is high, and current treatment is only supportive. As recently stated in the *state-of-the-art* pulmonary research conference (Aspen Lung Conference, 2007), where findings from the NHLBI ARDS Network clinical trials were summarized, clinicians and scientists hoped that new pharmacologic, biologic, and genetic approaches for a better understanding of pathogenesis, pathophysiology and treatment of ALI/ARDS would improve outcomes in the near future.

We herein announce the first conference on Translational Research in ALI, held under the auspices of CIBERES and other scientific societies, where current state of the art on research in this area will be reviewed. Speakers have been selected among worldwide recognized leaders in basic and translational research related to ALI.

At the symposium's conclusion, attendees will be familiar with the evidence used to support the current recommendations for the treatment of patients with ALI/ARDS. More importantly they will be introduced to the basic and translational research that will likely alter therapy for this disease within the next several years.

The Organizing Committee

## Faculty

<b>Alberto García</b>	Hosp. Universitario Niño Jesús, Madrid, Spain
<b>Alfonso Muriel</b>	Hosp. Universitario Ramón y Cajal, Madrid, Spain
<b>Ana Obeso</b>	Universidad de Valladolid, Valladolid, Spain
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<b>Esther Barreiro</b>	Hosp. del Mar, Barcelona, Spain.
<b>Federico Gordo</b>	Hosp. Universitario del Henares, Madrid, Spain
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<b>Giacomo Bellani</b>	University of Milan-Bicocca, Monza, Italy
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<b>Jesús M. Ruiz-Cabello</b>	CNIC Carlos III, UCM, Madrid, Spain
<b>Jesús Villar</b>	Hosp. Universitario Dr. Negrín, Las Palmas, Spain
<b>Jordi Mancebo</b>	Hosp. Universitario Sant Pau, Barcelona, Spain
<b>José A. Aramburu</b>	Hosp. Universitario de Getafe, Madrid, Spain
<b>José A. Lorente</b>	Hosp. Universitario de Getafe, Madrid, Spain
<b>José M. Carratalá</b>	Hosp. General de Alicante, Alicante, Spain
<b>Lluís Blanch</b>	Corporación Sanit. Univ. Parc Taulí, Sabadell, Spain
<b>Marcus J. Schultz</b>	ACM, Amsterdam, The Netherlands
<b>Nicolás Nin</b>	Hosp. Español, Montevideo, Uruguay
<b>Oscar Peñuelas</b>	Hosp. Universitario de Getafe, Madrid, Spain
<b>Sara Heili-Frades</b>	Fundación Jimenez Díaz, Madrid, Spain
<b>Victor Abraira</b>	Hosp. Universitario Ramón y Cajal, Madrid, Spain

November 2 <sup>nd</sup>		
09:00 – 09:30	Registration	
09:30 – 10:00	<b>Opening lecture.</b> Clinical research in Critical Care. A translational perspective.	Andrés Esteban
10:00 – 11:30	<b>Symposium I. Definition of ARDS.</b>	<b>Moderator: Andrés Esteban</b>
10:00 – 10:20	Epidemiology of ARDS.	Fernando Frutos-Vivar
10:20 – 10:40	Can we prevent ARDS?	Antonio Artigas
10:40 – 11:00	ARDS or diffuse alveolar damage? That is the question.	Arnaud Thille
11:00 – 11:20	The consequences and dangers of erroneous categorization of ARDS.	Jesús Villar
11:20 – 11:30	Round discusión.	
11:30 – 12:00	Coffee break	
12:00 – 14:00	<b>Simposyum II. Monitoring ARDS.</b>	<b>Moderator: Fernando Frutos-Vivar</b>
12:00 – 12:20	Monitoring respiratory muscle function.	Giacomo Bellini
12:20 – 12:40	Patient-ventilator interaction. New contributions.	Lluís Blanch
12:40 – 13:00	Lung protective ventilation in the operating room and postoperative complications in ARDS patients.	Javier García
13:00 – 13:20	Measuring dead space in ventilated patients.	Fernando Suárez-Sipmann
13:20 – 13:40	Extravascular lung water assessment by lung ultrasound.	Antonio Núñez
13:40 – 14:00	Round discussion.	
14:00 – 15:00	Lunch	
15:00 – 17:00	<b>Symposium III. Liberation form mechanical ventilation in acute respiratory failure.</b>	<b>Moderator: Federico Gordo</b>
15:00 – 15:20	High flow nasal cannula oxygen in acute respiratory failure.	Arnaud Thille
15:20 – 15:40	Difficult weaning from mechanical ventilation and role of noninvasive ventilation.	Sara Heili-Frades
15:40 – 16:00	To be announced	José M. Carratalá
16:00 – 16:20	Standardized ARDS outcome variables. The Laws of Medicine	Jesús Villar
16:20 – 16:40	Round discussion.	
16:40 – 17:00	<b>Consensus for clinical application of non invasive ventilation in acute respiratory failure</b>	Oscar Peñuelas
17:00 – 17:30	Coffee break	
17:30 – 20:00	<b>Symposium IV. Translational research in Acute Respiratory Failure (I).</b>	<b>Moderator: José A. Lorente</b>
17:30 – 17:50	Mechano-transduction of cellular membrane in ventilator-induced lung injury (VILI).	Guillermo Muñoz-Albaiceta
17:50 – 18:10	Driving pressure, power and energy –from animal studies to clinical trials.	Marcus J. Schultz
18:10 – 18:30	The measurement of esophageal pressure in the mechanically ventilated patient from physiology to practice.	Jordi Mancebo
18:30 – 18:50	Effect of hipercapnia in ARDS.	Nicolás Nin
18:50 – 19:10	Specific biomarkers of acute respiratory injury. Is the future better than the present?	Alberto García
19:10 – 19:30	ICU-Acquired weakness: state of the art of the underlying biological mechanisms.	Esther Barreiro
19:30 – 20:00	Final discussion.	

