Brown and Beige Fat
Organ Crosstalk,
Signaling
and Energetics

BATenergy

Program International Conference

Brown and Beige Fat
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Hamburg, May 22 -24 2023

Congress Venue

Bucerius Law School

Helmut Schmidt Auditorium

Supported by the

DFG Deutsche Forschungsgemeinschaft
German Research Foundation

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Sunday, May 21 2023 Arrival

Monday, May 22 2023

Session 1 - Energy Handling by Thermogenic Adipose Tissues (Chair Joerg Heeren)

9:00 – 9:10	**Welcome by Alexander Pfeifer and Joerg Heeren**
9:10 – 9:40	**Martin Klingenspor (Munich, Germany)** **The UCP1 KO mouse: bane or boon?**
9:40 – 10:10	**David Guertin (Worcester, USA)** **Metabolic adaptations that power adipocyte thermogenesis**
10:10 – 10:40	**Zachary Gerhart-Hines (Copenhagen, Denmark)** **Leveraging mitochondrial phospholipid synthesis in adipose tissue to improve cardiometabolic health**
10:40 – 10:55	**Tina Dahlby (Zürich, Switzerland)** **Alternative thermogenic mechanisms: The role of glycerol kinase in futile cycles**
10:55 – 11:30	**Coffee break and refreshment**

Session 2 – Thermogenic Adipose Tissues and Metabolic Imaging (Chair Wiebke Fenske)

11:30 – 12:00	**Kirsi Virtanen (Turku, Finland)** **Oxidative metabolism of human brown adipose tissue**
12:00 – 12:30	**Maria Chondronikola (Davis, USA)** **The role of the human brown adipose tissue in free fatty acid and triglyceride metabolism**
12:30 – 12:45	**Teemu Saari (Turku, Finland)** **Thermogenic capacity of human supraclavicular brown fat and cold-stimulated brain glucose metabolism**
12:45 – 13:00	**Kaja Plucinska (New York, USA)** **The human circulatome linked with cold exposure**
13:00 – 14:00	**Lunch**

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Session 3 – Thermogenic Adipose Tissues and Energy Metabolism (Chair Martin Klingenspor)

14:00 – 14:30	**Patrick Rensen (Leiden, The Netherlands)** **Role of brown fat in lipoprotein metabolism: new targets, tools and tracers**
14:30 – 15:00	**Aaron Cypess (Bethesda, USA)** **Using metabolic imaging of human thermogenic adipose tissues to determine their physiological roles**
15:00 – 15:15	**Dennis Blondin (Sherbrooke, Canada)** **Anatomical distribution and thermogenic activity of human brown adipose tissue and its impact on shivering intensity and shivering pattern**
15:15 – 15:30	**Miroslav Balaz (Bratislava, Slovakia)** **Loss of LATS kinases in brown fat cells protects mice from diet-induced obesity**
15:30 – 15:45	**Katharina Schnabl (Munich, Germany)** **First electrophysiological evidence for secretin-induced afferent neuronal communication between brown fat and brain**
15:45 – 16:00	**Frederike Sass (Copenhagen, Denmark)** **Dual energy expenditure and appetite control by insulin-sensitizing NK2R agonism**

Poster Session 1 with Wine, Beer and Refreshment

16:00 – 18:00	**Foyer Helmut Schmidt Auditorium**

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Tuesday, May 23 2023

Session 4 –Signals and Pathways in Thermogenic Adipose Tissues (Chair Dagmar Wachten)

9:00 – 9:30	**Camilla Scheele (Copenhagen, Denmark)** **New insights in the regulation of brown and beige fat in humans**
9:30 – 10:00	**Yu-Hua Tseng (Boston, USA)** **Brown fat in communication: within and without**
10:00 – 10:15	**Sheila Collins (Nashville, USA)** **Pivotal role of non-canonical PKA activation for brown fat activation and adipose browning for adipose mTORC1 in adipocyte metabolism and function**
10:15 – 10:30	**Dagmar Wachten (Bonn, Germany)** **Cold-induced expression of a truncated Adenylyl Cyclase 3 acts as rheostat to brown fat function**
10:30 – 10:45	**Michelle Y. Jaeckstein (Hamburg, Germany)** **Purinergic adipocyte-macrophage crosstalk regulates inflammatory degeneration of brown adipose tissue**
10:45 – 11:15	**Coffee break and refreshment**

Session 5 –Subpopulations in Thermogenic Adipose Tissues (Chair Alexander Pfeifer)

