

## Annual Working Group Report Form

**Year/time period of report: 2022**

**Name of Working Group:** Working Group on Hypertension and the Brain

**Name of Working Group Section:** NA

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### Composition of Working Group

**Chair:**

Pedro Miguel Guimarães Marques da Cunha

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Year of appointment: 2018

Year of birth: 1974

**Vice-Chair:**

Christina Sierra

Email: [csierra@clinic.cat](mailto:csierra@clinic.cat)

Year of appointment/term: 2018

**Secretary:**

Name: Dagmara Hering

Email: [hering@gumed.edu.pl](mailto:hering@gumed.edu.pl)

Year of appointment/term: 2018

### Working Group Members

Current number of members: 95

New members approved this year: 1

Bushra Farukh, [bushra.farukh@kcl.ac.uk](mailto:bushra.farukh@kcl.ac.uk)

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### Activities of the year

#### Participation to the ESH Annual Meeting

#### WG scientific meeting

### **RESEARCH OPPORTUNITIES ON BLOOD PRESSURE AND COGNITION Setting an agenda for Multicentric Collaborative Studies**

**Chairpersons:**

A. Coca (Barcelona, SPAIN),  
P. Guimarães Cunha (Guimarães, PORTUGAL)

**13.00-13.20** The CEREBRO study – CEntRal hEmodynamics, Blood pRessure and cognitiOn

P. Guimarães Cunha (Guimarães, PORTUGAL)

**13.20-13.40** The impact of Central Hemodynamic biomarkers in acute ischemic stroke prognosis and outcome

D. Gasecki (Gdansk, POLAND)

**13.40-14.00** Sympathetic Nervous System and Cognition

D. Hering (Gdansk, POLAND)

**14.00-14.30** General Discussion

**Main Program****Breakfast Session****UNDERSTANDING BETTER THE COGNITIVE IMPAIRMENT IN HYPERTENSION****Chairpersons:**

A. Coca (Barcelona, SPAIN),  
N. Khan (Vancouver, CANADA),  
S. Papageorgiou (Athens, GREECE)

**07.45-07.57** Blood pressure variability and cognition

C. Tzourio (Bordeaux, FRANCE)

**07.57-08.09** How to detect and monitor cognitive impairment in hypertensive patients

P. Guimarães Cunha (Guimarães, PORTUGAL)

**08.09-08.21** Optimal antihypertensive treatment in prevention and treatment of Dementia

A. Coca (Barcelona, SPAIN)

**08.21-08.45** General Discussion

**Breakfast Session****HYPERTENSION AND STROKE****Chairpersons:**

D. Lovic (Niš, SERBIA),  
C. Savopoulos (Thessaloniki, GREECE)

**07.45-07.57** Optimal blood pressure for mechanical thrombectomy in acute ischemic stroke patients. G. Tsivgoulis (Athens, GREECE)

**07.57-08.09** Blood pressure targets in the post-acute phase of stroke in different stroke subtypes. D. Gasecki (Gdansk, POLAND)

**08.09-08.21** The impact of blood pressure variability on stroke risk. D. Hering (Gdansk, POLAND)

**08.21-08.45** General Discussion

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### **Scientific projects:**

Ongoing:

1) **CHSP-SML Study**: The impact of Central Hemodynamic biomarkers in acute ischemic stroke prognosis and outcome at short, medium and long term. The goal is to analyse the different phenotypes of CBP during stroke, its evolution in the acute, sub-acute and chronic post-stroke evaluations, correlating these findings with cardiovascular and neurological outcomes. Recruitment started in 2019, but activity was stopped during the pandemic.

2) **CEREBRO Project** – A longitudinal cohort, followed with the goal of evaluating the prevalence of cognitive dysfunction in hypertensives, correlate different measures of central and peripheral arterial function and brain structure with cognitive decline. Centres in Latin America and Europe have signaled interest. It has started recruitment in 2019.

