



# 5TH JAPAN-GERMANY SYMPOSIUM ON ADVANCED PREVENTIVE MEDICINE

DÜSSELDORF, GERMANY  
19 – 20 SEPTEMBER, 2023

# PROGRAMME

COOPERATING INSTITUTIONS:





**Dear colleagues,**

**Welcome to Düsseldorf!**

I am delighted to extend my warmest greetings to each and every one of you as we gather for the *5th Japan-Germany Symposium on Advanced Preventive Medicine*. It is an honor and a privilege to welcome distinguished minds from both Japan and Germany to this collaborative platform.

Our shared commitment to advancing preventive medicine is a testament to our dedication to improving the well-being of individuals around the globe. Through our collective expertise and innovative ideas, we have the potential to shape the future of healthcare and make significant strides in combating various health challenges.

This symposium serves as a unique opportunity for us to exchange knowledge, insights, and experiences. Let us engage in meaningful discussions, foster interdisciplinary collaborations, and ignite the spark of innovation that drives us forward. By synergizing our efforts, we can pave the way for novel approaches in disease prevention and health promotion.

I am particularly grateful to all the organizers, speakers, researchers, and participants who have come together to make this event a reality. Your dedication and enthusiasm are the driving forces behind our collective success, and I have no doubt that our interactions during these days will be rich and inspiring.

As we embark on this journey of knowledge sharing and exploration, let us remain open to new ideas, receptive to different perspectives, and steadfast in our pursuit of advancing preventive medicine. Together, we can unlock new horizons and create a lasting impact on the health and well-being of generations to come.

Thank you all for your long-standing commitment and your active contribution to this meeting which shall further intensify the friendship and cooperation between our institutions!

Warm regards,

**Michael Roden**

Director; Division of Endocrinology and Diabetology  
Medical Faculty and University Hospital  
at Heinrich Heine University Düsseldorf

Director; German Diabetes Center (DDZ)  
Leibniz Center for Diabetes Research  
at Heinrich Heine University Düsseldorf

## Format

The 5<sup>th</sup> Japan-Germany Symposium on Advanced Preventive Medicine will take place as a hybrid event from 19 to 20 September 2023, providing the option to join us in person in Düsseldorf, Germany or online via ZOOM.

All sessions in the scientific programme will take place onsite at the meeting venue in Düsseldorf at the times indicated in the programme and will be live-streamed for delegates attending the meeting virtually.

## Meeting venue

The in person meeting will take place at:

**Deutsches Diabetes-Zentrum (DDZ) //**

**German Diabetes Center**

**Auf'm Hennekamp 65**

**40225 Düsseldorf**

## Contact persons

**Symposium Secretary:** Kálmán Bódis  
(kalman.bodis@ddz.de)

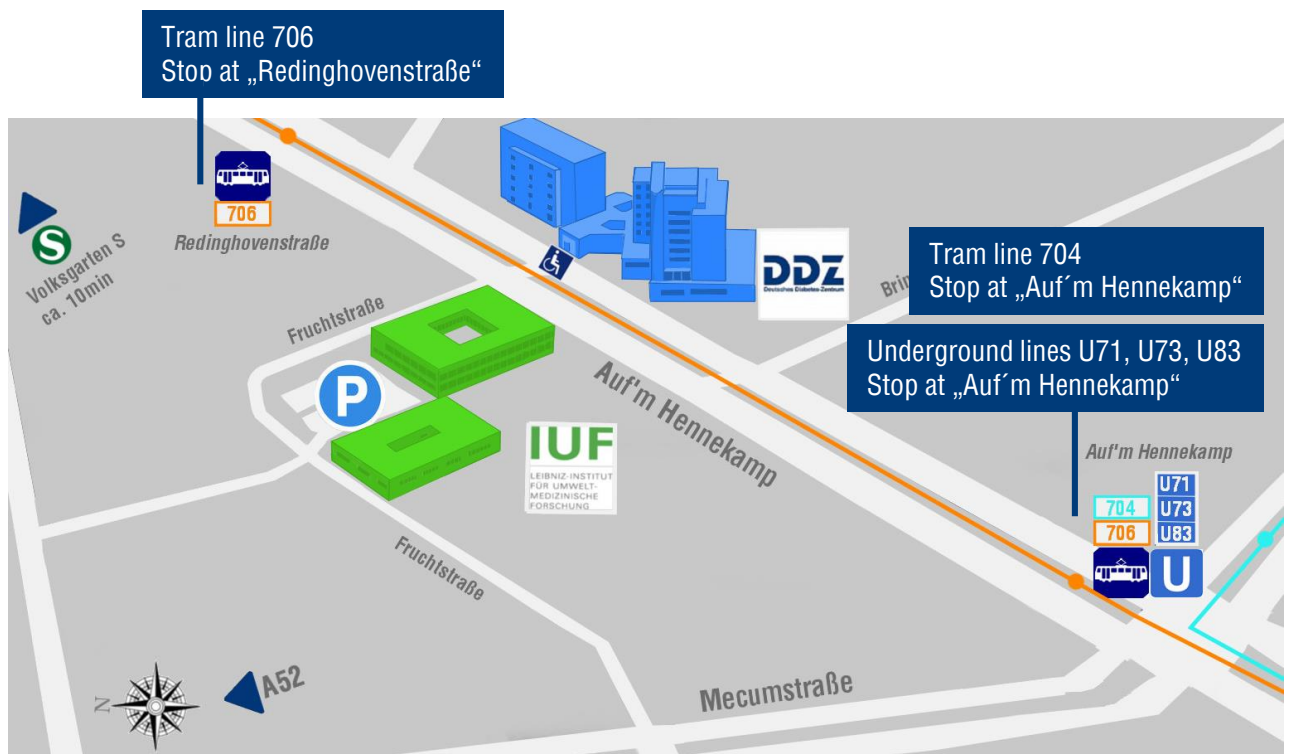
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## Transportation