11:15 – 12:00	**Shingo Kajimura (Boston, USA)** **Adipose tissue remodeling in pathophysiology**
12:00 – 12:30	**Christian Wolfrum (Zürich, Switzerland)** **Cold dependent adipose tissue remodeling**
12:30 – 13:00	**Jae Bum Kim (Seoul, South Korea)** **Dynamic adaptations of thermogenic adipocytes**
13:00 – 14:00	**Lunch**
14:00 – 15:00	**Talk with editors and funding agencies (Chairs Alexander Pfeifer / Joerg Heeren)** **Isabella Samuelson (Nature Metabolism)** **Patrick Schaefer (Cell Metabolism)** **Georg Munz (Deutsche Forschungsgemeinschaft)** **Veronica Caraffini (European Research Council)**

Poster Session 2 with Coffee and Refreshment

15:00 – 17:00	**Foyer Helmut Schmidt Auditorium**

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Tuesday, May 23 2023

Social Evening

18:30 – 22:00	**Boat Trip on the Elbe River Start Landungsbrücken** **See map last page for meeting place, the boat will start at 19:00! Please be there 30 min in advance!** **incl. Award Session for the Rising Stars Awards 2023**

Wednesday, May 24 2023

Session 6 – Adipocyte Heterogeneity and Cellular Models (Chair Anna Worthmann)

9:00 – 9:30	**Martina Schweiger (Graz, Austria)** **Macrophage-Neuron-Adipocyte communication during catabolic remodeling of white adipose tissue**
9:30 – 10:00	**Carolina Hagberg (Stockholm, Sweden)** **Using 3D cultures to study adipocyte growth and dysfunction**
10:00 – 10:30	**Audrey Carrière (Toulouse, France)** **Lactate fluxes and plasticity of adipose tissues**
10:30 – 10:45	**Jens Lund (Copenhagen, Denmark)** **Revising lactate's role as an inter-organ signal and driver of adipose thermogenesis**
10:45 – 11:15	**Coffee break and refreshment**

Rising Stars Awards 2022 of the SFB/TRR33 BATenergy (Chair Alexander Pfeifer)

11:15 – 11:45	**Hamburg - Michelle Y. Jäckstein** **Bonn – Daniel Rowland** **Munich – Katharina Küllmer**

Session 7 – Adipose Tissue Development (Chair Henriette Uhlenhaut)

11:45 – 12:15	**Patrick Seale (Philadelphia, USA)** **Fate and function of adipose tissue mesenchymal cell**
12:15 – 12:45	**Alexander Bartelt (Munich, Germany)** **Discovering novel brown fat regulators through epigenetics**
12:45 – 13:00	**Jan-Wilhelm Kornfeld (Odense, Denmark)** **Sperm miRNA let-7 prompts an intergenerational epigenetic legacy of adipose dysfunction**
13:00 – 13:15	**Awards for Best Poster and Best Presentation** **and closing remarks by Alexander Pfeifer and Jörg Heeren**

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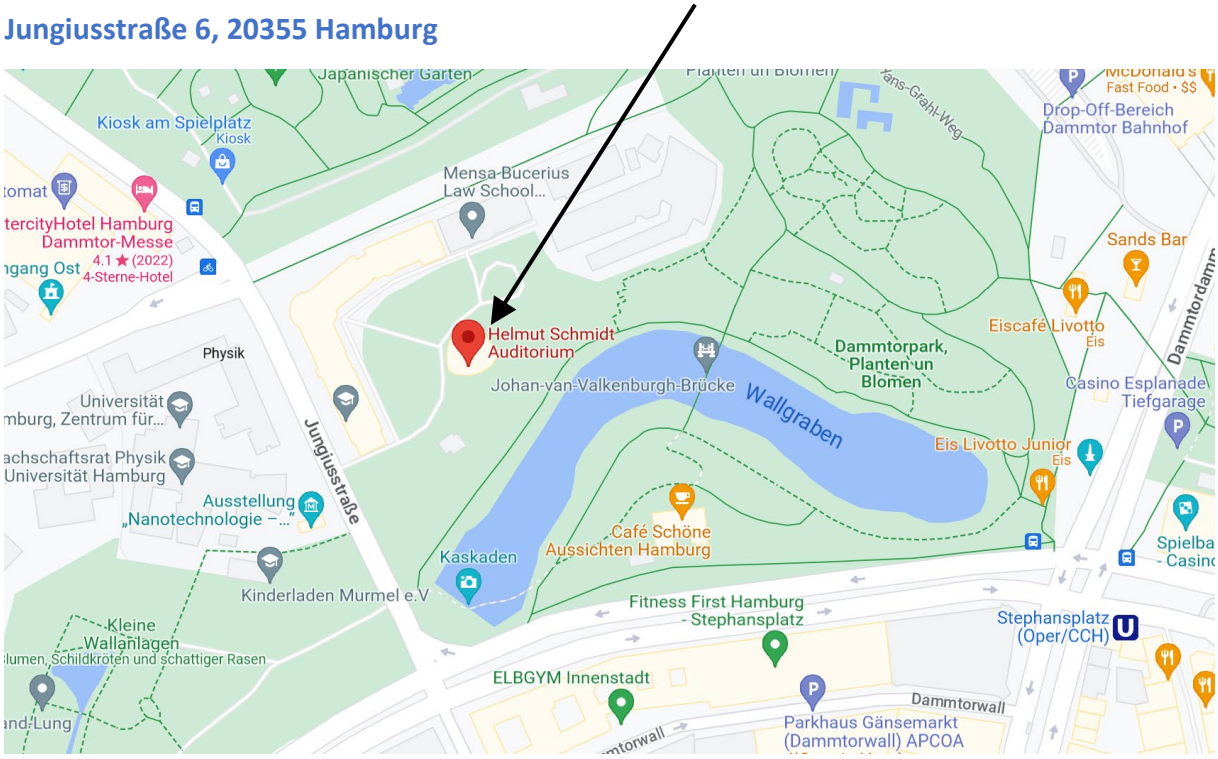
Locations