### **Collaborations with other WGs/Scientific Societies:**

1. **European Stroke Organisation** – planning a Joint Session with the ESO for the 2023 ESH Meeting, and possible joint activities concerning both Scientific Statements or Joint Research
2. Participation on the **Hypertension Seoul Meeting, in South Korea**, in November 2022, including a Meeting with the **WG on Stroke of the Korean Society of Hypertension** to discuss future collaborations possibilities. Participation with the topic – *“Blood Pressure, Dementia and cognitive decline - A cross talk between micro and macrocirculation”*
3. **Participation on the World Heart Federation Meeting** in, in Rio de Janeiro, Brazil with the topic – *“Subclinical Vascular Damage in hypertension: How to detect and therapeutic implications”*.
4. Participation in the **ESH Summer School** (Serbia, September 2022), with the topic *“IMPORTANCE OF HMOD ASSESSMENT: Cognitive Function”*.

**Other remarks:**

As we move along after the pandemic impact on the scientific activity of the WG, clinical research projects are being reactivated and a current status of the work progress in each project is being ascertained – at a slower pace than expected (different realities in different participating countries)

**Filed by (full name): Pedro Miguel Guimarães Marques da Cunha**

**Date:** 09/01/2023

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**Appendix:**

List of Officers and Members

WG History

WG Rules/Statutes

## CURRENT NUCLEUS OFFICERS 2018-2020

(Elected in Barcelona, June 10<sup>th</sup>, 2018)

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## Alphabetical list of the members of the Working Group on Hypertension and the Brain December 2017

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**Alphabetical list of the “associated members” of the  
Working Group on Hypertension and the Brain**

<b>First Name</b>	<b>Middle Name</b>	<b>Last Name</b>	<b>Country</b>	<b>E-mail</b>
1. Gustavo	Hernán	Cerezo	Argentina	ghcerezo@gmail.com
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## **ESH Working Group on Hypertension and the Brain**

1. In 2012 Prof. Stéphane Laurent (Paris, France) proposed to start a new Working Group within the ESH: the **Working Group on Hypertension and the Brain**;
2. The activity of this ESH WG would have as purpose a coordinated effort to improve results on the fight against stroke and cognitive decline, through the lowering of high blood pressure in primary prevention, as well as in more interaction between hypertension specialists and neurologists in BP management after stroke.

<b>Presidents:</b> 2012	Stéphane Laurent (Paris, France)
2014	António Coca (Barcelona, Spain)
2016	Dariusz Gąsecki (Gdansk, Poland)
2018	Pedro Guimarães Cunha (Guimarães, Portugal)

The new WG planned to connect ESH Excellence Centers and national Societies of Hypertension. All members of ESH Excellence Centers were asked to contact neurologists of their hospital, or nearby hospitals, and sensitize them to the objectives of the WG, thus creating an informal network of hypertension specialists and neurologists in numerous centers and countries.

The ESH Working Group should develop and implement collaborative recommendations, and promote scientific meetings or joint sessions with the purpose of debating and disseminating knowledge in the field, including:

- Guidelines, position papers, ESH Newsletters
  - a) Recommendations addressed to the writing committee of the 2013 ESH-ESC Guidelines
  - b) Position paper, reviews on hypertension and stroke (Journal of Hypertension, 2018)
  - c) Position paper, reviews on hypertension and cognitive decline (in preparation)
- Implementation of Guidelines
  1. WG sessions at regular meetings of the ESH
  2. Joint ESH-ESC (European Stroke Conference) sessions at ESC and ESH meetings (Barcelona, 2018)

3. Joint Session with the Portuguese Society of Hypertension (2016, 2017)
4. Joint Session with the Polish Society of Hypertension (2016)
5. Joint Session at the ESC Meeting (2018, Athens)
6. Joint Session with the Portuguese Society of Internal Medicine (2019)

## **Teaching course of ESH Working Group "Hypertension and the Brain"**

ESH, 8 June 2018, Barcelona, 15:00-16:00

- 15.00 – 15.15: Hypertension and brain damage - Dariusz Gasecki
- 15.15 – 15.30: Hypertension and stroke subtypes - Dagmara Hering
- 15.30 – 15.45: Management of high BP in acute ischemic stroke – Pedro Guimarães Cunha
- 15.45 – 16.00: Management of high BP in acute hemorrhagic stroke – Efstathios Manios

