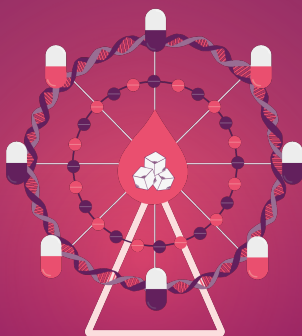


HELMHOLTZ MUNICH



I→ DIABETES CONFERENCE

9th Helmholtz Diabetes Conference

Latest Therapies in Diabetes

September 26 – 28, 2022

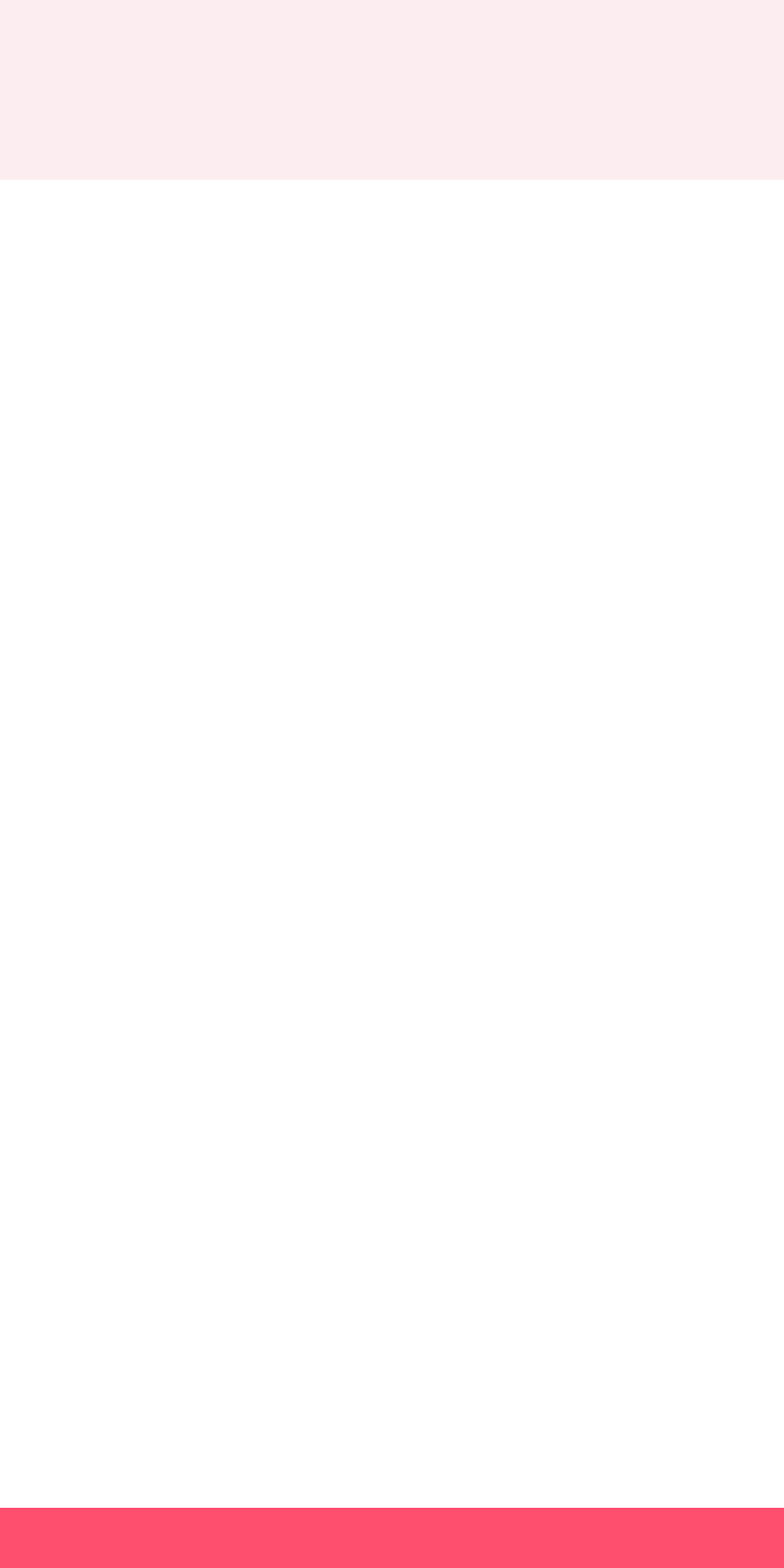
Künstlerhaus, Munich, Germany

Topics

Adipose Tissue and Metabolism
Genetics of Diabetes
Hormone Action
Metabolism and Cardiovascular Diseases
Systemic Control Metabolism
Dual Agonists / Pharmacology
Beta Cell Function
CNS Mechanisms of Action