Congress Venue - Bucerius Law School – Helmut Schmidt Auditorium

Jungiusstraße 6, 20355 Hamburg



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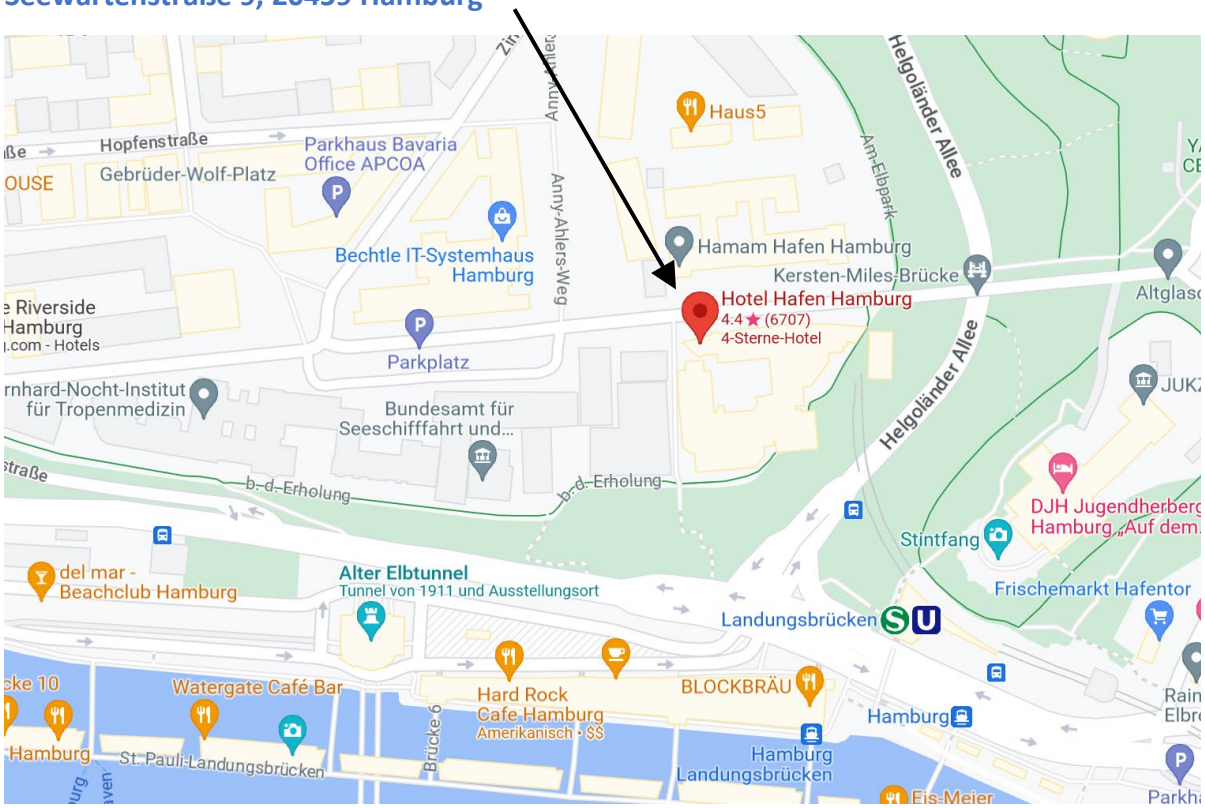
Hotel Hafen Hamburg

