

The [Special Interest Group on Vascular Physiology of the Scandinavian Physiological Society](#) has arranged an exciting satellite meeting on the day before the Europhysiology 2018. To celebrate the plans to have a series of biennial joint meetings of [The Physiological Society](#), the [Scandinavian Physiological Society](#), the [Deutsche Physiologische Gesellschaft](#) and the [Federation of European Physiological Societies](#), we invite all scientists with an interest in cardiac physiology to participate.

Venue: [QEII Centre, Broad Sanctuary, Westminster, London SW1P 3EE](#)

Time: 12.00 - 20.00, Thursday 13 September 2018

Attendance is free, but registration to Europhysiology 2018 is required. Refreshments will be provided.

Organisers:

Vladimir Matchkov, Aarhus University, Denmark

Ingrid Fleming, Goethe University, Germany

Thomas Andrew Jepps, University of Copenhagen, Denmark

Charlotte Mehlin Sørensen, University of Copenhagen, Denmark

Sponsored by the [Scandinavian Physiological Society](#)



Programme [[PDF](#)]

12.00 Registration and lunch

Lunch will be provided on the fifth floor of the conference centre together with the SPS Special Interest Groups on Vascular Physiology and Skeletal Muscle Physiology.

13.00 Welcome address

1:10 – 3:10 *Vascular stability*

1:10 – 1:50 *The role of novel lipid mediators in vascular stability*

[Professor Ingrid Fleming, Goethe University, Germany](#)

1:50 – 2:10 selected abstract: [Seidinger A.](#), König G., Kostenis E., Fleischmann B., Wenzel D. “The Gq protein inhibitor FR900359 induces strong vasodilation in pulmonary arteries”.

2:10 – 2:30 selected abstract: H.A.T Pritchard, E. Yamasaki, P.W. Pires, A.S Greenstein, Mark T. Neslon & S. Earley. “Junctophilin-2 Supports Functional Coupling Between Type 2 Ryanodine Receptors and BK Channels in Vascular Smooth Muscle Cells”.

2:30 – 3:30 Coffee & Posters

3:30 – 5:30 Vascular signalling

3:30 – 4:10 *Caveolae, and vasodilator signalling mechanisms as targets for pravastatin treatment of preeclampsia*

[Associate professor Shaun Sandow, University of the Sunshine Coast & University of New South Wales, Australia](#)

4:10 – 4:50 *Changes in the endothelial network in vascular disease*

[Professor John McCarron, University of Strathclyde, UK](#)

4:50 – 5:10 selected abstract: Iain A Greenwood and [Jennifer B Stott](#). “Specific G β subunits differentially regulate Kv7.4 channels”.

5:10 – 5:30 selected abstract: [Irakli Kopaliani](#), Dmitry Egorov, Birgit Zatschler, Stefanie Titze, Christian Reeps, Magnus Sindt, Klaus Matschke, Sems Malte Tugtekin, Axel Gödecke, Andreas Deussen. “Dysfunctional endothelium promotes arterial remodeling through activation of matrix metalloproteinase 2 and vascular inflammation via Akt1 signaling”.

5:30 – 6:30 Refreshments & Posters

6:30 – 8:00 Integrative vascular physiology

6:30 – 7:00 *Hypoperfusion, hypertension and Alzheimer's disease*

[Professor Seth Love, University of Bristol, UK](#)

7:00 – 7:15 selected abstract: [Matthias S. Leisegang](#), Sofia-Iris Bibli, Stefan Günther, Beatrice Pflüger-Müller, James A. Oo, Jiong Hu, Fragiska Sigala, Reinier A. Boon, Ingrid Fleming and Ralf P. Brandes. “Long non-coding RNA MANTIS is induced by statins and limits monocyte adhesion to human endothelial cells”.

7:15 – 7:30 selected abstract: [Trine P. Ludvigsen](#), Lisbeth H. Olsen, Henrik D. Pedersen, Berit Ø. Christoffersen, Lars J. Jensen. “Structural remodeling in cerebral and mesenteric arteries from obese Göttingen minipigs with or without diabetes”.

