

**Nordic-Baltic Region University Research Course
Gdańsk, Poland, September 19-21, 2019**

**HYPERTENSION AND CARDIOVASCULAR DISEASE:
Focus on Brain, Cognition, Stroke
and Sympathetic Nervous System Activity**

Organized by the Polish Hypertension Society, the Swedish Society of Hypertension, Stroke and Vascular Medicine, the Danish Hypertension Society, the Finnish Hypertension Society, Norwegian Society of Hypertension, Estonian Society of Hypertension, Latvian Society of Hypertension and Atherosclerosis, Lithuanian Hypertension Society, Russian Society of Hypertension in collaboration with the Medical University of Gdańsk and International Society of Hypertension



Program Chairs: Peter M Nilsson, Lund/Malmö, and Krzysztof Narkiewicz, Gdańsk

Faculty (in alphabetic order)

Piotr Badosz (Poland)
Eivind Berge (Norway)
Mattias Brunström (Sweden)
Dariusz Gąsecki (Poland)
Anders Gottsäter (Sweden)
Dagmara Hering (Poland)
Jørgen Jeppesen (Denmark)
Thomas Kahan (Sweden)
Sverre E. Kjeldsen (Norway)
Alexandra Konradi (Russia)
Stephane Laurent (France)
Olle Melander (Sweden)
Marius Miglinas (Lithuania)
Teemu Niiranen (Finland)
Michael Hecht Olsen (Denmark)
Jonas Spaak (Sweden)
Mucha Steckelings (Denmark)
Maciej Tomaszewski (U.K.)
Karlis Trusinskis (Latvia)
Margus Viigimaa (Estonia)

Welcome address

We cordially welcome you to this Nordic-Baltic Region University Research Course in Gdańsk during three days in late September 2019. The intention is to bring together PhD students and young investigators from the region for an interactive course focused on aspects of hypertension in relation to the brain and nervous system. We have been able to bring together a Faculty of experienced researchers and clinicians to address these topics, but of great importance is the interaction and lively discussions including pro-con debates.

The Research Course is financially supported by the International Society of Hypertension – Regional Activity Group (ISH-RAG) for Europe, and endorsed by the European Society of Hypertension (ESH). Behind the programme are representatives from all the national hypertension societies in the region.

There will be an opportunity to submit abstracts for poster presentations. All course participants are encouraged to bring with them their own projects for a brief presentation and discussion with members of the Faculty.

We look forward to meeting you in Gdańsk! Plan for your attendance as flights and other forms of transportation are cheap if booked in advance. National societies will be asked to support their course delegates financially.

Welcome!

Peter M Nilsson, Professor
Lund University, Sweden
Chair: ISH-RAG Europe

Krzysztof Narkiewicz, Professor
Gdańsk Medical University, Poland
Chair: Organising Committee



General information

Date: 19–21 September, 2019

Venue: Hotel Almond, Gdańsk, Poland

Registration fee: 400 EUR

Price includes taxes.

The registration fee includes:

- hotel accommodation (2 nights)
- all meals
- refreshments during breaks
- access to the conference materials

For further details please contact:

Prof. Krzysztof Narkiewicz

Department of Hypertension and Diabetology
Medical University of Gdansk
Debinki 7c, 80-952 Gdansk, Poland

e-mail: krzysztof.narkiewicz@gumed.edu.pl

Program Outline

September 19, 2019 THURSDAY
(at the Medical University of Gdansk)

10:00-10:30 Registration, coffee

10:30-11:30 Welcome, introduction, program presentation; presentation of participants and national representatives

Krzysztof Narkiewicz (Poland): A short introduction on the relationship between hypertension, brain, cognition and stroke

Day 1. Epidemiology, genetics and mechanisms of hypertension and its complications

11:30-12:25 **Session 1**

Worldwide trends in blood pressure and other risk factors: implications for future cardiovascular disease mortality. Piotr Bandosz (Poland) (20 min)

Epidemiology of hypertension: novel insights from the Finn-Home Study and the Framingham Heart Study. Teemu Niiranen (Finland) (20 min)

Discussion (15 min)

12:25-13:40 **Session 2**

Genetic and molecular background of hypertension in the post-GWAS era. Maciej Tomaszewski (U.K.) (20 min)