Seewartenstraße 9, 20459 Hamburg



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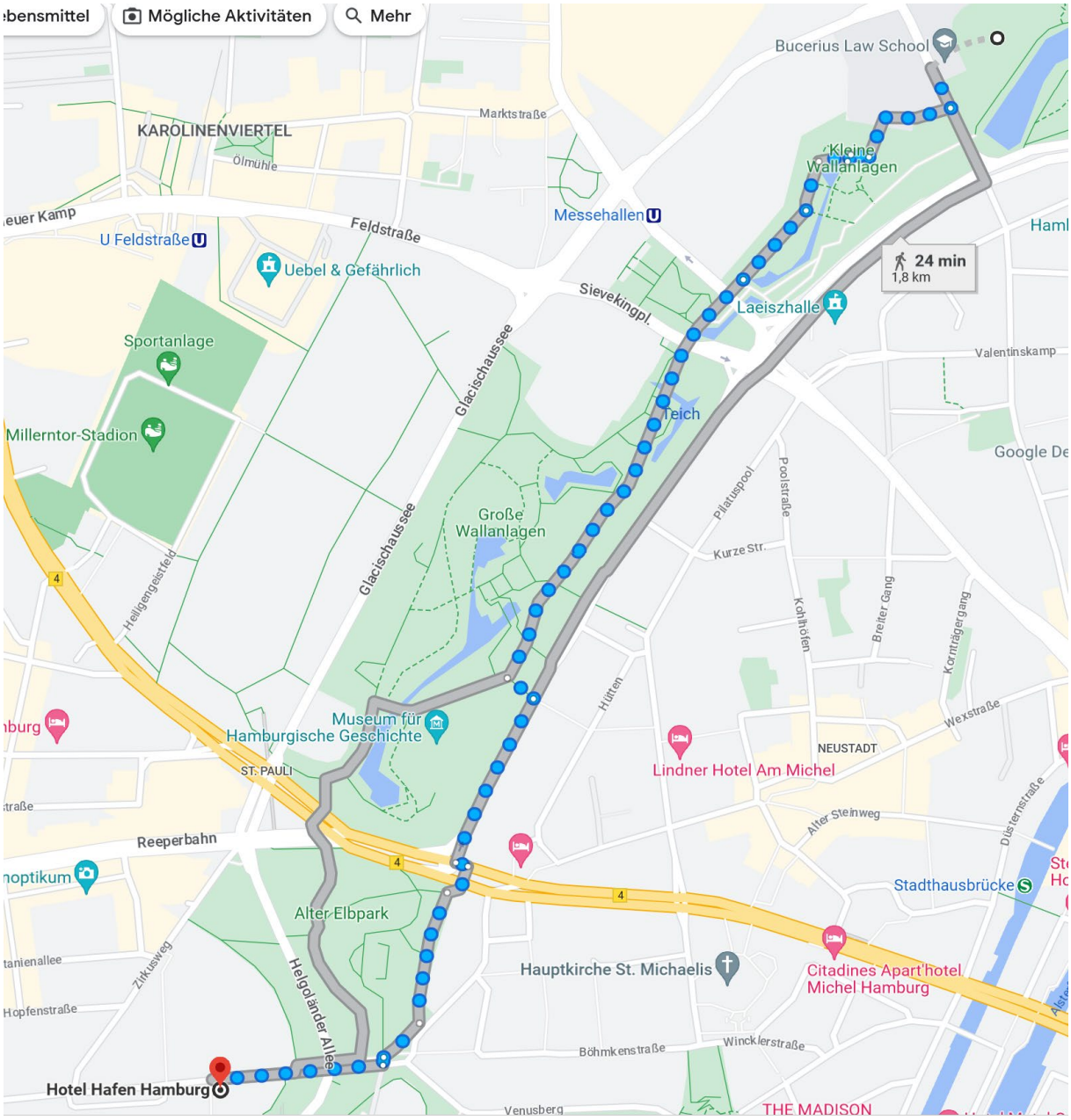
Hotel Hafen Hamburg – Congress Venue Bucerius Law School (25 min walk)



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Social Event - Boat Trip

ANLEGER ÜBERSEEBRÜCKE (between the subway stations Landungsbrücken and Baumwall) is in walking distance to the Hotel Hafen Hamburg (see blue dotted line on the map).

Cross the large, white, covered bridge (headed Überseebrücke) and keep left at the end of the bridge. The piers of the passenger ship is located below the bridge on the left side.

Please be here on time at the pier at 18:30!