### **The Book**

1. Hypertension and the Brain Damage. Coca A. (ed), Springer 2016

### **The ESH - Newsletters:**

1. Hypertension and stroke subtypes: A causative role or simply association? (2016)
2. Blood pressure targets in acute intracerebral hemorrhage. 2017
3. Effects of antihypertensive treatment in Cognitive Decline (Submitted, 2019)

### **ESH - Position Papers:**

Blood pressure in acute ischemic stroke: challenges in trial interpretation and clinical management: position of the ESH Working Group on Hypertension and the Brain  
J Hypertension 2018, 36:1212-1221.

### **Joint Research Projects**

The WG has recently decided to promote joint multicentric research projects, and is currently developing two research protocols in different domains: Cognitive decline in hypertensives and central hemodynamic profile in subjects with stroke.

Currently, the WG includes 94 member form 25 countries in 4 continents.

# **Working Group on “Hypertension and the Brain”**

## **Rules and Regulations**

### **Article 1.**

The working group (WG HT & Brain) is established as a working group of the European Society of Hypertension (ESH) according to the by-laws of the ESH. The internal governance of the WG is regulated by ESH Council-approved Rules and Regulations.

### **Article 2.**

The WG encourages research, teaching, and communication of knowledge, and participates in education focused on the effects of high blood pressure and associated cardiovascular risk factors on the brain.

Specific objectives include:

- To promote, organize and/or co-ordinate research on this subject
- To gather and exchange information regarding research and related activities within the working group
- To contribute to the organization, preparation and delivery of the scientific program of the annual ESH Congress and to support and participate in other ESH scientific meetings and symposia
- To organize and participate in educational activities within the ESH
- To organize teaching workshops on suitable topics related to the brain
- To contribute to the organization, preparation and delivery of joint sessions with other relevant national or international societies in scientific meetings
- To promote and organize education on this subject
- To contribute to task forces for the development and implementation of ESH guidelines and joint guidelines with sister societies
- To establish appropriate recommendations for the ESH Council regarding the subject matter of the WG
- To develop position papers and consensus documents on hypertension and the brain in collaboration with sister societies
- To contribute to the content of the ESH website

### **Article 3.**

The Nucleus consists of:

- Officers: Chair, Vice-Chair, immediate Past-Chair, Secretary, and four officers.

- Ex-officio members: the Nucleus may nominate ex-officio members to carry out specific tasks

The Chair is elected for a non-renewable period of 2 years. The Vice-Chair automatically becomes the Chair for the following 2 years. A person may not be re-elected to these posts.

The Chair automatically becomes Past-Chair for the following 2 years, after his/her term of office has expired.

The Secretary, the Vice-Chair and the four officers are elected for 2 years, renewable for a further 2 years. After these 4-years, a person may not be re-elected to these posts during the following 4 years.

The ex-officio members are appointed for 2 years, renewable for a further 2 years.

#### **Article 4.**

The Secretary, with the agreement of the Chair, is responsible for preparing an annual report on the activities of the WG for the ESH Council and the membership, to be presented and approved at the Annual General Assembly.

#### **Article 5.**

The members of the WG Nucleus will elect the Officers (Chair, Vice-Chair, and Secretary). In order to guarantee continuity, the position of Vice-Chair will only be open to an Officer who has been a member of the Nucleus for at least 2-years.

#### **Article 6.**

The Nucleus will consist of members with a proven record in the field of hypertension and the brain. Potential members should apply to the Chair by submitting a brief (one page) curriculum vitae including relevant references related to the subject of the working group. The Chair will ratify the application, but may ask for advice from the other Officers if deemed appropriate. If an application is rejected there is no obligation to provide reasons to the applicant.

#### **Article 7.**

The Nucleus will meet at least once a year at the annual ESH Congress. The Nucleus may meet in conjunction with other events and hold conference calls when required.

#### **Article 8.**

The General Assembly will be held once a year during the annual ESH Congress. The agenda of the General Assembly will be drawn up by the Chair.