

10<sup>th</sup> & 11<sup>th</sup> January 2020

## WELCOME

Dear Colleagues and Friends,

we are delighted to welcome you to the first “Myocardial function symposium” of the German Cardiac Society Working Group on Myocardial Function and Energetics (WG13), which is organized as a Joint Meeting with the Austrian Society of Cardiology Working Group Cardiovascular Biology and Thrombosis Research (WG1)..

The WG13 decided to establish regular meetings to exchange research knowledge and to foster scientific collaboration with scientists of similar research interest. The particular purpose of having this year’s meeting in Graz is to foster scientific exchange and collaboration with scientist of the ÖKG, in particular with members of the Working Group 1. Beyond this opportunity, we kindly invite scientists and clinicians of all areas to participate in the meeting and would like to create a particularly interactive atmosphere for exchange for all participants. The meeting is also meant to connect basic scientists and clinicians and thus offers sessions on basic science and clinical patient management. Given the beneficial effects on cardiovascular outcomes by novel classes of antidiabetic drugs in recent clinical trials, we decided to set the focus of this meeting on the understanding of underlying mechanisms and treatment options of cardiometabolic disease. It will thus be an extraordinary honor to welcome Prof. E. Dale Abel as a world leading expert in diabetology and cardiovascular disease to give a keynote lecture, and Prof. Filip Swirski as a world leading expert in inflammation and immunology to give a special lecture. Finally, we would like to emphasize that students and young scientists are particularly welcome to participate and may particularly benefit from the basic science sessions on models and methods in cardiometabolic research.

The symposium is held in the Aula of the MED CAMPUS Graz on the campus of the Medical University of Graz. Contact information and detailed travel instructions follow below in this flyer. We wish all participants a very stimulating and exciting stay here in Graz.

Yours sincerely,

Heiko Bugger  
Division of Cardiology  
Medical University of Graz  
Austria

Katrin Streckfuß-Bömeke  
Heartcenter–Cardiology and Pneumology  
University Medicine Göttingen  
Germany

unter wissenschaftlicher  
Beteiligung der:



Wissenschaftliche Gesellschaft für Innovation in der Herzmedizin

Universitäres Herzzentrum Graz



# 1<sup>st</sup> Myocardial Function Symposium: “Targets in cardiometabolic disease”

10<sup>th</sup> & 11<sup>th</sup> January 2020

Sponsored by



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## Joint Meeting:

**WG13 – Myocardial Function and Energetics, German Cardiac Society (DGK)**

**WG1 – Cardiovascular Biology and Thrombosis Research, Austrian Society of Cardiology (ÖKG)**

12:00 **Strategic meeting WG13 (Lunch meeting)**

13:00 Welcome (Bugger, Graz, AUT)

### Session 1

13:05 – 15:00 **Basic Science Session I: Ex-vivo cardiac cell models and methods: current status and future prospects**

Chair: Streckfuß-Bömeke (Göttingen, GER), Rainer (Graz, AUT)

13:05 How to evaluate the cardiac function in vivo vs. ex vivo? (Schwarzer, Jena, GER)

13:25 Cardiometabolic measurements in isolated cardiomyocytes (Niemann, Giessen, GER)

13:45 Cardiometabolic disease modeling using a patient-specific stem cell model (Dudek, Würzburg, GER)

14:05 Systems biology in cardiometabolic research (Metabolomics) (Birner-Grünberger, Graz, AUT)

14:25 Sophisticated methods to evaluate mitochondrial biology (Malli, Graz, AUT)

14:45 Novel technologies for mitochondria and cell research (Gnaiger, Innsbruck, AUT)

15:00 – 15:15 Coffee break

### Session 2

15:15 – 16:50 **Basic Science Session II: In vivo models of cardiac disease**  
Chair: Sedej (Graz, AUT), Neef (Regensburg, GER)

15:15 Animal models of cardiac disease I: HFpEF models (Wallner, Graz, AUT)

15:35 Animal models of cardiac disease II: HFrEF models (Haubner, Zurich, CH)

15:55 Animal models of cardiac disease III: Models of cardiac stress (Backs, Heidelberg, GER)

16:15 Animal models of cardiac disease IV: Diabetes and heart disease in pigs (Hinkel, München, GER)

16:35 Animal models of cardiac disease V: Cardiac interventions in large animal models (Manninger-Wünscher, Graz, AUT)

16:50-17:05 Coffee break

### Session 3

17:05 – 18:45 **Basic Science Session III: Emerging mechanisms in diabetic heart disease**  
Chair: Hamdani (Bochum, GER), Niessner (Wien, AUT)