www.hd-conference.com

follow us on twitter: @HelmholtzMunich | @Helmholtz_diabc
#HelmholtzDiabetes2022



I➔ Welcome Note

Dear Friends and Colleagues,

We are excited to welcome you to our 9th Helmholtz Diabetes Conference. On the heels of the success of the past eight conferences, in 2022 we are continuing this recurring high-impact meeting for the ninth time with the goal of facilitating a cure for all forms of diabetes.

Every year, this conference series integrates research reports on essential scientific questions in urgent need of a breakthrough. In 2022, we will focus on the latest therapies in diabetes.






We are looking forward to celebrating getting yet one step closer to finding a cure for diabetes!

Stephan & Matthias & Ruth



Program

Monday, September 26

09:00–11:00	Registration
11:00–11:15	Welcome and Opening Remarks
	Stephan Herzig, Helmholtz Munich
11:15–11:45	Opening Keynote Lecture
	Chair: Stephan Herzig
	 <u>MATTHIAS TSCHÖP, Helmholtz Munich</u> Discovery of Gut Hormone Co-Agonists: From GIP: GLP-1 Invention to Tirzepatide Approval
11:45–13:30	Session 1: Adipose Tissue and Metabolism
	Chairs: Siegfried Ussar, Fabiana Perocchi
11:45–12:15	 <u>BRUCE SPIEGELMAN, Dana Farber Cancer Institute</u> Futile Creatine Cycle: Mechanisms and New Biology
12:15–12:45	 <u>PHILIPP SCHERER, UT Southwestern</u> Adipose Tissue, PAQRs and MetAP2
12:45–13:00	 <u>CLAIR CREWE, Washington University School of Medicine</u> Extracellular vesicle-based Interorgan Transport of Mitochondria from Energetically Stressed Adipocytes
13:00–13:15	 <u>LAWRENCE KAZAK, McGill University</u> ADRA1A-Gq Signaling Potentiates Adipocyte Thermogenesis
13:15–13:30	 <u>JUDITH SIMCOX, University of Wisconsin-Madison</u> Regulation of Energy Expenditure by Plasma Lipids
13:30–14:15	Snacks and coffee



14:15-15:30

Session 2: Genetics of Diabetes

Chairs: Martin Hrabe de Angelis, Henrik Semb

14:15-14:45



STEVE O'RAHILLY, University of Cambridge
Hormones, Nutrient Signalling and the Brain;
Beyond the Control of Energy Balance

14:45-15:00



RAFAEL ARROJO E DRIGO, Vanderbilt University
Spatiotemporal Dynamics of Beta Cells

15:00-15:15



RAFFAELE TEPERINO, Helmholtz Munich
Parental Genetics and Epigenetic Control of
Offspring Health

15:15-15:30



BILAL SHEIKH, Helmholtz Munich
Organ-Specific Effects of Metabolic Disease on
Blood Vessels

Program


Tuesday, September 27


08:30-09:00 Coffee





09:00-10:45 Session 3: Hormone Action


Chairs: Timo Müller, Henriette Uhlenhaut

09:00-09:30  DAVID MANGELSDORF, UT Southwestern
FGF21, Alcohol, and Amethyst Crystals

09:30-10:00  JEFFREY FRIEDMAN, The Rockefeller University
Brainstem Neurons Mediate the Anorectic Effect of Lipopolysaccharide and Other Components of the Sickness Response

10:00-10:15  ALICE ADRIENSSENS, University of Cambridge
The Role of Gpr-Expressing Neurons in Mediating Feeding Behavior

10:15-10:30  CAROLINE BONNER, Institut Pasteur de Lille
Scientific Rationale for a Paradigm Shift in Treatment Options for HNF1A-MODY Patients

