

1st International Conference Engineering Biomedical Breakthroughs

Participants and Program



July 3-6, 2018, San Servolo, Venice, Italy

1st International Conference Engineering Biomedical Breakthroughs

Venice International University, Isola di San Servolo,
Venice, Italy, July 3-6, 2018

Presentations will be focusing on interdisciplinary strategies and next generation technologies enabling breakthroughs toward novel precision medicines. Discussions will take place in an interactive setting at a spectacularly inspiring location. No more than 100 innovators and opinion leaders have been selected to participate, representing priority areas of the organising partner institutions, including next generation bio-engineering, computational biomedicine, stem cell and metabolism research. This by-invitation-only conference will introduce the newly founded Helmholtz Pioneer Campus. We are looking forward to an exciting conference and hope to welcome you to San Servolo!

On behalf of the Helmholtz Pioneer Campus (HPC):
Prof. Dr. Matthias Tschöp, Prof. Dr. Vasilis Ntziachristos,
Dr. Thomas Schwarz-Romond

On behalf of the German Center for Diabetes Research (DZD):
Prof. Dr. Martin Hrabě de Angelis, Prof. Dr. Hans-Ulrich Häring,
Prof. Dr. Michael Roden



HELMHOLTZ PIONEER CAMPUS



DZD
German Center for
Diabetes Research

HelmholtzZentrum münchen
German Research Center for Environmental Health

HDC Helmholtz Diabetes Center

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July 3, 2018

16:00 Arrival and registration

17:30 - 17:40 Matthias Tschöp, Munich
Welcome note

1 Setting the stage - new frontiers in biomedicine and engineering

17:40 - 17:50 Vasilis Ntziachristos, Munich

17:50 - 18:00 Martin Hrabě de Angelis, Munich

18:00 - 18:50 **Opening keynote: Amanda Fisher, London**
Chair: Martin Hrabě de Angelis

19:00 - 20:00 **Nobel lecture: Steven Chu, Stanford**
Chair: Matthias Tschöp

20:30 Welcome reception

July 4, 2018

2 Neurobiology frontiers in the control of metabolism, behavior and (neuro-) development

Chairs (before break): Sandrine Lefort, Jovica Ninkovic
Chairs (after break): Cristina García, Martin Heni

9:00 - 9:30 **Keynote: Scott Sternson, Ashburn**

9:30 - 9:45 Cristina García Cáceres, Munich

9:45 - 10:00 Jens Brüning, Cologne

10:00 - 10:15 Paul Pfluger, Munich

10:15 - 10:30 Martin Heni, Tübingen

10:30 - 11:00 Coffee break

11:00 - 11:15 Mikhail Shapiro, Pasadena

11:15 - 11:30 Sandrine Lefort, Munich

11:30 - 11:45 Ryan Remedios, Pasadena

11:45 - 12:00 Gil Westmeyer, Munich

12:00 - 12:15 Jovica Ninkovic, Munich

12:15 - 12:30 Boyan Bonev, Montpellier

12:30 - 12:45 Kristin Baldwin, La Jolla

12:45 - 14:00 Lunch break

3 Computational and (single) cellular approaches to rationalize metabolic organ function

Chairs: Maria Colomé-Tatché, Timo Müller

14:00 - 14:15 Fabian Theis, Munich

14:15 - 14:30 Carolin Daniel, Munich

14:30 - 14:45 Herbert Schiller, Munich

14:45 - 15:00 Henriette Uhlenhaut, Munich

15:00 - 15:15 Celia Martinez-Jimenez, Cambridge

15:15 - 15:30 Siegfried Ussar, Munich

15:30 - 15:45 Katia Karalis, Boston

15:45 - 16:00 Rahul Satija, New York

16:00 - 16:30 *Coffee break*

4 New clinical concepts and emerging technologies for precision medicine

Chairs: Matthias Meier, Siegfried Ussar

16:30 - 16:45 Hans-Ulrich Häring, Tübingen

16:45 - 17:00 Michael Roden, Düsseldorf

17:00 - 17:15 Annette Schürmann, Potsdam

17:15 - 17:30 Stephan Herzig, Munich

17:30 - 17:45 Susanna Hofmann, Munich

17:45 - 18:00 Uwe Ohler, Berlin

18:00 - 18:15 Axel Scherer, Pasadena

18:15 - 18:30 *Short break*

Panel discussion: „Turning new technologies into future therapies - where do we stand?“

