

Shaping the Future of Functional Genomics for 20 Years

Day 1: June 11, 2025

12:00 - 12:15 | Opening Remarks

Chair: Tadeja Režen

- Prof. Gregor Majdič, Rector of University of Ljubljana
- Prof. Igor Švab, Dean of Faculty of Medicine, University of Ljubljana

12:15 - 13:15 | Session 1: Functional Genomics at 20 - Founders' Perspectives and Future Horizons

Chair: Damjana Rozman

- **Radovan Komel**, University of Ljubljana, Faculty of Medicine, Slovenia: TBA
- **Tamara Lah Turnšek**, National Institute of Biology, Slovenia: TBA
- **Peter Dovč**, University of Ljubljana, Biotechnical Faculty, Slovenia: TBA

13:15 - 14:00 | Plenary Lecture 1

Chair: Damjana Rozman

- **Dame Janet Thornton**, EBI-IMBL, UK: *The past, present, and future of genomic and protein structural and functional data*

14:00 - 14:30 | Coffee Break 1

14:30 - 16:00 | Session 2: From Bio-Chips to Big Data - The Evolution of Molecular Medicine

Chair: John M. Hancock & Iain R. White

- **Stephen J. Fowler**, University of Manchester, UK: *Breath biomarkers in respiratory disease*
- **Klementina Fon Tacer**, Texas Tech University, USA: *Multiomic Approach Reveals the Physiological and Oncogenic Roles of Melanoma Antigens*
- **Jernej Kovač**, University Medical Center and UL Faculty of Medicine, Slovenia: *Precision Prevention: Leveraging Genetics for Early Familial Hypercholesterolemia Screening*
- **Tadeja Režen**, University of Ljubljana, Faculty of Medicine, Slovenia: *Unraveling circRNA function and clinical applications in hepatocellular carcinoma*

16:00 - 16:30 | Coffee Break 2

16:30 - 18:00 | Session 3: Plant Functional Genomics - From Systems to Sustainable Agriculture

Chair: Špela Baebler & Vladimir Meglič

- **Anna Matuszyńska**, RWTH Aachen University, Germany: *Computational models and functional genomics: do we even need mechanistic models to improve plant photosynthesis?*
- **Roberto Papa**, Università Politecnica delle Marche, Italy: *Omics in Legumes: Unveiling Genetic Diversity for Sustainable Agriculture*

- **Jan Zrimec**, National Institute of Biology, Slovenia: *Metabolic models for deciphering potato biotic stress responses*
- **Barbara Pipan**, Agricultural Institute of Slovenia, Slovenia: *Advances in genetics/genomics Integration for Crop Improvement*

Day 2: June 12, 2025

9:00 - 9:45 | Workshop 1 for doctoral students of Biomedicine UL

Klementina Fon Tacer: The Global Alumni Network of the University of Ljubljana (SMUL) opens opportunities for doctoral students of UL

9:45 - 10:30 | Workshop 2 for doctoral students of Biomedicine UL

Mikael Benson: Digital Twins

10:30 - 12:00 | Poster Session, with Pitch talks

Chairs: Mikael Benson & Klementina Fon Tacer

12:00 - 13:00 | Lunch and poster session

13:00 - 13:45 | Plenary Lecture 2

Chair: Damjana Rozman

- **Mikael Benson**, Karolinska Institute and University of Linköping, Sweden: *Multiomic biomarkers and Digital Twins*

13:45 - 15:00 | Session 4: Translational Medicine

Chair: Toni Petan & Barbara Ostanek

- **Vid Mlakar**, University of Genève, Pediatric Oncology, Switzerland: *Reactivation of p53 as a new strategy for treatment of Neuroblastoma*
- **Irena Mlinarič Raščan**, University of Ljubljana, Faculty of Pharmacy, Slovenia: *20 years of translating and personalizing leukemia therapies at the University of Ljubljana Faculty of Pharmacy*
- **Katarina Černe**, University of Ljubljana, Faculty of Medicine, Slovenia: *Biomarkers in Advanced Ovarian Cancer: A Pathway to Personalized Therapy*

15:00 - 15:30 | Coffee break 3

15:30 - 17:00 | Session 5: Modeling and Data Integration in Life Sciences

Chairs: Maja Rupnik & Miha Moškon

- **Jacopo Grilli**, ICTP, Italy: *Modelling of Microbial Communities*
- **Barbara Koroušič Seljak**, Institute of Jožef Stefan, Slovenia: *Data Interoperability in Functional Genomics Modeling*
- **Martin Špendl**, University of Ljubljana, Faculty of Computer and Information Science, Slovenia: *Towards bulk RNA-Seq Foundation model*
- **Anna Magdalena Dragoš**, University of Ljubljana, Biotechnical Faculty, Slovenia: *Genetics and genomics in phage-bacteria interactions*

17:00 - 17:30 | Poster awards and closing