7:30 – 8:00 The remarkable cardiovascular system of giraffes

[Professor Christian Aalkjaer, Aarhus University, Denmark](#)

8:00- Drinks and networking

POSTER PRESENTATIONS:

1. Maria Bloksgaard, Mariana Morales-Quinones,, Luis Martinez-Lemus. “Disruption of the smooth muscle actin cytoskeleton decreases human resistance artery stiffness and abolishes smooth muscle contractile function”.
2. Maria Bloksgaard, Sören Möller, Thomas Leurgans, Akhmadjon Irmukhamedov, Lars Riber, Yu Wang, Jo De Mey. “Inverse relationship between the media-to-lumen ratio and smooth muscle contractile function in resistance arteries from patients with residual cardiovascular disease”.
3. Heike Langbein, Amna Shahid, Peter Cimalla, Christian Schnabel, Edmund Koch, Henning Morawietz, Coy Brunssen. “Optical Coherence Tomography as a Novel Method to Measure Endothelial Dysfunction in Mice In Vivo”.

4. R. Schubert, A. Bachmann, F. Stocker, P. Quinn, S. Braun, C. Kammermeier, A. Kannt, N. Schmidt. "Organotypic expression of vascular smooth muscle Kv7.1 channels – potential for renoprotection?"
5. Jennifer van der Horst, Thomas A. Jepps. "A novel physiological role for dynein motor proteins in arterial smooth muscle".
6. Andreas Frees, Kasper Assersen, Pernille B.L. Hansen, Mia Jensen, Kirsten Madsen, Anja Toft, Boye L. Jensen. "Natriuretic peptides BNP and ANP and soluble guanylate cyclase agonists relax human intrarenal arteries".
7. Christian Staehr, Rajkumar Rajanathan, Elena Bouzinova, Christian Aalkjaer, Flemming Winther Bach, Vladimir Matchkov. "Migraine Associated Mutation in the $\alpha 2$ Isoform Na^+, K^+ -ATPase leads to Disturbance in Neurovascular Coupling".
8. Pedro Malacarne, Oliver Löwe, Ilka Wittig, Valeska Helfinger, Franziska Moll, Nina Kurrle, Niklas Müller, Ingrid Fleming, Ralf Brandes, Katrin Schröder, Flávia Rezende. "Cytochrome P450 reductase contributes to NADPH-dependent signal in membrane assays used for measuring Nox activity".
9. Dmitry D. Postnov, Evren Erdener, Jianbo Tang, David Boas. "Novel quantitative tool for the blood flow imaging".
10. E.K. Selivanova, D.K. Gaynullina, O.S. Tarasova. "Thyroxine direct vasodilating effect in skeletal muscle artery is mediated by integrin $\alpha v \beta 3$ ".
11. Maximilian Matthies, Maria Bloksgaard, Lars Peter Riber, Akhmadjon Irmukhamedov, Jo G. R. De Mey. "A novel role for cyclooxygenase, NO-synthase and soluble guanylyl cyclase in resistance arteries from patients with cardiovascular disease".
12. Daria S. Kostyunina, Anastasia A. Shvetsova, Dina K. Gaynullina and Olga S. Tarasova. "The role of chloride ions in contraction of rat saphenous artery changes during postnatal development partly due to influence of sympathetic innervation".
13. Andreas Petry, Benjamin Trautz, Damir Kracun, Zuwen Zhang, Frederick Vogel, Michael Weitnauer, Agnes Görlach. "Hypoxic stabilized p22phox modulates vascularization in vitro and in vivo and promotes pulmonary hypertension".
14. SL Sandow, JB Stott & IA Greenwood. "Kv7 channels in rat mesenteric artery endothelium".
15. Giulia Ederle, Kamila Behnam and Alister J McNeish. "The effect of inhibition of PKA on omega-3 Polyunsaturated Fatty Acids (n-3 PUFAs) mediated dilation".
16. Asger Maare Søndergaard, Cathrine Overgaard, Vladimir V. Matchkov and Christian Aalkjaer. "Perivascular nerve-mediated vasodilation is predominantly $\beta 1$ -AR mediated in vivo in rat mesenteric small arteries".
17. Kamila Behnam, Roshan Limbu, Alister J McNeish. "Structural properties of omega-3 polyunsaturated fatty acids (n-3 PUFAs) required to evoke vasodilation mediated by Kv7 channels in rat aorta".
18. Kristina S. Lyngsø, Henrik Dimke, Pernille B. L. Hansen. "Role of mineralocorticoid receptors in mediating endothelial dysfunction in experimental diabetes".

19. R. Rajanathan, C. Stæhr, S. Sandow, C. Aalkjaer, V. Matchkov. "Increased contribution of the inward-rectifying K^+ channels to K^+ -induced dilation of cerebral arteries in Familial hemiplegic migraine type 2."
20. B. Hesse, P. Kümpers, K. Kusche-Vihrog, J.-R. Nofer, H. Pavenstädt, W. Linke, A. Lukasz. "Influence of high-density-lipoproteins on the endothelial glycocalyx".