10:30-10:45  ALEXANDER JAIS, Helmholtz Munich
Characterization of Hypothalamic Neurons Activated by Palatable Hyper-Caloric Foods

10:45-11:15 Coffee



11:15-12:15 Molecular Metabolism - Flash Talk Session


12:15-13:30 Lunch





13:30-15:15 Session 4: Metabolism and Cardiovascular Diseases


Chairs: Julia Hauer, Matthias Blüher

13:30-14:00  MICHAEL LEHRKE, University Hospital Aachen
Functional Relevance of GLP-1/2 Under Inflammatory Conditions

14:00-14:30  BART STAELS, University of Lille
Mechanisms of PPARalpha Activity Decrease During the Progression of NAFLD

14:30-14:45  JAMES GOODMAN, University of Cambridge
GLP-1 and Glucagon Dual Agonism - Cardiovascular
Actions in Humans

14:45-15:00  RACHEL PERRY, Yale School of Medicine
Metabolic Underpinnings of Renal Cell Carcinoma:
Insights from REGAL Analysis


15:00-15:15  CHRISTOFFER CLEMMENSEN, University of
Copenhagen
Peptide-Directed Inhibition of NMDA-Receptor
Signaling for Treatment of Metabolic Disease


15:15-15:45 Coffee





15:45-17:15 Session 5: Systemic Control Metabolism

Chairs: Paul Pfluger, Andreas Birkenfeld

15:45-16:15  JENS HOLST, University of Copenhagen
The Expanding Role of Glucagon in The Acute and
Chronic Regulation of Metabolism

16:15-16:45  BARBARA KAHN, Harvard Medical School
Recent Advances in Understanding the Regulation
and Mechanisms of Action of The Anti-Diabetic and
Anti-Inflammatory Lipids, Fatty Acid Hydroxy Fatty
Acids

16:45-17:00  STEPHANIE KULLMANN, Helmholtz Munich
and University of Tübingen
Cognitive Processes Interact with Central Insulin
Action in The Battle to Control Appetite

17:00-17:15  DIEGO PEREZ-TILVE, University of Cincinnati
Brain Melanocortin Control of Gut Microbiome
Regulates Adiposity

18:00-21:00 Networking Flying Dinner
(open for registered participants)

Program


Wednesday, September 28


08:30-09:00 Coffee




09:00-10:30 Session 6: Dual Agonists / Pharmacology

Chairs: Kerstin Stemmer, Kenneth Dyar

09:00-09:30  RUTH GIMENO, Eli Lilly and Company
Multifunctional Incretins as Next Generation
Therapies for Obesity and Type 2 Diabetes

09:30-10:00  VICTORIA PARKER, Astra Zeneca
Mechanisms of Action of Cotadutide a Dual GLP-1-
Glucagon Receptor Agonist


10:00-10:30  JON CAMPBELL, Duke Molecular Physiology
Institute
Tirzepatide: Does GIPR Matter?


10:30-11:00 Coffee



11:00-12:00 Session 7: Beta Cell Function

Chairs: Heiko Lickert, Michele Solimena

11:00-11:30  DOMENICO ACCILI, Weill Cornell Medical
College
Mechanism-Based Interventions to Reverse Beta
Cell Failure


11:30-12:00  SUSAN BONNER-WEIR, Harvard University
Insights From Studies of Human Endocrine
Pancreas Growth

12:00-13:30 Lunch



13:30-14:30 Session 8: CNS Mechanisms of Action

Chairs: Sonja Schriever, Natalie Krahmer

13:30-14:00  TIMO MÜLLER, Helmholtz Munich
Novel Avenues for GLP-1-Based Therapeutics -
Novel Molecules, Novel Mechanisms

14:00-14:30



MATTHEW HAYES, University of Pennsylvania
Brainstem Cellular Substrates Mediating Incretin
Effects on Energy Balance, Nausea and Vomiting

14:30-15:00



SABRINA DIANO, Columbia University
POMC Neuronal Regulation by The Redox State

15:00-15:30

Coffee



15:30-16:30

The Helmholtz Diabetes Lecture -
sponsored by the DZD

Chair: **Matthias Tschöp**



RUDOLF ZECHNER, University of Graz
Lipolysis - a Key Pathway in Energy Metabolism
and Metabolic Disease

