

Immunology, Metabolism and Ageing

FEBS Workshop

September 8-11, 2025 | Mauterei am Brenner, Austria

Immunology, Metabolism and Ageing

immunologymetabolismageing2025.febsevents.org

Venue:

St. Michael Alpine Retreat
Schöfens 12
6443 Mauterei am Brenner
Austria

Program

FEBS
openbio



FEBS 2025
ADVANCED COURSE

St. Michael Alpine Retreat
Schöfens 12
6443 Mauterei am Brenner
Austria

Phone: +43 512 507508 55
info@immunologymetabolismageing2025.febsevents.org



Monday, September 8, 2025

08:00 - 09:15 Registration

09:15 - 09:30 Welcome Addresses

09:30 - 11:00 **Session 1: "Mitochondria and Aging"** (chairperson: Alexander WEISS)

09:30 - 10:00 Aleksandra TRIFUNOVIC, Cologne, Germany: *Mitochondrial stress responses in disease and ageing*

10:00 - 10:30 Marta IBORRA PERNICHI, Madrid, Spain: *Defective mitochondria function in B cells as a trigger of an aged immune response*

10:30 - 10:45 Short Talk: Maria CAVINATO, Innsbruck, Austria: *Mitochondrial quality control and cellular senescence in the pathogenesis of cutaneous squamous cell carcinoma*

10:45 - 11:00 Short Talk: Sophie. DIECKMANN, Innsbruck, Austria: *Impact of glutamate metabolism inhibition on melanoma development and myeloid cells*

11:00 - 11:30 Coffee break

11:30 - 12:45 **Interactive Session 1: Meet the Editors**

11:30 - 11:50 Jan RIEMER, Cologne, Germany: FEBS presentation

11:50 - 12:00 Ioannis TSAGAKIS, FEBS Press representative

12:00 - 12:45 Meet the Editors

12:45 - 13:45 Lunch

13:45 - 15:15 **Session 2: "Senolytics"** (chairperson: Pidder JANSEN-DÜRR)

13:45 - 14:15 Johannes GRILLARI, Vienna, Austria: *Senolytics in aging and regeneration*

14:15 - 14:45 Makoto NAKANISHI, Japan: *Targeting senescent cells to ameliorate age-related diseases*

14:45 - 15:00 Short Talk: Karla VALDIVIESO, MN, USA: *Targeting senescence to prevent therapy induced accelerated aging and cognitive decline*

15:00 - 15:15 Short Talk: Julia LIST, Vienna, Austria: *Targeting aggressive NK cell leukemia: a preclinical Ink4a/Arf knockout mouse model reveals novel therapeutic strategies*

15:15 - 15:45 Coffee break

15:45 - 17:00 **Session 3: "Inflammation and Immune Responses in Metabolic Disease"** (chairperson: Johannes GRILLARI)

15:45 - 16:15 Daniel WINER, Novato, CA, USA: *The intestinal immune system in obesity-related insulin resistance*

16:15 - 16:45 Carolin DANIEL, Munich, Germany: *Treg-based immune metabolic crosstalk in diabetes*

16:45 - 17:00 Short Talk: Kanella PRODROMIDOU, Boston, Massachusetts, USA: *Identification of a novel metabolic immunomodulator in gastric cancer that regulates type I interferon pathway*

18:00 Dinner

Tuesday, September 9, 2025

08:00 - 09:00 **Breakfast with an expert**

09:00 - 10:45 **Session 4: "B Cell Aging and Metabolism"** (chairperson: Marta IBORRA PERNICHI)

09:00 - 09:30 Michelle LINTERMAN, Wellington, New Zealand: *Ageing and the response to vaccination*

09:30 - 10:00 Ranjan SEN, Baltimore, MD, USA: *Epigenetic regulation B cell development during aging*

10:00 - 10:15 Short talk: Sarah SPÖCK, Innsbruck, Austria: *Loss of TET enzymes drives clonal expansion of age-associated B cells and promotes B cell lymphomagenesis*

10:15 - 10:30 Short talk: Emmanuel DERUDDER, Innsbruck, Austria: *miRN-Dependent modulation of age-associated B cell physiology*

10:30 - 10:45 Short talk: Kirsten HICKS, Perth, Australia: *Divergent inflammatory and metabolic adaptation of bone marrow sites with age: protective qualities of the calvaria*