The German Diabetes Center can easily be reached by several tram and underground stations within walking distance. You can buy a ticket in almost every tram or at a ticket counter at a tram stop.

Alternatively, you can download the Rheinbahn App,  
available for iOS and Android:

<https://www.rheinbahn.de/fahren/mehr-mobilitaet/rheinbahn-app>



## Catering during the symposium

Two coffee breaks and one lunch are planned for the participants each day.

- Day 1: Coffee breaks at 9:30 and 10:45  
Snacks & drinks during Postersession at 12:00
- Day 2: Coffee breaks at 9:45 and 11:00  
Farewell lunch at 13:00

## Dinner

All Japanese guests are cordially invited to dinner on the first evening with freshly tapped traditional Altbier and typical Rhenish cuisine.

**Tuesday, 19 September, at 19:00**

Brauerei Schumacher - Stammhaus  
Oststraße 123  
40210 Düsseldorf



Founded in 1838, the Altbier manufactory Schumacher is located in the middle of the Japanese quarter "Little Tokyo", not far from the famous Königsallee.

It can easily be reached with the following tram lines:  
U70, U74, U75, U76, U77, U78 und U79, Stop at „Oststraße“

## Your way to the airport

### By Train:

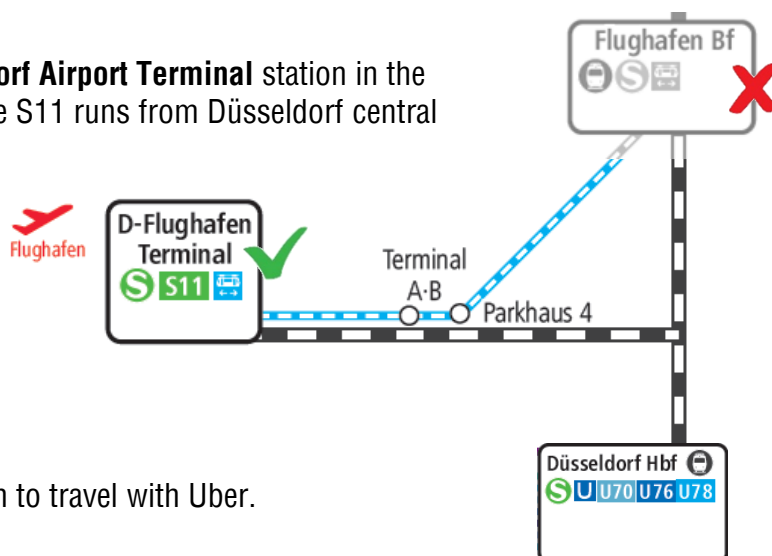
The S-Bahn **S11** stops at the **Düsseldorf Airport Terminal** station in the basement of the terminal building. The S11 runs from Düsseldorf central station (Hbf) to the airport.

### By Taxi:

- Taxi Düsseldorf  
phone: 0211-33 333
- Rheintaxi:  
phone: 0211-21 21 21

### By Uber:

In Düsseldorf you have also the option to travel with Uber.  
Simply book via the Uber App!





