

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 12th

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 Schläfli (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 Cocchiara (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 LS² 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 13th

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