10:45 - 16:00 Break

- 16:00 - 17:45 **Session 5: "The Role of Extracellular Vesicles in Aging and Senescence"** (chairperson: Aleksandra TRIFUNOVIC)
- 16:00 - 16:30 Jerome LAMARTINE, France: *Impact of chronological aging on communications mediated by EVs in skin: Focus on the fibroblast-keratinocyte crosstalk*
- 16:30 - 17:00 Myriam GOROSPE, Baltimore, MD, USA: *Insights into cell senescence from RNA biology*
- 17:00 - 17:30 Thomas BROCKER, Munich, Germany: *Interactions of extracellular vesicles with immune cells*
- 17:30 - 17:45 Short talk: Lukas NARENDJA, Vienna, Austria: *Engineering ASC-derived extracellular vesicles with VEGFC-CD81 fusion protein to promote lymphangiogenesis: a targeted therapy for aging associated lymphatic dysfunction*
- 18:30 Dinner

Wednesday, September 10, 2025

- 08:00 - 09:00 **Breakfast with an expert**
- 09:00 - 10:30 **Session 6: "T cell Aging and Metabolism"** (chairperson: Birgit WEINBERGER)
- 09:00 - 09:30 Enrique GABANDÉ-RODRIGUEZ, Madrid, Spain: *CD4⁺ cytotoxic T cells compromise healthy aging by inducing myelopoiesis*
- 09:30 - 10:00 Ilaria ELIA, Leuven, Belgium: *The metabolic cross-talk between T cells and cancer cells in the tumor microenvironment*
- 10:00 - 10:15 Short talk: Tomas ZELENKA, Tampa, Florida, USA: *Age-induced innate-like reprogramming of CD8 T cells in LUAD progression*
- 10:15 - 10:30 Short talk: Delphine SAUCE, Paris, France: *Metabolic activation and mitochondrial stress characterize aging human hematopoietic progenitor cells*
- 10:30 - 12:00 **Posters and coffee:** Posters with odd numbers
- 12:00 - 13:00 **Interactive Session 2: Equal Opportunities in Science**
- Rosa RAU, Innsbruck, Austria
- Sabine ENGEL, Innsbruck, Austria
- 13:00 - 14:00 Lunch
- 14:00 - 15:30 **Posters and coffee:** Posters with even numbers
- 15:30 - 17:00 **Session 7: "Inflammation, Autophagy and Cell Death"** (chairperson: Verena LABI)
- 15:30 - 16:00 Katja SIMON, Berlin, Germany: *Autophagy's role in the aging of the immune system*
- 16:00 - 16:30 Manolis PASPARAKIS, Cologne, Germany: *Regulation of necroptosis and its role in inflammation*
- 16:30 - 17:00 Elvira MASS, Bonn, Germany: *Developmental programming of tissue-resident macrophages*
- 17:00 - 18:30 **Interactive Session 3: Hot topics: Pro & Contra**
- Discussion and drinks
- 18:30 Dinner

Thursday, September 11, 2025

- 08:00 - 09:00 **Breakfast with an expert**
- 09:00 - 10:30 **Interactive Session 4: Entrepreneurship**
- Klaus WEINBERGER, Innsbruck, Austria
- 10:30 - 11:00 Coffee break
- 11:00 - 12:30 **Session 8: "Inflammaging in Various Tissues"** (chairperson: Katja SIMON)
- 11:00 - 11:30 Stefano PLUCHINO, Cambridge, UK: *Mitochondrial regulation of microglia function in MS-like disease*
- 11:30 - 12:00 Christina D. CAMELL, MN, USA: *Adipose tissue leukocytes and impaired metabolism during aging*
- 12:00 - 12:15 Short talk: Lisa KLEISSL, Vienna, Austria: *Interplay of structural changes in skin tissue during aging and the progression of chronic inflammatory skin diseases*
- 12:15 - 12:30 Zinaida SHAKEL, Porto, Portugal: *β -carotene-loaded solid lipid nanoparticles drive hyaluronic acid stimulation in skin models: a strategy against ageing*
- 12:30 - 13:00 **Poster and short presentation prizes**
- 13:00 Farewell

Organizers

Main Organizer: Birgit Weinberger (University of Innsbruck, Austria)

Co-Organizers: Pidder Jansen-Dürr (University of Innsbruck, Austria); Patrizia Stoitzner (Medical University of Innsbruck, Austria); Verena Labi (Medical University of Innsbruck, Austria); Thomas Brocker (University of Munich, Germany); Christina Camell (University of Minneapolis, MN, USA)

For more info and to register, please visit

<https://immunologymetabolismageing2025.febsevents.org>