Chair: Brady Huggett (Nature Biotech)

20:15 *Conference dinner at venue*

July 5, 2018

5 Breakthroughs in beta-cell regeneration, biology and insulin signaling

Chairs: Jantje Gerdes, Anthony Gavalas

8:30 - 9:00 Keynote: Aydogan Ozcan, Los Angeles

9:00 - 9:15 Henrik Semb, Copenhagen

9:15 - 9:30 Heiko Lickert, Munich

9:30 - 9:45 Michele Solimena, Dresden

9:45 - 10:00 Lori Sussel, Denver

10:00 - 10:15 Ünal Coskun, Dresden

10:15 - 10:45 *Coffee break*

6 Emerging epigenetic concepts in development and disease

Chairs: Anja Zeigerer, Herbert Schiller

10:45 - 11:00 Robert Schneider, Munich

11:00 - 11:15 Pavel Osten, Cold Spring Harbor

11:15 - 11:30 Kurt Schmoller, Munich

11:30 - 11:45 Andrew Pospisilik, Freiburg

11:45 - 12:00 Petra Hajkova, London

12:00 - 12:15 Stefan Stricker, Munich

12:15 - 12:30 Eleftheria Zeggini, Cambridge

12:30 - 14:00 *Lunch break and meet the editors opportunities*

7 T1D meets enabling technologies

Chairs: Fabiana Perocchi, Ünal Coskun

14:00 - 14:15 Anette-Gabriele Ziegler, Munich

14:15 - 14:30 Ezio Bonifacio, Dresden

14:30 - 14:45 Maria Colomé-Tatché, Munich

14:45 - 15:00 Oliver Plettenburg, Hannover

15:00 - 15:15 William Shih, Boston

15:15 - 15:45 *Coffee break*

8 From organelle to systems level metabolic regulation

Chairs: Celia Martinez-Jimenez, Paul Pfluger

15:45 - 16:15 Keynote: Matthias Mann, Munich

16:15 - 16:30 Fabiana Perocchi, Munich

16:30 - 16:45 Timo Müller, Munich

16:45 - 17:00 Jantje Gerdes, Munich

17:00 - 17:15 Bengt Belgardt, Düsseldorf

17:15 - 17:30 Irene-Miguel Aliaga, London

17:30 - 17:45 Natalie Kraemer, Munich

17:45 - 18:00 Theodore Alexandrov, Heidelberg

18:00 *Free evening in Venice*

July 6, 2018

9 Advanced organoid, microfluidics and imaging technologies

Chairs: Stefan Stricker, Boyan Bonev

9:00 - 9:30 Keynote: Jim Wells, Cincinnati

9:30 - 9:45 Christina Scheel, Munich

9:45 - 10:00 Matthias Meier, Freiburg

10:00 - 10:15 Maximilian Reichert, Munich

10:15 - 10:30 Anthony Gavalas, Dresden

10:30 - 10:45 Ali Ertürk, Munich

10:45 - 11:15 *Coffee break*

10 Enabling concepts for discovery, disease modeling and therapy

Chairs: Oliver Bruns, Christina Scheel

11:15 - 11:30 Annette Peters, Munich

11:30 - 11:45 Wolfgang Wurst, Munich

11:45 - 12:00 Eckhard Wolf, Munich

12:00 - 12:15 Jian Cui, Zurich

12:15 - 12:30 Jessica Spinelli, Boston

12:30 - 12:45 Michael Sattler, Munich

12:45 - 14:00 *Lunch break*

11 Inter-organ signaling meets biosensing and chemical biology

Chairs: Bengt Belgardt, Gil Westmeyer

14:00 - 14:15 Oliver Bruns, Munich

14:15 - 14:30 Anja Zeigerer, Munich

14:30 - 14:45 Amy Palmer, Boulder

14:45 - 15:00 Carsten Schultz, Portland

15:00 - 15:50 Closing keynote: Stephen Quake, Stanford

Chair: Vasilis Ntziachristos

16:00 *Farewell and departures*

16:15 *Shuttles San Servolo to Venice Airport Marco Polo*