# TUESDAY, 19 SEPTEMBER

OSKAR MINKOWSKI- AND PAUL LANGERHANS-ROOM

TIME	SESSION
<p><b>8:00 - 8:15</b> JT: 15:00 - 15:15</p>	<p><b>OPENING REMARKS</b></p>
<p><b>8:15 - 9:00</b> JT: 15:15 - 16:00</p>	<p><b>DIABETES MELLITUS</b></p>
<p><b>9:00 - 9:30</b> JT: 16:00 - 16:30</p>	<p><b>ELDERLY HEALTH AND WELFARE</b></p>
<p><b>10:00 - 10:45</b> JT: 17:00 - 17:45</p>	<p><b>CARDIOVASCULAR DISEASES</b></p>
<p><b>11:00 - 11:45</b> JT: 18:00 - 18:45</p>	<p><b>COLLABORATIVE STUDIES</b></p>
<p><b>11:45 - 13:30</b></p>	<p><b>POSTERSESSION</b></p>

JT: Japan Time

# WEDNESDAY, 20 SEPTEMBER

OSKAR MINKOWSKI- AND PAUL LANGERHANS-ROOM

TIME	SESSION
<b>8:00 - 8:45</b> JT: 15:00 - 15:45	<b>ENVIRONMENTAL &amp; LIFESTYLE-RELATED DISEASES</b>
<b>8:45 - 9:45</b> JT: 15:45 - 16:45	<b>METABOLIC DISORDERS</b>
<b>10:00 - 11:00</b> JT: 17:00 - 18:00	<b>PREVENTIVE MEDICINE</b>
<b>11:15 - 12:00</b> JT: 18:15 - 19:00	<b>MICROBIOME &amp; PROTEOMICS</b>
<b>12:00 - 12:40</b> JT: 19:00 - 19:40	<b>SHORT PRESENTATIONS</b>
<b>12:40 - 13:00</b> JT: 19:40 - 20:00	<b>CLOSING REMARKS</b>

JT: Japan Time

## DO YOU HAVE ANY TECHNICAL QUESTIONS?

Person in charge for ZOOM: Dr. Olaf Spörkel, [olaf.spoerkel@ddz.de](mailto:olaf.spoerkel@ddz.de)

# TUESDAY, 19 SEPTEMBER

## 8:00 - 8:15      **Opening Remarks**

Heiner Fangerau (HHU)  
Atsushi Tajima (KU)  
Michael Roden (HHU/DDZ)

## 8:00 - 9:00      **Session I: Diabetes mellitus**

**Chair:** Toshinari Takamura (KU)

Hiroyuki Nakamura (KU):  
**Prospective cohort study of nutrition including dietary vegetable protein and animal fats on diabetes from the Shika Study**

Oana-Patricia Zaharia (HHU/DDZ):  
**Endotypes of type 2 diabetes**

Masaya Koshizaka (CU):  
**Type 2 diabetes treatment based on racial difference regarding SGLT2 inhibitor and metformin**

## 9:00 - 9:30      **Session II: Elderly health and welfare**

**Chair:** Christian Herder (DDZ)

Hiroto Yamanashi (NU):  
**Behavioral risk factors of multimorbidity patterns in Asian countries**

Yu-Ru Chen (CU):  
**Does the neighborhood built and social environment reduce long-term care costs for Japanese older people? The JAGES2010-2019 Cohort Study**

Abbreviations:

Chiba University (CU) • Kanazawa University (KU) • Nagasaki University (NU) • German Diabetes Center (DDZ)  
Heinrich-Heine-University (HHU) • Leibniz Research Institute for Environmental Medicine (IUF)

# TUESDAY, 19 SEPTEMBER

**10:00 - 10:05**     **Welcome Message**

Nikolaj Klöcker (HHU)

**10:05 - 10:50**     **Session III: Cardiovascular diseases**

**Chair:** Masaya Koshizaka (CU)

Lucas Busch (HHU):

**Large artery stiffness (LAS) and isolated systolic hypertension (ISH)**

Julian-Dario Rembe (HHU):

**Biomolecular marker profiling and disease pattern analysis in chronic hard-to-heal wounds for diagnostics and therapy stratification**

Patricia Wischmann (HHU):

**Impact of RBC dysfunction in anemia on cardiovascular function following acute myocardial infarction**

**11:00 - 11:45**     **Session IV: Collaborative studies**

**Chair:** Michael Roden (HHU/DDZ)

Christian Herder (DDZ):

**Biomarkers of distal sensorimotor polyneuropathy**

Akinori Hara (KU):

**Effect of fatty acid metabolizing enzyme gene polymorphisms on the relationship between polyunsaturated fatty acid intake and kidney function**

Keita Suzuki (DDZ):

**Investigation of the interaction between genetic polymorphisms of essential fatty acid metabolizing enzymes and their intake on chronic kidney disease**



# TUESDAY, 19 SEPTEMBER

## 11:45 - 12:00 Introduction of Postersession

Hiroyuki Nakamura (KU)

