

# Swiss Autophagy Meeting 2024

## Emerging roles of autophagy: From cells to organisms

**Date:** Thursday & Friday September 12-13, 2024

**Place:** Grand Auditoire, DNF-UNIL, Rue du Bugnon 9, 1005 Lausanne

### Detailed program

#### Thursday 12<sup>th</sup>

**09:15-10:00 Registration opens, coffee, croissant**

**10:00-10:15 Welcome address**

**10:15-11:00 KEYNOTE 1: Anne Simonsen** (University of Oslo, Norway): Exploring the crosstalk of hypoxia-induced mitophagy and cellular bioenergetics

#### **Session 1: Basic mechanisms of the autophagic pathway**

**11:00-11:30 Sharon Tooze** (The Francis Crick Institute, London, UK): WIPI2b recruitment to phagophores and ATG16L1 binding are regulated by ULK1 phosphorylation

**11:30-11:45 Short Talk 1** (selected from abstracts) **Mikhail Rudinskiy** (IRB Bellinzona, CH): Intrinsically disordered modules of autophagy receptors induce organelle fragmentation during autophagy

**11:45-12:15 Marja Jaatela** (University of Copenhagen, Denmark): Control of lysosomal ion homeostasis

**12:15-12:30 Flash talks (selected from abstracts; 5 x 3')**

**12:15-12:18 Anna Bill** (University of Bern, CH): Particular ATG16L2 function in myeloid leukemia cells

**12:18-12:21 Pauline Depierre** (University of Lausanne, CH): Investigating the involvement of selective autophagy in neuronal autosis and the molecular mechanisms behind

**12:21-12:24 Monique Gannage** (CHUV, Lausanne, CH): Autophagy shapes the MHC class II peptide repertoire and contributes to autoimmunity

**12:24-12:27 Stéphanie Kaeser-Pebarnard** (University of Fribourg, CH): Beyond Transcription: WBP2's Role in Connecting Vesicle-Coat Proteins and Autophagosome Maturation

**12:27-12:30 Ilaria Cocchiararo** (University of Geneva, CH): Pathomechanisms involved in the selective affection of skeletal muscle in X-linked Myopathy with Excessive Autophagy

**12:30-14:00 Lunch and posters (even number posters)**

**13:00-13:30 LS<sup>2</sup> Section Autophagy member meeting**

## Session 2: Methods and models in autophagy research

**14:00-14:30 Joern Dengjel** (University of Fribourg, Switzerland): Phosphorylation-based regulation of autophagy

**14:30-14:45 Short Talk 2** (selected from abstracts) **Xiaoqing Mu** (ETH Zurich, CH): Investigating organelle clearance during erythroblast differentiation using genome-wide screening

**14:45-15:15 Terje Johansen** (The Arctic University of Norway, Norway): The mitochondrial ubiquitin ligase MUL1 recruits the ULK1 complex to induce mitophagy

**15:15-15:30 Short Talk 3** (selected from abstracts) **Jianwen Zhou** (ETH Zurich, CH): A genome-wide CRISPR screen to investigate hypoxia-mediated pexophagy

**15:30-15:45 Flash talks (selected from abstracts; 5 x 3')**

**15:30-15:33 Lisa Gambarotto** (University of Lausanne, CH): Autophagic regulation of RNAs in the brain

**15:33-15:36 Rosalie Heilig** (Beatson Institute for Cancer Research, UK): Mitochondrial ubiquitylation during cell death drives anti-tumorigenic pro-inflammatory signalling

**15:36-15:39 Karla Alvarez Valadez** (Centre de Recherche des Cordeliers, Paris, FR): Lysosomal damage via cholesterol accumulation triggers immunogenic cell death

**15:39-15:42 Diego Morone** (IRB Bellinzona, CH): Role of autophagy in T cell homeostasis

**15:42-15:45 Svenja Nopper** (University of Zurich, CH): Beclin-1 interaction with Bcl-2 is dispensable for canonical autophagy

**15:45-17:00 Coffee break and posters (odd numbers posters)**

## Session 3: Non-canonical function of autophagy

**17:00-17:30 Oliver Florey** (Babraham Institute, Cambridge, UK): New roles for non-canonical autophagy in lysosome homeostasis

**17:30-18:00 Thierry Galli** (INSERM UMR1266/University Paris Cité, Paris, France): Molecular and Cellular Mechanisms of Late Endosomal Autophagy-Dependent Secretion

**18:00-18:15 Short talk 4** (selected from abstracts) **Elise Jacquin** (Inserm U1231, Université de Bourgogne, FR): STING-associated conjugation of Atg8 to single-membranes (CASM) in immune cells

**18:15-18:30 Short talk 5** (selected from abstracts) **Erin Wosnitzka** (University of Lausanne, CH): Secretory autophagosomes shape the synaptic surfaceome

**18:30-19:30 Apéro and speed dating**

**19:30 BBQ!!! and more drinks**

## **Friday 13<sup>th</sup>**

**08:30-09:00 Coffee, croissants**

### **Session 4: Autophagy in disease**

**09:00-9:30 Francesco Cecconi** (Danish Cancer Society Research Center, Copenhagen and University of Rome 'Tor Vergata', Rome, Italy): Novel forms of selective autophagy and cancer ontogenesis and progression

**9:30-10:00 Jay Debnath** (University of California San Francisco, USA): Autophagy suppresses pro-metastatic differentiation by degrading SQSTM1-NBR1 condensates

**10:00-10:15 Short talk 6** (selected from abstracts) **Qi Wang** (EPFL, Lausanne, CH): Enhancing mitophagy reduces neuroinflammation, amyloid aggregation and improves cognition

**10:15-10:30 Coffee break**

**10:30-11:00 Christian Munz** (University of Zürich, Switzerland): Autophagy during human tumorvirus infections

**11:00-11:30 Maho Hamasaki** (Osaka University, Japan): Palmitoylation of ULK1 by ZDHHC13 plays a crucial role in autophagy

**11:30-12:15 KEYNOTE 2: Katja Simon** (Max-Delbrück-Centrum für Molekulare Medizin, Berlin, Germany): Autophagy's role in immune aging

**12:15-12:30: Closing remarks**

**Poster and short talk prizes**

**Lunch and departure**