16:30-16:35

Presentation of the HelDi Awards

16:35-16:40

Helmholtz Best Molecular Metabolism Flash Talks

16:40-16:45

Closing Remarks

Speakers

Helmholtz Diabetes Lecture

Rudolf Zechner

University of Graz

Plenary Speakers

Bruce Spiegelman

Dana Farber Cancer Institute

Philipp Scherer

UT Southwestern

Steve O’Rahilly

University of Cambridge

David Mangelsdorf

UT Southwestern

Jeffrey Friedmann

The Rockefeller University

Michael Lehrke

University Hospital Aachen

Bart Staels

University of Lille

Jens Holst

University of Copenhagen

Sabrina Diano

Columbia University Irving Medical Center

Ruth Gimeno

Sr. Vice President, Diabetes, Obesity &
Cardiometabolic Research and Early Clinical Development

Victoria Parker

Astra Zeneca

Jon Campbell

Duke Molecular Physiology Institute

Domenico Accili

Columbia University

Susan Bonner-Weis

Harvard University

Timo Müller

Helmholtz Munich

Matthew Hayes

University of Pennsylvania

Rudolf Zechner

University of Graz

Barbara Kahn

Harvard Medical School

I➔ Award Nominees / Short Talks

HeIDI* - Award Nominees / Short Talks

Clair Crewe	Washington University School of Medicine
Lawrence Kazak	McGill University
Judith Simcox	University of Wisconsin-Madison
Rafael Arrojo e Drigo	Vanderbilt University
Raffaele Teperino	Helmholtz Munich
Bilal Sheikh	Helmholtz Munich
Alice Adrienssens	University of Cambridge
Caroline Bonner	Institut Pasteur de Lille
Alexander Jais	Helmholtz Munich
James Goodman	University of Cambridge
Rachel Perry	Yale School of Medicine
Christoffer Clemmensen	University of Copenhagen
Stephanie Kullmann	Helmholtz Munich
Ren Hongxia	Indiana University of Medicine
Diego Perez-Tilve	University of Cincinnati

* HeIDI = Helmholtz Young Investigator in Diabetes Award.
The HeIDI Award jury is a scientific panel consisting of independent scientists.

I→ Award Committee / Organizing Committee

HelDi* - Award Committee

Barbara Kahn (Chair)
Julia Szendrödi
Anette Ziegler
Carolin Daniel
Henriette Uhlenhaut
Timo Müller
Heiko Lickert
Steve O’Rahilly

Conference Organizers

Stephan Herzig
Helmholtz Munich
Matthias Tschöp
Helmholtz Munich
Ruth Gimeno
Eli Lilly and Company

Conference Office

Intercom Dresden GmbH

Sylvia Neumann
Zellescher Weg 3
01069 Dresden, Germany

phone: + 49 - 351 - 320 173 - 20
fax: + 49 - 351 - 320 173 - 33
mobil: + 49 - 160 - 744 000 1
e-mail: sneumann@intercom.de
www.intercom.de

* HelDi = Helmholtz Young Investigator in Diabetes Award.
The HelDi Award jury is a scientific panel consisting of independent scientists.

→ Cooperation Partner

We are grateful for the support of the conference by



DZD

German Center for
Diabetes Research

The German Center for Diabetes Research (DZD)

The German Center for Diabetes Research (DZD) is one of six German centers of health research. It brings together experts in the field of diabetes research and combines basic research, epidemiology and clinical applications. Using a novel, integrative research approach, the DZD seeks to make a major contribution to developing a successful, personalized prevention, diagnosis and treatment of diabetes mellitus. The members of the network are Helmholtz Munich, the German Diabetes Center (DDZ) in Düsseldorf, the German Institute of Human Nutrition (DIfE) in Potsdam-Rehbrücke, the Institute for Diabetes Research and Metabolic Diseases of Helmholtz Zentrum München at the University of Tübingen and the Paul Langerhans Institute Dresden of Helmholtz Zentrum München at the TU Dresden Medical Center, associated partners at the universities in Heidelberg, Cologne, Leipzig, Lübeck and Munich as well as additional project partners.

www.dzd-ev.de

We would like to thank the DZD for being a cooperation partner of the Helmholtz Diabetes Conference and for sponsoring the Helmholtz Diabetes Lecture, this year awarded to Prof. Rudolf Zechner of the University of Graz.

I➔ Platinum Supporter



Sable Systems

Sable Systems - By scientists, for scientists

Sable Systems is the world's most trusted provider of tools and expertise for research in the metabolic sciences. The company provides integrated platforms for metabolic and behavioral phenotyping and testing (e.g. BAT activation, gut microbiota, ingestive behavior) of animal models of diabetes and other obesity-related diseases, enhancing a true translational approach from animal models to man. Only Sable Systems spans the entire model range, from microbiome to Drosophila, rodent to human.

Sable Systems is eliminating the disconnect between scientists and the people who develop their instruments. We merge authoritative expertise in metabolic physiology and biophysics with an inventive spark to create precision tools for metabolic measurement, neurophysiology and environmental science.

The Promethion Core™ metabolic and behavioral measurement system for rodent research delivers highest resolution data regardless of study size. This enables greater statistical power with fewer animals and simultaneous testing of more hypotheses. The integrated data platform features continuous live evaluation of system performance, animal welfare and data quality at a glance.

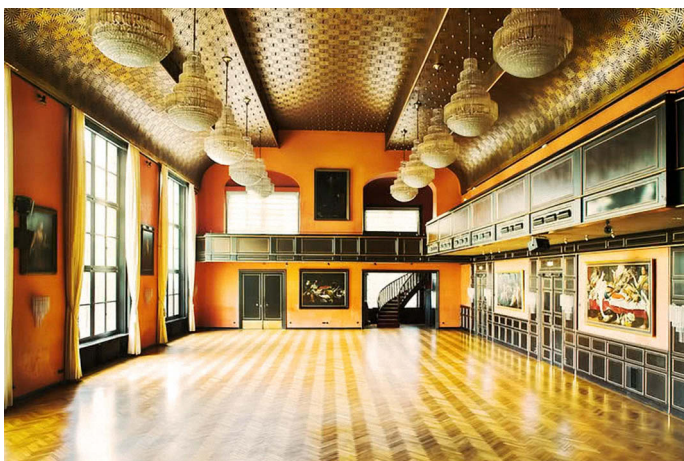
Systems can be expanded by cutting-edge features like analysis of stable isotopes or high-precision methane monitoring at any time.

➔ General Information

Conference Venue

Münchner Kulturhaus
Lenbachplatz 8
80333 Munich, Germany

The Künstlerhaus, located in the heart of Munich, was conceived as a meeting place for artists and society alike and is still living proof of the style and society model of its time of origin when prince regent Luitpold opened the house to the public in 1900. After some glorious decades of festivities, masked balls and banquets the house burned down following a bombing raid in 1944. It was rebuilt and re-opened to the public by Duke Albrecht of Bavaria on October 1, 1961. Today it is open for a wide variety of congresses, festivities, and exhibitions.



Parking

Drive into the city center and follow the signs to "Karlsplatz (Stachus)". Lenbachplatz connects to Stachus in the direction of Maximiliansplatz. The underground car park at Karstadt Oberpollinger in Maxburgstraße is open throughout.

I→ General Information

Mediacheck

Please hand in your presentation, latest in the last break before your talk, directly to the technician in the Festsaal (conference hall) and check for complete and fluent presentation on the computer system provided.

Photography

By participating or attending this event, you agree that you may appear on photos and/or videos which might be used for Helmholtz Munich's public relations activities.

You have the right to object, on grounds relating to your particular situation, at any time during the processing of your personal data. In order to object to the processing of personal data, you should address your request to the organization team at: info@helmholtz-muenchen.de

WiFi

Network: mkh_gast
Password: willkommen

Networking Flying Dinner

September 27, 2022 18:00 - 21:00
Lenbachplatz 2, 80333 Munich

Please use the wristband for free entrance.

Location Map



Getting to the Conference Venue

The Münchner Künstlerhaus is located in the center of the city and easily reached by public transportation:

U-Bahn U4 and U5, stop: Karlsplatz/Stachus (2-5 min from venue)

S-Bahn all lines, stop: Karlsplatz/Stachus (2-5 min from venue)

Tram No. 19, stop: Lenbachplatz (2-3 min from venue)





Notes