## 12:00 - 13:30 Postersession

**Chair:** Kálmán Bódis, Kalliopi Pafili (HHU/DDZ)

Christian Binsch:

**Deletion of Tbc1d4/As160 abrogates cardiac glucose uptake and increases myocardial damage after ischemia/reperfusion**

Bedair Dewidar / Geronimo Heilmann:

**Lipotoxic liver disease: phenotypes and mechanisms**

Christian Herder:

**Biomarkers in diabetes endotypes and comorbidities**

Birgit Knebel:

**Tissue-specific functional and (epi)-genetic changes after metabolic stress**

Nina Saatmann:

**Association of thyroid hormone levels with nonalcoholic fatty liver disease in recent onset diabetes**

Martin Schön:

**Continuous representation of type 2 diabetes heterogeneity on a tree-like graph structure stratifies risk of complications**

Edyta Szczerba / Sabrina Schlesinger:

**A DASH eating pattern in diabetes: revealing the association with subcutaneous, visceral and liver fat**

Michael Turewicz:

**Temporal response to insulin treatment in human skeletal muscle cells**

**We are pleased to exhibit the scientific posters of our colleagues from Japan, who cannot be present in Düsseldorf.**

# WEDNESDAY, 20 SEPTEMBER

8:00 - 8:45

## Session I: Environmental & lifestyle-related diseases

**Chair:** Hiroyuki Nakamura (KU)

Kazuhiko Arima (NU):

**Association of behavioral characteristics with bone health among community-dwelling residents**

Thomas Haarmann-Stemann (IUF):

**A gene variant of AKR1C3 contributes to interindividual susceptibilities to atopic dermatitis triggered by particulate air pollution**

Mami Tamai (NU):

**Prediction of rheumatoid arthritis and IgG4-related disease development from the results of Nagasaki Island Study: Cross-sectional and prospective study of rheumatic diseases in a residential health checkup-based healthy population**

8:45 - 9:45

## Session II: Metabolic disorders

**Chair:** Atsushi Tajima (KU)

Kálmán Bódis (HHU/DDZ):

**Role of insulin sensitivity in complications of diabetes**

Keita Suzuki (KU):

**Association of hepatokine LECT2 with insulin resistance and liver enzymes in the Japanese general population**

Kalliopi Pafili (HHU/DDZ):

**Liver and adipose tissue energy metabolism in the pathogenesis of NAFLD**

Toshinari Takamura (KU):

**Pathology of type 2 diabetic liver**

# WEDNESDAY, 20 SEPTEMBER

## 10:00 - 11:00 **Session III: Preventive medicine**

**Chair:** Thomas Haarmann-Stemmann (IUF)

Hirohito Tsuboi (KU):

**Serum levels of TNF $\alpha$  and IL-17A can affect depressive symptoms:  
Findings from the Shika Cohort Study in Japan**

Yoko Matsuoka (CU):

**Does the smartphone-based shopping mall-walking program encourage people to walk more? A multilevel analysis of nationwide big data in Japan**

Katharina Rolfes (IUF):

**Impact of low dose UVA radiation on UVB radiation-induced DNA damage and skin carcinogenesis**

Akinori Hara (KU):

**Association between ambient polycyclic aromatic hydrocarbons and cough prevalence in patients with chronic respiratory diseases: an observational study in two regions of Japan**

## 11:15 - 12:00 **Session IV: Microbiome and proteomics**

**Chair:** Kouichiro Yoshiura (NU)

Jiang Chuanhao (KU):

**Genetic diversity and host-specificity of *Chilomastix* spp.**

Cynthia Monserrat Galicia-Medina (KU):

**Cysteine post-translational modifications targeted by selenoprotein P-mediated reductive stress and impact in type 2 diabetes**

Sebastian Scharf (HHU):

**Insights into gut microbiomes in stem cell transplantation by comprehensive shotgun long-read sequencing**

# WEDNESDAY, 20 SEPTEMBER

## 12:00 - 12:40 **Session V: Short Presentations**

**Chair:** Hiroyuki Nakamura (KU)

Fumihiko Suzuki (KU):

**Association between bone mineral density and oral frailty on renal function: Findings from the Shika Study**

Kouyuki Hirayasu (KU):

**Identification and characterization of the novel fusion gene LILRB3-LILRB5 by long-read sequencing technology**

Kenichi Sakurai (CU):

**Association between gut microbiota and mother and child health**

Hiromasa Tsujiguchi (KU):

**Prospective relationship between autistic traits and nutrient intakes among Japanese children: Results of the Shika Study**

## 12:40 - 13:00 **Closing Remarks**

Toshinari Takamura (KU)

Michael Roden (HHU/DDZ)

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