

**PROGRAM**  
**of the International conference “Advances in Microbiology and Biotechnology”**  
**Lviv, October 26-29<sup>th</sup>, 2020 (AMB-2020)**  
<http://www.cellbiol.lviv.ua/2020>

**Oct 26th (Monday)**

- 12:00 – 15:00 Registration of participants, Conference hall of the main building of Ivan Franko Lviv National University.
- 15:00 – 15:30 Conference opening, press release for the media**  
Speakers: A. Sibirny (Chair of the Organizing Committee), R. Hladyshevsky (Vice-Rector of Lviv National University), H. Lappin-Scott (FEMS President), B. Oudega (Chair of the Program Committee of 9<sup>th</sup> FEMS Congress), representatives of National Academy of Sciences of Ukraine, Lviv city council and Lviv regional administration
- 15:30 – 17:30 **Plenary Session**  
***Chair, Andriy Sibirny (Ukraine)***
- 15:30 – 16:10 H. Lappin-Scott (UK). The importance of biofilms in complex microbial communities.
- 16:10 – 16:50 G. Wegrzyn (Poland). Bacteriophages as model system of molecular genetics research and their possible role in medicine and veterinary.
- 16:50 – 17:30 C. Harwood (UK). Progress in understanding the composition and activity of the *Bacillus subtilis* Signal Recognition Particle
- 17:30 – 19:00 **Get together party** (cafeteria of Lviv house of scientists, Lystopadovoho chynu Str. 6)

**Oct 27th (Tuesday)**

- 9:00 – 11:00 Session 1 "**Cell Signaling, Autophagy and Apoptosis**"  
***Chair, Rostyslav Stoika (Ukraine), Teresa Zoladek (Poland)***
- (Conference hall of the main building of Ivan Franko Lviv National University)
- 9:00 – 9:20 Lecture 1. A. Sibirny (Ukraine). New insight on mechanisms of degradation of cytosolic enzymes of methanol metabolism.
- 9:20 – 9:40 Lecture 2. T. Zoladek (Poland). Vps13 protein and calcium signaling in yeast.
- 9:40 – 10:00 Lecture 3. M. Semkiv (Ukraine) Tagging the genes involved in cytosolic protein degradation in the methylotrophic yeast *Komagataella phaffii*
- 10:00 – 10:20 Lecture 4. O. Stasyk (Ukraine). Tumor cell signaling in response to arginine deprivation.

- 10:20 – 10:40 Lecture 5. Y. Kit (Ukraine). Study of molecular mechanisms of Lactaplin action
- 10:40 – 11:00 *Presentation of conference sponsor*
- 11:00 – 11:30 **Coffee break**
- 11:30 – 13:30 Session 2 "**Eukaryotic Cell Biology**"  
*Chairs, Oleh Stasyk (Ukraine), Bozena Kaminska-Kaczmarek (Poland)*
- 11:30 – 11:50 Lecture 1. B. Kaminska-Kaczmarek (Poland). Re-activating the innate immune system against cancer with synthetic short peptides
- 11:50 – 12:10 Lecture 2. R. Stoika (Ukraine). Redox-based mechanisms in circumvention of drug resistance in tumor cells.
- 12:10 – 12:30 Lecture 3. A. Jozkowicz (Poland). TRAIL-based chimeric protein to inhibit tumor growth and bypass TRAIL resistance.
- 12:30 – 12:50 Lecture 4. R. Panchuk (Ukraine). Interplay between ROS production and thiol binding at anticancer action of Landomycin antibiotic.
- 12:50 – 13:10 Lecture 5. Y. Bobak (Ukraine). New combinational approaches of metabolic therapy based on arginine deprivation.
- 13:10 – 13:30 Lecture 6. K. Pierzynowska (Poland). Two-year comprehensive studies on effects of genistein in the mouse model of Huntington disease
- 13:30 – 14:30 **Lunch** (cafeteria of Lviv House of Scientists).
- 14:30 – 17.10 Session 3 "**Microbial Cell Biology, Biochemistry and Genetics**"  
*Chairs Alexander Rapoport (Latvia), Colin Harwood (UK)*
- 14:30 – 14:50 Lecture 1. A. Rapoport (Latvia). Mechanisms of yeast dehydration/rehydration.
- 14:50 – 15:10 Lecture 2. R. Daugelavicius (Lithuania). Electrochemical analysis for biochemical studies of microbial cultures.
- 15:10 – 15:30 Lecture 3. P. Buzzini (Italy). Genetics of new cold-tolerant and psychrophilic yeasts.
- 15:30 – 15:50 Lecture 4. P. Fickers (Belgium). Metabolic engineering of *Yarrowia lipolytica* for erythritol synthesis.
- 15:50 – 16:10 Lecture 5. H. Erten (Turkey). Cell morphology and biochemistry of *Yarrowia lipolytica* mutants overproducing citric acid.

