

# Cardiovascular Network Retreat 2013



**GRK 1566: Protecting the Heart from Ischemia: PROMISE**  
Giessen - Barcelona (Klaus T. Preissner)



**GRK 880: Vascular Medicine/**  
Mannheim - Groningen (Hans-Peter Hammes)



**GRK 1874 DIAMICOM**  
Mannheim – Groningen (Hans-Peter Hammes)



**GRK 1508: Arterial Remodeling: EuCAR**  
Aachen - Maastricht (Jürgen Bernhagen)

**Venue: Rauschholzhausen Castle, Ferdinand-von-Stumm-Straße**  
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# Cardiovascular Network Retreat 2013

Rauischholzhausen Castle, March 7<sup>th</sup> - 9<sup>th</sup>, 2013

## Thursday, March 7, 2013

- 15:30 **Shuttle Service** from Giessen to Rauischholzhausen Castle
- 16:30 **Arrival** at Rauischholzhausen Castle
- 17:00 **Welcome & Introduction**  
Klaus T. Preissner (GI), Hans-Peter Hammes (MA), Jürgen Bernhagen (AC)

### Session 1 MY HEART IS MY CASTLE 17:10 - 19:30

- 17:10 **Oxygen sensing pathways and mTORC1 regulation: Possible impact on heart biology**  
Julián Aragonés (Madrid, Spain)
- 18:00 **Contribution of the calcium-sensing receptor to the electromechanical coupling of cardiomyocytes**  
Elena Dyukova (GRK 1566, Giessen)
- 18:25 **Induction of myocardial ischemic injury by extracellular RNA: A case for tumor necrosis factor (TNF- $\alpha$ )-shedding**  
Hector Cabrera Fuentes (GRK 1566, Giessen)
- 18:50 **TBA**  
David García Dorado (GRK 1566, Barcelona)
- 19:45 - - - - - *Dinner* - - - - -

### CANDLE LIGHT LECTURE

- 21:10 **The mitochondrial permeability transition pore: Control mechanisms related to cardiac injury and protection**  
Fabio DiLisa (Padova, Italy)
- 22:00 - - - - - *Get-together* - - - - -

## Friday, March 8, 2013

### Session 2 HOP ON AND OFF THE TUBE 08:30 - 10:35

- 08:30 **Soluble adenylyl cyclase, a protective biosensor for endothelium under inflammatory stress**  
Anupam Das (GRK 1566, Dresden)
- 08:55 **Small vessels with huge impact: leaky microvessels exacerbate atherosclerosis**  
Judith Sluimer (GRK 1508, Maastricht)
- 09:20 **Impact of the EphrinB/EphB-system on monocyte – endothelial cells interactions**  
Hui Liu (GRK 880, Mannheim)
- 09:45 **The role of endothelial CXCR4 in injury-induced restenosis**  
Heidi Noels (GRK 1508, Aachen)
- 10:10 **Endothelial plasticity: Shifting paradigms through force feedback**  
Jan-Renier Moonen (GRK 880, Groningen)
- 10:40 - - - - - *Coffee break* - - - - -

**Session 3** **UNCHAIN YOUR HEART** **11:10 - 13:00**

- 11:10 **Fermented beverages and cardiovascular disease**  
Gemma Vilahur (GRK 1566, Barcelona)
- 11:35 **Intracoronary injection of encapsulated antagomir 52a promotes angiogenesis and prevents adverse infarct remodeling in a pig model of myocardial infarction**  
Neus Bellera Gotarda (GRK 1566, Barcelona)
- 12:00 **Involvement of RISK and SAFE pathways in the effects of Cx43 deficiency on myocardial ischemia-reperfusion injury**  
Antonio Rodríguez Sinovas (GRK 1566, Barcelona)
- 12:25 **Ischemic postconditioning extends SERCA inhibition during the onset of myocardial reperfusion**  
Víctor Hernando Martínez (GRK 1566, Barcelona)
- 13:00 - - - - - *Lunch break & Poster discussion* - - - - -

**Session 4** **VASCULAR ROCK'N ROLL** **15:00 - 17:10**

- 15:00 **From osmotic to mechanical stress: The impact of NFAT5 on the vascular smooth muscle cell phenotype**  
Thomas Korff (GRK 880, Heidelberg)
- 15:30 **Role of platelets in vascular remodeling**  
Judith Cosemans (GRK 1508, Maastricht)
- 15:55 **The role of fetuin-A in endochondral ossification**  
Laura Brylka (GRK 1508, Aachen)
- 16:20 **Vascular calcification: The price to pay for anticoagulation with vitamin K-antagonists**  
Leon J. Schurgers (GRK 1508, Maastricht)
- 16:45 **Analysis of the haemodynamic and biomechanical properties of the lumina in aortic dissections: complementary value of in-silico and in-vitro assessments**  
Paula Rudenick (GRK 1566, Barcelona)
- 17:10 - - - - - *Coffee break* - - - - -

**Session 5** **BETWEEN LIFE AND DEATH** **17:40 - 19:45**

- 17:40 **Centrosome structure and function: Implications for cardiac regeneration**  
Felix Engel (GRK 1566, Erlangen)
- 18:05 **CXCL1 promotes arteriogenesis**  
Mark Vries (GRK 1508, Maastricht)
- 18:30 **Two-photon microscopic imaging in atherosclerosis research**  
Pyta, Jürgen (GRK 1508, Munich)
- 18:55 **Effect of age on mitochondrial- SR communication**  
Celia Fernández Sanz (GRK 1566, Barcelona)
- 19:20 **Cell death in physiology and pathology**  
Chris Reutelingsperger (GRK 1508, Maastricht)
- 20:00 - - - - - *Dinner & Social Highlight ("ANDY CLAPP")* - - - - -

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<b>Session 6</b>	<b>HIDDEN SEDUCERS IN METABOLICS</b>	<b>08:30 - 10:10</b>
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- 08:30     **miRNAs in endothelial dysfunction**  
 Guido Krenning (GRK 880, Groningen)
- 08:55     **Effects of liraglutide and erythropoietin on glucose-induced neuronal damage in *C. elegans***  
 Kanyanat Wongchai (GRK 880, Mannheim)
- 09:20     **N-octanoyl-dopamine improves acute kidney injury: A possible role of vanilloid receptor subtype 1 (TRPV 1)**  
 Prama Pallavi (GRK 880, Mannheim)
- 09:45     **Diabetic retinopathy: Adipose-derived stem cells (ADSC) to the rescue?!**  
 Marco Harmsen (GRK 880, Groningen)
- 10:20     - - - - - *Coffee break* - - - - -

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<b>Session 7</b>	<b>ATHERO-IGNITION AT ITS BEST</b>	<b>10:50 – 13:00</b>
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- 10:50     **Plasmacytoid dendritic cells in atherosclerosis: tolerogenic or immunogenic?**  
 Erik Biessen (GRK 1508, Maastricht)
- 11:15     **Myocardial edema: MRI insights into myocardial water distribution**  
 Mireia Andrés Villarreal (GRK 1566, Barcelona)
- 11:40     **IL4-inducible transcription factor FOXQ1 activates monocyte transmigration during inflammation**  
 Julia Kzhyshkowska/ Ilja Ovsy (GRK 880, Mannheim)
- 12:05     **MIF-mediated B cell chemotactic responses are regulated by CXCR4, CD74 and ZAP-70**  
 Omar El Bounkari (GRK 1508, Aachen)
- 12:30     **Role of platelet-specific junctional adhesion molecule – A (JAM-A) in the progression of atherosclerosis**  
 Rory R. Koenen (GRK 1508, Maastricht)
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- 13:00     **Concluding Remarks & Business Meeting**
- 13:30     - - - - - *Farewell Snacks* - - - - -
- 14:00     **End of Meeting, Shuttle service** from Rauschholzhausen Castle to Giessen
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# Poster presentations

