



With an Unrestricted Support
by Fondazione Internazionale Menarini



FINAL PROGRAM

LIMA, PERU MAY 25TH-26TH, 2017

CARDIOVASCULAR AND METABOLIC CHANGES AT HIGH ALTITUDE

Relevance to cardiovascular risk?

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**CARDIOVASCULAR AND METABOLIC CHANGES
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Relevance to cardiovascular risk?

KICK-OFF MEETING OF THE HIGHCARE LAPS PROJECT

(HIGH ALTITUDE CARDIOVASCULAR RESEARCH
LATIN AMERICA POPULATION STUDY)

CHAIRMEN

Gianfranco Parati MD, FESC

President, Italian Society of Hypertension

Department of Medicine and Surgery, University of Milano-Bicocca

Head, Cardiology Unit and Department of Cardiovascular, Neural and Metabolic Sciences

S. Luca Hospital, IRCCS Istituto Auxologico Italiano, Milan, Italy

José Manuel Sosa Rosado, MD

President, Peruvian Society of Cardiology

Clinica Internacional, Lima, Peru

SCIENTIFIC COMMITTEE

Piergiuseppe Agostoni

Grzegorz Bilo

Giuseppe Mancia

Gianfranco Parati

José Parra

José Manuel Sosa Rosado



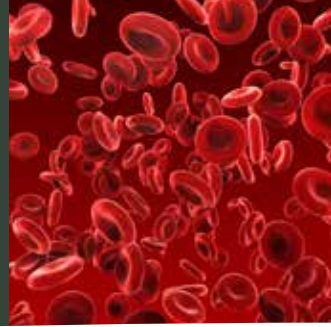
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THURSDAY, MAY 25TH, 2017

- 12:50 p.m.** WELCOME ADDRESS
Welcome from Authorities
Welcome from *Prof. Gianfranco Parati*
Welcome from *Dr. Giuseppe Caracciolo*
Gianfranco Parati (Milan, I)
A clinical perspective on the effects of hypobaric hypoxia exposure at altitude

SESSION 1 PHYSIOLOGY OF LONG TERM HIGH ALTITUDE EXPOSURE

Chairpersons: Piergiuseppe Agostoni (Milan, I), Robert Naeije (Brussels, B)

- 01:15 p.m.** **Francesco Cosentino** (Stockholm, S)
Genetic and epigenetic adaptations in high altitude populations
- 01:45 p.m.** **Robert Naeije** (Brussels, B)
Adaptation of cardiovascular system to high altitude exposure
- 02:15 p.m.** **Piergiuseppe Agostoni** (Milan, I)
Physical exercise at high altitude
- 02:45 p.m.** **Juan Alamiro Silva Urra** (Antofagasta, RCH)
Working at high altitude: Effects of intermittent hypoxia exposure in Chilean miners
- 03:15 p.m.** **Athanasios J. Manolis** (Athens, GR)
Exposure of cardiovascular patients to hypobaric hypoxia during commercial flights. Does it matter?
- 03:45 p.m.** Discussion
- 04:15 p.m.** *Coffee break*



SESSION 2 CARDIOVASCULAR RISK AT LOW AND HIGH ALTITUDE

Chairpersons: Giuseppe Mancia (Milan, I), José Parra (Guadalajara, MEX)

- 04:30** p.m. **Giuseppe Mancia** (Milan, I)
Update on cardiovascular risk in year 2017:
New risk charts, new risk factors and role of hypertension.
Pathophysiological and clinical challenges
- 05:00** p.m. **Gianfranco Parati** (Milan, I)
Cardiovascular effects of acute high altitude exposure
- 05:30** p.m. **Lorenza Pratali** (Pisa, I)
Cardiovascular disease at high altitude - are the mountains a safe harbour?
- 06:00** p.m. Discussion

SESSION 3 CHALLENGES FOR HYPERTENSION AND CARDIOVASCULAR RISK MANAGEMENT IN LATIN AMERICA

Chairpersons: Eduardo Barbosa (Porto Alegre, BR), Rafael Hernandez-Hernandez (Barquisimeto, YV)

- 06:30** p.m. **Fernando Stuardo Wyss Quintana** (Guatemala City, GCA)
Current status in management of hypertension
- 06:55** p.m. **José Andres Octavio** (Caracas, YV)
Obesity, salt intake and other modifiable risk factors
- 07:20** p.m. **Ramiro Sanchez** (Buenos Aires, RA)
Cardiometabolic disease and diabetes
- 07:45** p.m. **Patricio Lopez-Jaramillo** (Bucaramana, CO)
Cardiovascular risk in populations living at high altitude
- 08:10** p.m. Discussion
- 08:30** p.m. *Welcome Reception*



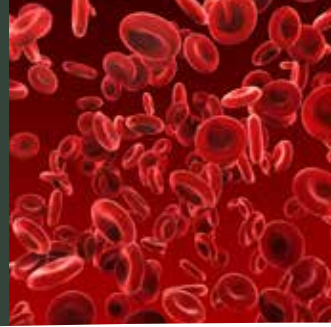
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FRIDAY, MAY 26TH, 2017

SESSION 4 HIGH ALTITUDE RELATED DISEASES: MONGE'S DISEASE AND BEYOND

Chairpersons: Bijoy K. Khandheria (Milwaukee, WI, USA), José Manuel Sosa Rosado (Lima, PE)

- 09:00 a.m.** **Fabiola Leon-Velarde (Lima, PE)**
Chronic mountain sickness
- 09:25 a.m.** **Pietro Amedeo Modesti (Florence, I)**
Red blood cells at high altitude
- 09:50 a.m.** **Grzegorz Bilo (Milan, I)**
Blood pressure and haemodynamics under chronic hypoxia
- 10:15 a.m.** **Bijoy K. Khandheria (Milwaukee, WI, USA)**
Pulmonary hypertension: non invasive assessment at low and high altitude
- 10:40 a.m.** Discussion
- 10:50 a.m.** *Coffee break*

SESSION 5 ISCHEMIC HEART DISEASE AT HIGH ALTITUDE

Chairpersons: Pierre Boutouyrie (Paris, F), Enrique Melgarejo (Bogota, CO)

- 11:00 a.m.** **Dagnovar Aristizabal (Medellin, CO)**
Epidemiology of ischemic heart disease in Latin America
- 11:25 a.m.** **Patricio Lopez-Jaramillo (Bucaramana, CO)**
Endothelial dysfunction at high altitude
- 11:50 a.m.** **Pierre Boutouyrie (Paris, F)**
Arterial stiffness and SEVR as determinants of coronary perfusion
- 12:15 p.m.** **Juan Verdejo (Mexico City, MEX)**
Coronary artery disease and exposure to hypoxia
- 12:40 p.m.** Discussion
- 01:00 p.m.** *Lunch break*



SESSION 6 HIGH ALTITUDE AND METABOLIC CHANGES

Chairpersons: Ernesto Peñaherrera (Guayaquil, EC), Gines Viscor (Barcelona, E)

- 02:30** p.m. **Gines Viscor (Barcelona, E)**
Exposure to intermittent hypoxia: risk factor for cardiovascular disease and diabetes or beneficial intervention?
- 02:55** p.m. **Francisco Villafuerte (Lima, PE)**
Metabolic alterations at high altitude
- 03:20** p.m. **Carolina Lombardi (Milan, I)**
Sleep disordered breathing at high altitude
- 03:45** p.m. **Coffee break**

SESSION 7 HIGH ALTITUDE AND HEART FAILURE

Chairpersons: Piergiuseppe Agostoni (Milan, I), Buddha Basnyat (Kathmandu, NEP)

- 04:05** p.m. **Buddha Basnyat (Kathmandu, NEP)**
Pulmonary edema and heart failure at high altitude
- 04:30** p.m. **Piergiuseppe Agostoni (Milan, I)**
Heart failure, hypoxia and beta blockers
- 04:55** p.m. Discussion
- 05:15** p.m. **Grzegorz Bilo (Milan, I), Gianfranco Parati (Milan, I)**
Presentation of HIGHCARE-LAPS project
Discussants:
Reynaldo Castillo, Alex Copaja Flores, Miguel Córdova Castañeda, Oscar Contreras Vasquez, Fernando Gamio, Gustavo Grajeda Valdez, Rosario Landa Galarza, Morin Lang-Tapia, Beatriz Loza Barboza, Edgard Miranda, Freddy Erasmo Montero Molina, Alexander Montesinos Cardenas, Angel Augusto Perez Urrutia, Jorge Martos Salcedo, Marco Lazo Soldevilla, Jorge Luis Sotomajor Perales, Vittore Verratti, Liz Carla Mendivil Warthon
- 06:20** p.m. Closing remarks



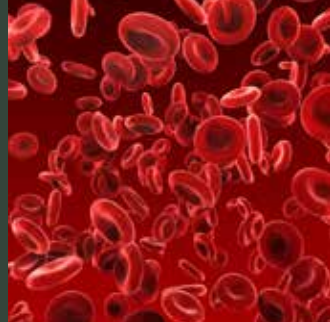
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FACULTY

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Dagnovar Aristizabal (*Medellin, CO*)
Eduardo Barbosa (*Porto Alegre, BR*)
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Reynaldo Castillo (*Lima, PE*)
Oscar Contrares Vasquez (*Huancajo, PE*)
Alex Copaja Flores (*Cuzco, PE*)
Miguel Córdova Castañeda (*Cajamarca, PE*)
Francesco Cosentino (*Stockholm, S*)
Fernando Gamio (*Cuzco, PE*)
Gustavo Grajeda Valdez (*Cuzco, PE*)
Rafael Hernandez-Hernandez (*Barquisimeto, YV*)
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Rosario Landa Galarza (*Huancajo, PE*)
Morin Lang-Tapia (*Antofagasta, RCH*)
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Giuseppe Mancina (*Milan, I*)
Athanasios J. Manolis (*Athens, GR*)





Enrique Melgarejo (*Bogota, CO*)

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Angel Augusto Perez Urrutia (*Juliaca, PE*)

Lorenza Pratali (*Pisa, I*)

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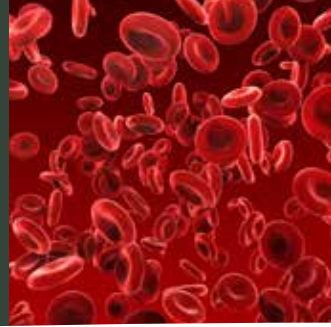
Liz Carla Mendivil Warthon (*Cuzco, PE*)

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GENERAL INFORMATION

CONFERENCE VENUE

Country Club Hotel

Calle Los Eucaliptos 590
San Isidro
Lima 27
Peru
Ph. +51 1 6119000

REGISTRATION

The conference is free to attend.
Please register on the website [https://
webplatform.planning.it/Lima2017/Register](https://webplatform.planning.it/Lima2017/Register)

SECRETARIAT COUNTER

The Secretariat will be open at the following times:

- **Thursday, May 25th, 2017**
from 9.00 a.m. to 8.30 p.m.
- **Friday, May 26th, 2017**
from 8.00 a.m. to 7.00 p.m.

OFFICIAL LANGUAGE

The official language of the conference will be English. Simultaneous translation into Spanish will be provided.

TECHNICAL FACILITIES

Facilities will be available for computer presentations and overhead projections. A Speakers' Ready Room with P(Powerpoint for Windows) will be available for check and preview of presentations. It is essential that speakers deliver their presentations to the Speakers' Ready Room at least one hour before the session starts. The Speakers' Ready Room will be open at the following times:

- **Thursday, May 25th, 2017**
from 9.00 a.m. to 8.00 p.m.
- **Friday, May 26th, 2017**
from 8.00 a.m. to 6.00 p.m.

LUNCHESS AND COFFEE BREAKS

Lunches and coffee breaks will be served at the conference venue.

CERTIFICATE OF ATTENDANCE

The certificate of attendance will be available on request at the end of the conference at the secretariat counter.

ORGANIZING SECRETARIAT

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