17:05 Inflammation in cardiometabolic disease (Wolf, Freiburg, GER)

17:25 NAD<sup>+</sup> metabolism and sirtuins in cardiometabolic disease (Abdellatif, Graz, AUT)

17:45 Calcium handling and signaling in cardiometabolic disease (Wagner, Regensburg, GER)

18:05 **Special lecture:** Cardiovascular disease in diabetes: Is it all about the guts? (Swirski, Boston, USA)

18:45 - 19:45 **Casual Get Together for Interaction**

20:00 **Speakers Dinner**

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### Session 4

- 8:30 – 9:55      **Novel antidiabetic drugs: The road to cardioprotection**  
(Joint Session with AG23 – Heart and Diabetes, DGK)  
Chair: Sossalla (Regensburg, GER), Zirlik (Graz, AUT)
- 8:30      Welcome (Zirlik, Graz, AUT)
- 8:35      Cardiovascular outcomes of novel antidiabetic drugs (von Lewinski, Graz, AUT)
- 8:55      An endocrinologist view of use of SGLT2 inhibitors and GLP-1 receptor agonists (Kim, Seoul, KOR)
- 9:15      Mechanisms underlying heart disease in diabetes (Rohrbach, Giessen, GER)
- 9:35      Cardioprotective mechanisms of SGLT2 inhibition (Pabel, Regensburg, GER)
- 9:55      Cardioprotective mechanisms of GLP1 agonism (Lehrke, Aachen, GER)
- 10:15 – 10:30      Coffee break

### Session 5

- 10:30 – 11:45      **Optimal risk factor management and treatment in diabetic patients**  
Chair: Ablasser (Graz, AUT), Maack (Würzburg, GER)
- 10:15      Optimal lipid lowering: Established and novel therapies (Drexel, Dornbirn, AUT)
- 10:35      Omega-3 fatty acids in reducing risk for cardiovascular diseases: Fact, fancy or folly?  
(März, Mannheim, GER)
- 10:55      Pleiotropic effects of NOACs: How many actions and cardioprotective effects have NOACs ?  
(Siller-Matula, Wien, AUT)
- 11:05      Heart failure treatment in diabetics: Current drugs and emerging options  
(Maack, Würzburg, GER)
- 11:25-11:30      Short break
- 11:30      **Keynote lecture:** Treating diabetic heart disease: Where do we go? (Abel, Iowa City, USA)  
Chair: Bugger (Graz, AUT), Toischer (Göttingen, GER)
- 12:20      Conclusion and Lunch

### Session Chairs:

- |   |                                       |
|---|---------------------------------------|
| Katrin Streckfuß-Bömeke (WG 13, Vice Speaker) | Simon Sedej (WG 1)                    |
| Stefan Neef (WG 13)                           | Klemens Ablasser                      |
| Karl Toischer (WG 13)                         | Robert Zweiker                        |
| Peter Rainer (WG 1)                           | Andreas Zirlik                        |
| Nazda Hamdani (WG 13)                         | Peter Rainer (WG 1)                   |
| Heiko Bugger (WG 13, Speaker)                 | Samuel Sossalla (WG 13, Past Speaker) |
| Alexander Niessner (WG 1, Vice Speaker)       | Christoph Maack (WG 13)               |

### Speakers:

- |                           |                                  |
|---------------------------|----------------------------------|
| Dirk von Lewinski         | Jolanta Siller-Matula            |
| Stefan Wagner (WG 13)     | Steffen Pabel (WG 13)            |
| Michael Schwarzer (WG 13) | Mahmoud Abdellatif (WG 1)        |
| Dennis Wolf               | Johannes Backs (WG 13)           |
| Roland Malli              | Markus Wallner (WG 1)            |
| Ruth Birner-Grünberger    | Rabea Hinkel                     |
| Bernd Niemann             | Bernhard Haubner (WG 1, Speaker) |
| Susanne Rohrbach          | Christoph Maack (WG 13)          |
| Michael Lehrke            | Erich Gnaiger                    |
| Jan Dudek (WG 13)         | Martin Manninger-Wünscher        |
| Heinz Drexel              | Jaetaek Kim                      |
| Winfried März             |                                  |