- 16:10 – 16:30 Lecture 6. O. Dmytruk (Ukraine). Degradation of formaldehyde dehydrogenase and formate dehydrogenase in the yeast *Komagataella phaffii*.
- 16:30 – 16:50 Lecture 7. O. Maslovska (Ukraine). Biochemical indicators of influence of heavy metal ions on bacteria of sulfur cycle.
- 16:50 – 17:10 Lecture 8.
- 17:10 – 17:30 **Coffee break**
- 17:30 – 18:30 **Poster session №1** (sections 1, 2, 3)
- 18:30 – 19:30 **Dinner** (cafeteria of Lviv house of scientists)

### Oct 28th (Wednesday)

- 9:00 – 11:50 Session 4 "**Biotechnology and Metabolic Engineering**"  
*Chairs, Pietro Buzzini (Italy), Volkmar Passoth (Sweden)*
- 9:00 – 9:20 Lecture 1. V. Passoth (Sweden). Molecular approaches for studying oleaginous yeasts.
- 9:20 – 9:40 Lecture 2. R. Ledesma-Amaro (UK) Combining synthetic biology and metabolic engineering for an affordable microbial bioproduction of valuable chemicals.
- 9:40 – 10:00 Lecture 3. F. Matthes (Germany) Towards the production of 2,5-furandicarboxylic acid in *Blastobotrys (Arxula) adenivorans*
- 10:00 – 10:20 Lecture 4. D. Fedorovych (Ukraine). Production of flavins by metabolically engineered yeast *Candida famata*.
- 10:20 – 10:40 Lecture 5. J. Ruchala (Poland). Construction of the yeast strains producing bacterial flavin antibiotics
- 10:40 – 11:00 Lecture 6. K. Dmytruk (Ukraine). Metabolic engineering of *Ogataea polymorpha* for advanced xylose and L-arabinose fermentation.
- 11:00 – 11:20  
Lecture 7. B. Ostash (Ukraine) Landomycins export in *Streptomyces cyanogenus* S136: novel insights from genetic and structural biology studies.
- 11:20 – 11:40 Lecture 8.
- 11:40 – 11:50 **Coffee break**

- 11:50 – 13:50 **Session 5 “Medical Microbiology”**  
*Chairs, Andrzej Gamian (Poland), Vladimir Zavyalov (Finland)*
- 11:50 – 12:10 Lecture 1. V. Zavyalov (Finland) Chaperone-usher systems coding for surface adhesion organelles in Gram-negative bacteria: elucidation of their role in immune response and antibiotic resistance.
- 12.10 – 12.30 Lecture 2. M.F. Colom (Spain) The human lung mycobiome and the domestic environment
- 12.30 – 12.50 Lecture 3. A. Gamian (Poland) Cell structure of the pathogenic actinomycetes.
- 12.50 – 13.10 Lecture 4. Yingqian Kang (China) Screening of fungal supernatants for novel HIV-1 latency reversal agents (LRAs).
- 13:10 – 13:30 Lecture 5. J. Dziadek (Poland) Evaluation of putative drugs and antibiotic drug targets in tubercle bacilli.
- 13.30 – 14.30 Lecture 6. A. Trchounian (Armenia) Metal nanoparticles in microbiology: antimicrobial effects and membranous mechanisms
- 14.30 – 15.30 *Presentations of sponsors*
- Lunch** (cafeteria of Lviv House of Scientists)
- Poster session №2** (sections 4, 5)
- 15:30 – 18:30 Lviv tour or walking excursions
- 19:00 – 20:00 **Dinner** (cafeteria of Lviv House of Scientists) **or**
- 19:00 – 22:00 **Banquet**

### Oct 29<sup>th</sup> (Thursday)

- 9.00 – 10.40 **Meeting of the FEMS Education group.**  
*Chairs, Andriy Sibirny (Ukraine), Arment Trchounian (Armenia)*
- Speakers: Andriy Sibirny (Ukraine), Hilary Lappin-Scott (UK), Alexander Rapoport (Latvia), Grzegorz Wegrzyn (Poland), