

INVITATION

The Center for the Research and Treatment of Arterial Hypertension and Cardiovascular Risk of the Internal Medicine Department, Guimarães – Centro Hospitalar do Alto Ave / Minho University (ESH Excellence Centre) and the Life and Health Science Research Institute and the School of Health Sciences – University of Minho, Portugal, are organizing the fourth edition of the “Arterial Stiffness and Early Vascular Aging” Post-Graduation Conference on the 18th and 19th November 2015.

This Conference will be a part of our International Post-Graduate Program and will be structured in three different parts:

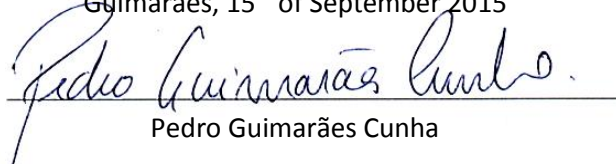
- 1) A series of **lectures by distinguished scientists and clinicians** dedicated to this field. The lecturers include Prof. Peter Nilsson (Malmo/Sweden), Prof. Stephane Laurent (Paris/France), Prof. Boutouyrie (Paris/France) and Prof. Angelo Scuteri (Rome/Italy).
- 2) A **“Hands-on” practical course on Pulse-wave Velocity, Central Blood Pressure and Carotid evaluation**, organized during the afternoon of the 18th and 19th.
- 3) Presentation and discussion with the Faculty and course participants of different research projects related to this field – with the goal of creating for all participants an opportunity to **share their research ideas and create international collaborations**.

We would be happy to learn if you would consider interesting **to participate or to send someone from your Centre to this Post-Graduation Course**. We would also welcome one or several of your collaborators. Should you choose to accept our invitation we will be happy to point out lodging options available in Braga as well as to insure transfer from Oporto to Braga (scheduled after receiving your collaborators’ travelling details). Registration details and Preliminary Program can be seen by visiting the following page:

www.ecsaude.uminho.pt/pg/aseva

We would hope to hear from you soon, and are ready to address any issue that you see fit. Have our best regards,

Guimarães, 15th of September 2015



Pedro Guimarães Cunha

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ARTERIAL STIFFNESS AND EARLY VASCULAR AGING

4th Edition | November 18-19, 2015

Life and Health Sciences Research Institute (ICVS)
School of Health Sciences | University of Minho
Braga | Portugal



The main goal of this course is to create a scientific forum on new aspects and concepts concerning cardiovascular risk evaluation and stratification, as well as discussing interactions between aspects of the cardiovascular and the central nervous system disease process. At the end of this course, all participants should:

- (1) Understand the concept of Arterial Stiffness and know its clinical applicability;
- (2) Know how to measure arterial stiffness markers (Pulse wave velocity and Central Blood Pressure) both theoretically and practically;
- (3) Identify subjects with Early Vascular Aging syndrome and be aware of its clinical implications;
- (4) To discuss the connection between brain and arterial aging;
- (5) To recognize the relationship between micro and macrovascular changes, cognitive decline and cerebrovascular disease;
- (6) Acquire technical skills in Pulse Wave Velocity, Central Blood Pressure and Carotid Evaluation (Intima/Media thickness evaluation and Carotid Doppler);
- (7) To apprehend new research perspectives in the field of cardiovascular research involving the brain and arterial disease.

Invited lecturers

Angelo Scuteri, MD, PhD

- Scuola Specializzazione Geriatria
Universita' di Roma Tor Vergata
Roma, ITALY

Peter M Nilsson, MD, PhD

- Professor of Clinical Cardiovascular Research
Department of Clinical Sciences
Lund University, University Hospital
Malmö, SWEDEN

Pierre Boutouyrie, MD, PhD

- Pharmacologie, HEGP, APHP
Paris, FRANCE

Stephane Laurent, MD, PhD

- Université René Descartes, Faculté de Medecine Paris V
- Unité INSERM U970 – Physiology and pharmacology of large arteries
- Pharmacologie, HEGP, APHP
Paris, FRANCE

Registration and more information: www.ecsaude.uminho.pt/pg/aseva

International Postgraduate Programme
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1.Preliminary Program

November 17th - Arrival and accommodation in Braga

November 18th

9h00 – Post-Graduate Course/Opening Ceremony

9h. Pulse Wave Analysis (Prof. Pierre Boutouyrie)

- 1) Components of the pulse wave and associations with cardiovascular risk.
- 2) Ventricular – vascular dysfunction – clinical and treatment implications.
- 3) Research opportunities

10h30. Coffee Break

10h45. Central Blood Pressure (Prof. Stephane Laurent)

- 1) Systolic amplification and pulse pressure amplification: critical appraisal of its significance and clinical implications.
- 2) Response of central blood pressure to diverse drug treatments;
- 3) Treatment of elevated central blood pressure: are we there yet?
- 4) Research opportunities

12h15. Central Blood Pressure in a high stroke incidence area: a Portuguese experience. (Dr. Pedro Guimarães Cunha)

Afternoon of the 18th of November

- **14h – 18h.** Practical component of the Course (Hands on practice in PWV/Central Blood Pressure and Carotid Evaluation -4h00 of practice for each technique)
- **16h.** Coffee Break

November 19th

9h. Early Vascular Aging: non-pressure dependent components (Prof. Peter Nilsson)

- 1) Early Vascular Aging – Hemodynamic Aging Syndrome.
- 2) What fuels large artery damage, other than age and blood pressure?
- 3) Clinical practical implications;
- 4) Research opportunities.

10h30. Coffee Break

10h45. Pulse Wave Velocity – longitudinal evolution and interactions with blood pressure. (Prof. Angelo Scuteri)

- 1) Blood pressure and its relationship with arterial damage
- 2) Pulse Wave Velocity as a predictor of the development of hypertension
- 3) Longitudinal evaluation of pulse wave velocity and other central hemodynamic parameters
- 4) Research opportunities

12h15 Research Projects – Poster presentation and discussion with the faculty

Afternoon of the 19th of November

- **14h – 18h.** Practical component of the Course (Hands on practice in PWV/Central Blood Pressure and Carotid Evaluation -4h00 of practice for each technique)
- **16h.** Coffee Break