### Keynote/Special Speakers:

- Dale Abel  
Filip Swirski



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## Directions

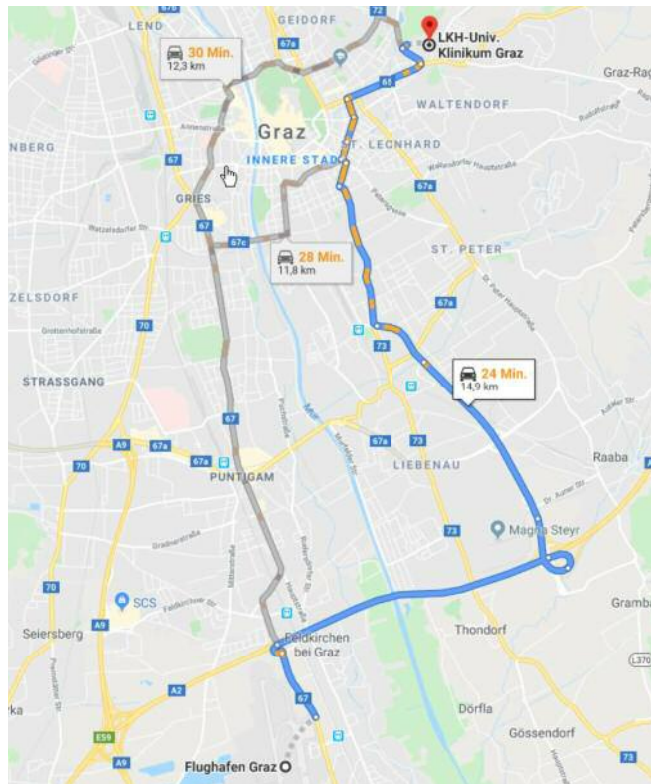
### From the airport

#### With the train:

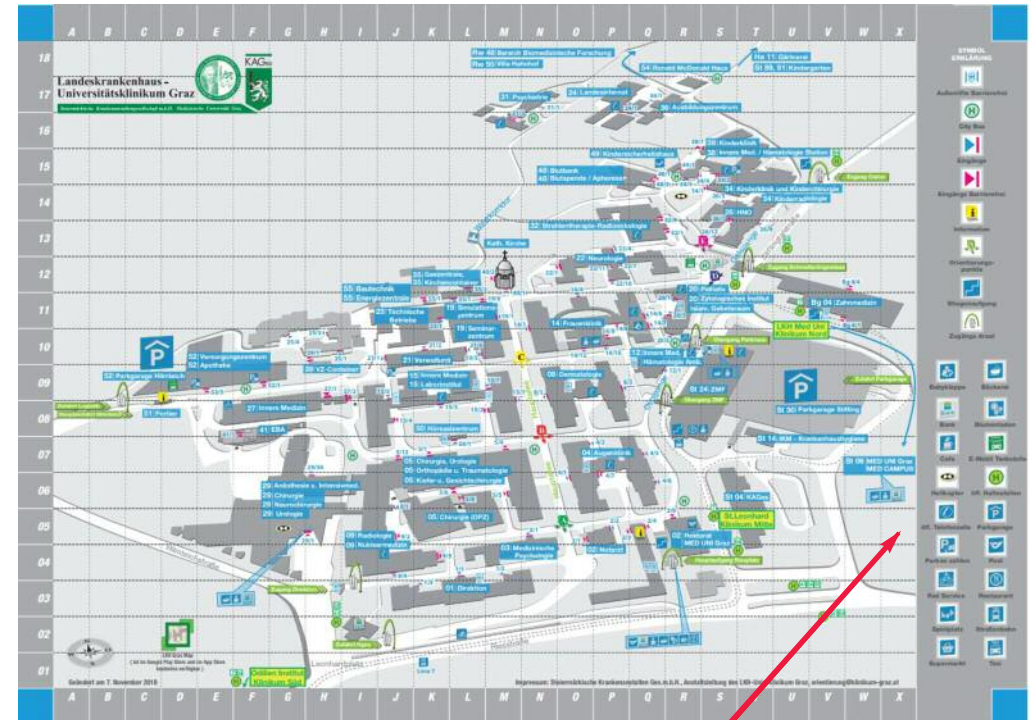
From the Airport Graz-Feldkirchen take the train to Graz Central Station, change to tram no. 7 (direction LKH Med Uni/Klinikum Nord ), get off at the stop “St.Leonhard/Klinikum Nord ”. From there proceed right and take the pavement to the Med Campus and continue walking. After a couple of meters you will reach the entrance of the building on your left-hand side.

#### With the rental car

Address is Stiftingtalstrasse 2, 8010 Graz  
Parking facilities: Visitors car park „LKH-Univ. Klinikum“ or basement garage below the “Eingangsgebäude” (Billa parking garage).



## Medical University campus map



Aula Med Campus