November 3 <sup>rd</sup>		
09:30 – 11:20	<b>Symposium I. Imaging in ARDS.</b>	<b>Moderator: Fernando Frutos-Vivar</b>
09:30 – 09:50	Molecular and functional imaging of the lung. Clinical applications.	Jesús Ruiz-Cabello
09:50 – 10:10	Lung inflammation in ARDS: lessons learned from PET.	Giacomo Bellani
10:10 – 10:30	Regional ventilation monitoring by impedance tomography.	Federico Gordo
10:30 – 10:50	Role of ultrasonography in the diagnosis of VAP.	Antonio Núñez
10:50 – 11:10	Regional measurement of pulmonary perfusion by electrical impedance tomography (EIT).	Fernando Suárez-Sipmann
11:10 – 11:20	Round discussion.	
11:20 – 11:50	Coffee break	
11:50 – 12:30	<b>Workshop: Applied clinical research in Intensive Care Medicine.</b>	
11:50 – 12:10	Exploring causality with observational studies, Is that possible?	Alfonso Muriel
12:10 – 12:30	Evaluation of mortality in the field of Intensive Care Medicine.	Victor Abraira
12:30 – 14:00	<b>Symposium II. Therapeutic strategies in ARDS.</b>	<b>Moderator: Arnaud W. Thille</b>
12:30 – 12:50	Physiological and clinical consequences of prone position in ARDS patients.	Jordi Mancebo
12:50 – 13:10	Prone position in acute lung injury.	Bruno V. Pinheiro
13:10 – 13:30	What do or do not we know of lung recruitment maneuvers in ARDS patients?	Javier García
13:30 – 13:50	Current role of NIV in mild ARDS patients.	Sara Heili-Frades
13:50 – 14:00	Round discussion.	
14:00 – 15:00	Lunch	
15:00 – 17:20	<b>Symposium III. Translational research in Acute Respiratory Failure (II).</b>	<b>Moderator: Oscar Peñuelas</b>
15:00 – 15:20	Metabolomics in ARDS.	Nicolás Nin
15:20 – 15:40	Brain-Lung cross talk during mechanical ventilation.	Luis Blanch
15:40 – 16:00	Is there (still) a rationale for anticoagulation in ARDS? – From trials to bench, and back to the bedside again.	Marcus J. Schultz
16:00 – 16:20	Searching for biomarkers in ARDS.	José A. Lorente
16:40 – 17:00	Histological aspects of acute lung injury. The view of the pathologist.	José A. Aramburu
17:00 – 17:10	Round discussion	
17:10 – 17:30	Coffee break	
17:30 – 20:00	<b>Symposium IV. Lung repair.</b>	<b>Moderator: Andrés Esteban</b>
17:30 – 17:50	Alveolar surfactant: physiology and pathophysiology.	Cristina Casals
17:50 – 18:10	Role of neutrophils in lung repair.	Guillermo Muñoz-Albaiceta
18:10 – 18:30	Effect of adult adipose-derived mesenchymal stem cells in VILI.	Oscar Peñuelas
18:30 – 18:50	Cell therapy in ARDS.	Antonio Artigas
18:50 – 19:10	Pulmonary vascular dysfunction in acute lung injury.	Francisco Pérez-Vizcaino
19:10 – 19:30	Acute lung injury in rats with and without emphysema.	Bruno V. Pinheiro
19:30 – 19:50	Cell response to hypoxia.	Ana Obeso
19:50 – 20:00	Final discussion.	

The Symposium has the scientific support of the following Societies:

 LOS PROFESIONALES DEL ENFERMO CRÍTICO	<b>SEMICYUC</b>	Sociedad Española de Medicina Intensiva y Unidades Coronarias
 Sociedad Española de Neumología y Cirugía Torácica SEPAR	<b>SEPAR</b>	Sociedad Española de Neumología y Cirugía Torácica
 SEDAR Sociedad Española de Anestesiología, Reanimación y Terapéutica del Dolor	<b>SEDAR</b>	Sociedad Española de Anestesiología y Reanimación
 SECIP Sociedad Española de Cuidados Intensivos Pediátricos	<b>SECIP</b>	Sociedad Española de Cuidados Intensivos Pediátricos
 SOMIAMA SOCIEDAD DE MEDICINA INTENSIVA DE LA COMUNIDAD DE MADRID	<b>SOMIAMA</b>	Sociedad de Medicina Intensiva de la Comunidad de Madrid
 ESICM European Society of Intensive Care Medicine	<b>ESICM</b>	European Society of Intensive Care Medicine
 CIBERES Centro de Investigación Biomédica en Red Enfermedades Respiratorias	<b>CIBERES</b>	CIBER de Enfermedades Respiratorias
 Sociedad Española de Medicinas de Urgencias y Emergencias	<b>SEMES</b>	Sociedad Española de Medicina de Urgencias y Emergencias

The contents and ideas expressed in this symposium solely the responsibility of the authors and do not necessarily represent the official view of the scientific societies.

## Sponsors



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## Venue

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28905 Getafe (Madrid)

## Accreditation



Comisión de Formación Continuada de las Profesiones Sanitarias de la Comunidad de Madrid.  
Sistema Nacional de Salud. (Requested)

## Language

English (possibility of online translation) and Spanish.

## Registration

Access through our web site: [www.icugetafe.com](http://www.icugetafe.com)

The registration fee includes:

- Course documentation
- Attendance at all scientific sessions
- Coffees and lunch

### Registration fee:

Members of Participating Scientific Societies	200 €
Non members	250 €