The early life influences on neuroendocrine and nervous function. Peter Nilsson (Sweden) (20 min)

Vasopressin, an endocrine link between cardiometabolic risk and the brain? Olle Melander (Sweden) (20 min)

Discussion (15 min)

13:40-14:30 Lunch

14:30-15:30 Visit to the research facility of the Medical University of Gdansk (including functional MRI)

15.30-16.30 **Session 3**

Arterial damage and cognitive decline in chronic kidney disease patients. Marius Miglinas (Lithuania) (20 min)

Blood pressure variability and risk of cardiovascular endpoints with focus on cerebral stroke. Eivind Berge (Norway) (20 min)

Discussion (20 min)

16:30-17:00 Break, coffee

17:00-19:00 Students' project session 1

Project presentations and discussions in 4 parallel groups (with 5 faculty members in each group)

20:00 Dinner (combined with team building - surprise)

September 20, 2019 Friday (at the hotel)

Day 2: The integrated clinical approach – Treatment aspects

08:30-09:30 Session 4

Early versus late-onset hypertension. Teemu Niiranen (Finland) (20 min)

Do randomized controlled trials and observational data yield the same results? Mattias Brunström (Sweden) (20 min)

Discussion (20 min)

09:30-10:30 Session 5

Renin-angiotensin-aldosterone system and cerebrovascular disease – Mucha Steckelings (Denmark)

How does blood pressure control influence the benefits of anticoagulant therapy ?

Thomas Kahan (Sweden)

Discussion (20 min)

10:30-11:00 Break, coffee

11:00-12:00 Session 6

Treatment of acute stroke – insights from the SCAST Study. Eivind Berge (Norway) (20 min)

Blood pressure in acute ischemic stroke: challenges in trial interpretation and clinical management. Dariusz Gąsecki (Poland) (20 min)

Discussion (20 min)

12:00-13:00 Session 7

Blood pressure control after the stroke: does the type of stroke matter?. Karlis Trusinskis (Latvia).

Why we need multidisciplinary care in vascular disease and stroke ? Anders Gottsäter (Sweden)

Discussion (20 min)

13:00-14:00 Lunch

14:00-15:00 Session 8

Telemedicine and E-health in hypertension management. Margus Viigimaa (Estonia) (20 min)

Mobile-based hypertension application. Michael Hecht Olsen (Denmark) (20 min)

Discussion (20 min)

15:00-16:00 Session 9: Pro-Con debates

AN EXPERIMENTAL PRO-CON DEBATE: "ATTACK AND DEFENCE OF THE SYSTOLIC BLOOD PRESSURE INTERVENTION TRIAL (SPRINT)" focusing on the postulate that "the design of SPRINT, with incident heart failure included in the primary endpoint, prohibited showing a difference in cerebral stroke despite a major difference in blood pressure". Pro (attack): Sverre E. Kjeldsen (Norway), Con (defence): All Ph.D. Students. Moderator: Maciej Tomaszewski (U.K.)

Pro-Con debate 2. Student debaters

16:00-16:30 Break, coffee

16:30-18:30 Students' project session 2

Project presentations and discussions in 4 parallel groups (with 5 faculty members in each group)

19:00 Social program and dinner

September 21, 2019 SATURDAY (at the hotel)

Day 3. The brain and nervous system in perspective

08:15-09:15 Session 10

Sympathetic nervous system and hypertension: old theory - new data. Alexandra Konradi (Russia)

Device-based hypertension therapy: focus on autonomic modulation. Dagmara Hering (Poland) (20 min)

Discussion (20 min)

09:15-10:15 Session 11

Potassium, blood pressure and stroke: epidemiological and mechanistic relationships. Jørgen Jeppesen (Denmark)

Sympathetic activation and the heart: from stroke to Takotsubo syndrome. Jonas Spaak (Sweden)

Discussion (20 min)

10:15-10:45 Break, coffee

10:45-12:45 **Students' project session 3**

Project presentations and discussions in 4 parallel groups (with 5 faculty members in each group)

12:45-14:15 **Session 16**

Interventions improving drug adherence in hypertension. Maciej Tomaszewski (UK)

State-of-the-art Lecture: Reversibility of Early Vascular Aging - EVA: to what extent?
Stephane Laurent (France)

Course summary

Farewell

15:00 Lunch

Departures