Posters are displayed during the entire time of the meeting.  
Presentation and discussion: Friday 13:30 – 15:00 h

- P1 **Role of Nox 4 in ischemia/reperfusion injury**  
Christine Hirschhäuser (GRK 1566, Giessen/ Barcelona)
- P2 **S-Nitrosylation of mitochondrial connexin 43: A possible mechanism mediating IPC in rat hearts**  
Daniel Soetkamp (GRK 1566, Giessen/ Barcelona)
- P3 **Post-ischemic pulmonary remodeling: Effect of high fat diet and ageing**  
Leartha Pervizaj-Oruqaj (GRK 1566, Giessen/ Barcelona)
- P4 **Hypoxia-induced effects in endothelial cells**  
Isabella Sniegon (GRK 1566, Giessen/ Barcelona)
- P5 **Induction of vasculogenesis in mouse embryonic stem cells by  $\alpha 2$  macroglobulin activating LRP1 signaling pathway**  
Febina Ravindran, Heinrich Sauer (GRK 1566, Giessen/ Barcelona)
- P6 **Protective effects of adiponectin and the adiponectin paralogs CTRP 7 and 9 in cardiomyocytes**  
Dorothee Stumpp (GRK 1566, Giessen/ Barcelona)
- P7 **Cardiomyocyte proliferation screening system identifies potential inducer of cardiomyocyte proliferation**  
Ajit Magadum (GRK 1566, Bad Nauheim/ Barcelona)
- P8 **The role of MIF in diabetic retinopathy**  
Jing Wan (GRK 880, Mannheim/ Groningen)
- P9 **Activation of Smad3 and Smad1/5 pathways by TGF $\beta$ 1 in human macrophages: Implication in cardiometabolic disorders**  
Kareem Awad (GRK 880, Mannheim/ Groningen)  
authors: Nurgazieva D., Ming W., Ovsyi I., Popova A., Awad K., Goerdts S., Kzhyshkowska J., Gratchev A.
- P10 **Supraphysiological wall stress disables myocardin function**  
Larissa Pfisterer (GRK 880, Mannheim/ Groningen)
- P11 **Characterization of Leda-1 expression and processing**  
Siladitta Biswas (GRK 880, Mannheim/ Groningen)  
authors: Biswas S., Evdokimov K., Géraud C., Goerdts S.
- P12 **CSN5, a novel player in atherosclerosis, confers atheroprotection**  
Yaw Asare (GRK 1508, Aachen/ Maastricht)

- P13 **Analysis of MIF receptor complexes by FRET and PLA**  
Joanna Korbiel (GRK 1508, Aachen/ Maastricht)
- P14 **Inhibition and regression of calcification in fetuin-A deficient mice**  
Anne Kinkeldey (GRK 1508, Aachen/ Maastricht)
- P15 **MIF-mediated B cell chemotactic responses are regulated by CXCR4, CD74 and ZAP-70**  
Christina Klasen (GRK 1508, Aachen/ Maastricht)
- P16 **The role of IKK $\alpha$  in atherosclerosis**  
Pathricia Tilstam (GRK 1508, Aachen/ Maastricht)
- P17 **Role of obesity on the myocardium and its tolerance to ischemia-reperfusion in a murine model**  
Marcos Poncelas Nozal (GRK 1566, Giessen/ Barcelona)
- P18 **The contractile inhibitor blebbistatin prevents reperfusion injury**  
Úrsula Vilardosa Vila (GRK 1566, Giessen/ Barcelona)
- P19 **N-acyl-dopamine derivates induce the Unfolded Protein Response in endothelial cells: Is this important for a protective phenotype?**  
Eleni Stamellou (GRK 880, Mannheim/ Groningen)  
authors: Stamellou E., Becker A., Wolf K., Palavi P., Yard B.