

CELLULAR ORGANELLE SCIENCE

At the Interface of Chemistry, Biology and Drug Discovery

Thursday, 24 September 2026
Lecture Room P1, Faculty of Pharmacy, University of Ljubljana

Each lecture comprises a 20-minute presentation followed by 5 minutes of discussion.

ABOUT THE SYMPOSIUM

Cellular Organelle Science is a one-day meeting on the chemistry and biology of cellular organelles, held at the **Faculty of Pharmacy, University of Ljubljana**, on **24 September 2026**. It is intended for chemists and biologists who work on the same organelles from different directions, and who rarely share a room.

Talks span chemical strategies for organelle targeting, fluorescent probes for organelle imaging, organelle-specific therapeutic targets, membrane contact sites, organelle dynamics, mitochondrial and lysosomal biology, and the roles of organelles in cancer and neurodegeneration.

The programme is deliberately unhurried: invited lectures across three sessions, a poster session over lunch, and time to talk. We look forward to welcoming you to Ljubljana.

MORNING SESSION I

09:00 – 10:40

Chair: Tihomir Tomašič

- 09:00 **Lucija Peterlin Mašič** University of Ljubljana, Faculty of Pharmacy
Opening address. Preclinical development of new mitochondrial ion channel inhibitors for cancer therapy
- 09:25 **Tea Lenarčič** ETH Zurich
Assembly of ribosomes in mitochondria
- 09:50 **Maria Grazia Perrone** University of Bari Aldo Moro
Targeting human caseinolytic protease (hClpP) in diffuse midline glioma: from ONC201 to next-generation ClpP activators
- 10:15 **Jernej Repas** University of Ljubljana, Faculty of Pharmacy
Mitochondrial respiration in cancer
- 10:40 *Coffee break*

MORNING SESSION II

11:10 – 12:25

Chair: Andrej Emanuel Cotman

- 11:10 **Robert Zorec** Celica Biomedical; University of Ljubljana, Faculty of Medicine
Regulation of lysosomal fusion with the plasma membrane in reactive astrocytes
- 11:35 **Iztok Urbančič** Jožef Stefan Institute
From microscopy of organelle responses to prediction of in vivo outcomes
- 12:00 **Anja Pišlar** University of Ljubljana, Faculty of Pharmacy
Beyond the lysosome: cathepsin X as a driver of neuroinflammation and a therapeutic target in neurodegenerative disease
- 12:25 *Lunch and poster session*

AFTERNOON SESSION

13:25 – 15:30

Chair: Lucija Peterlin Mašič

- 13:25 **Ildiko Szabó** University of Padova
The power of targeting mitochondrial potassium channels in aggressive cancers
- 13:50 **Tihomir Tomašič** University of Ljubljana, Faculty of Pharmacy
The discovery of new Kv1.3 inhibitors
- 14:15 **Andrej Emanuel Cotman** University of Ljubljana, Faculty of Pharmacy
Small-molecule mitochondria-targeting moieties
- 14:40 **Stane Pajk** University of Ljubljana, Faculty of Pharmacy
Fluorescent probes for organelle imaging

- 15:05 **Natalija Trunkelj** **University of Ljubljana, Faculty of Pharmacy**
Large Stokes-shift coumarins as chemical tools for organelle research
- 15:30 *Poster awards and closing remarks*
-

Organising committee

Lucija Peterlin Mašič, Tihomir Tomašič, Stane Pajk, Andrej Emanuel Cotman, Natalija Trunkelj and Ivan Džajić.

Hosted by the Faculty of Pharmacy, University of Ljubljana. Supported by the Slovenian Research and Innovation Agency (ARIS), grant J7-4635.