

Working group on VASCULAR STRUCTURE AND FUNCTION

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ESH 2019 SUMMARY

At the 2019 ESH meeting in Milan, we held two meetings:

WORKING GROUP MEETING: ARTERIAL STRUCTURE AND FUNCTION – TECHNIQUES, THEIR MEANING AND THEIR VALUE

Friday, June 21, from 16:00-17:00, Yellow Hall 1.

Programme:

- 16:00-16:15 **Martin Schultz:** *Central blood pressure measurement in the clinic – what's there and what's missing?*
- 16:15-16:30 **Bart Spronck:** *"Arterial stiffness" – different metrics, different meanings*
- 16:30-16:45 **Johannes Baulmann:** *Pulse wave velocity – beyond the gold standard*
- 16:45-17:00 Discussion

During our meeting, Dr. Schultz updated us on the current advancements and shortcomings on central blood pressure monitoring. Dr. Spronck subsequently focused on the importance of the measurement conditions under which arterial stiffness is measured – i.e., in vitro is not always comparable to in vivo. Finally, Dr. Baulmann critically appraised pulse wave velocity, highlighting accomplishments but also put the finger on important potential shortcomings in our current validation protocol.

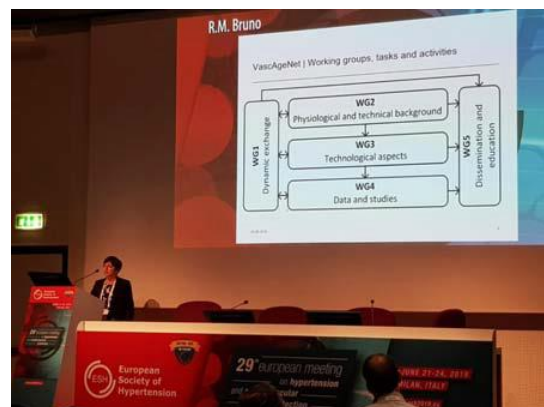
BUSINESS MEETING: THE EU-COST ACTION VascAgeNet: BUILDING A NETWORK FOR RESEARCH IN VASCULAR AGEING

Sunday, June 23, from 18:00-19:00, Yellow Hall 2.

Programme:

- 18:00-18:10 **Christopher Mayer:** *The "making of" of the VascAgeNet COST action*
- 18:10-18:20 **Rosa Maria Bruno:** *VascAgeNet: Main objectives and actions*
- 18:20-18:30 Questions and answers
- 18:30-19:00 General meeting

This year's business meeting differed slightly from a standard business meeting, in that it was started by two presentations on the EU-COST action VascAgeNet – a networking grant that was acquired by four young investigators of the ARTERY Society: Christopher Mayer, Rosa Maria Bruno, Rachel Climie, and Bernhard Hametner. During the presentations, the grant contents and timeline were briefly summarised. For more information, contact our secretary (bruno.rosa-maria@inserm.fr).



Christopher Mayer and Rosa Maria Bruno presenting the EU-COST action VascAgeNet.

Subsequently, it was announced that the Working Group Steering Committee composition changed. Rosa Maria took over the Secretary position from Bart Spronck, who took over the Chair position from Pierre Boutouyrie. Pedro Cunha (chair of the ESH Working Group on Hypertension and the Brain) remains Vice Chair.

Finally, Pierre Boutouyrie informed us that our position paper on vascular consequences of inflammation, which was the topic of the 2018 Working Group meeting, was initially rejected and is currently being prepared for resubmission to European Heart Journal.

BECOMING A MEMBER?

Our working group welcomes new members with an **interest in vascular structure and function**. Applications should have

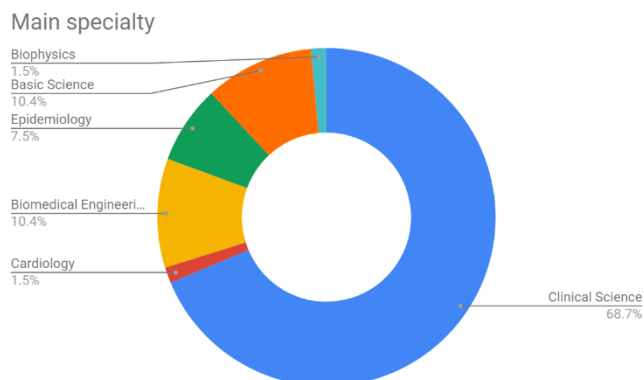
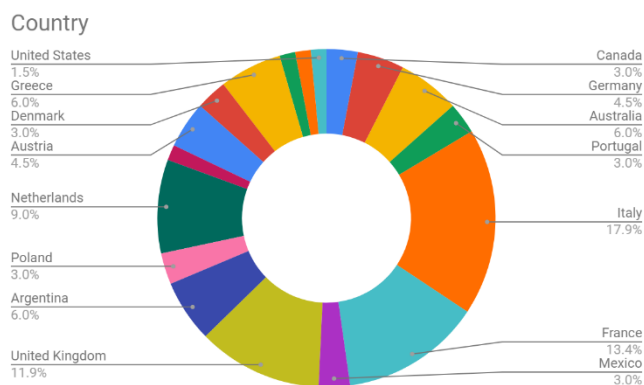
1. A degree in medicine, biomedical science, or any related field — we aim for a multidisciplinary membership.
2. A willingness to actively participate in working group activities.

New members can be from all continents — i.e., from in- or outside Europe.

Membership applications can be directed to the secretary (bruno.rosa-maria@inserm.fr).

MEMBERS

Our working group currently has **67 members** from diverse countries and specialties.



PAST MEETINGS – ESH 2018 BUSINESS MEETING

At the 2018 ESH meeting in Barcelona, we held a business meeting on Saturday, June 9 from 18:15 to 19:45.

The topic of our meeting was systemic inflammation and arterial damage, in line with our upcoming consensus paper on systemic inflammation and arterial properties.

PROGRAMME

- 18:15 **Ernesto Schiffrin:** *Inflammation and immune mechanisms in small artery remodelling and hypertension*
18:45 **Charalambos Vlachopoulos:** *Acute inflammation and large artery stiffness*
19:15 Roundtable discussion
19:45 End

SUMMARY — LARGE AND SMALL ARTERIES AT THE CENTER OF HYPERTENSION

We had a seminal session on the central role of inflammation in hypertension. This year's session was again well received, with an attendance of 40–45 people. Prof. Boutouyrie presented a general overview of the working group and summarised our activities. After this, our position paper on **vascular consequences of inflammation** was discussed through two state-of-the-art presentations by Prof. Schiffrin and Prof. Vlachopoulos, followed by an interesting wrap-up with many questions and answers.

Related to our working group, the ARTERY-ESH meeting was very successful, starting with 100 participants and finishing with over 400. New insights in investigations were developed by Prof. Boutouyrie. The basic role of small arteries environment and vascular smooth muscle cells in the development of cardiovascular diseases was presented by Prof. Heagerty and Prof. Lacolley, respectively. Prof. Cruickshank, president of the ARTERY society, presented how vascular structure and function could be integrated in cardiovascular care.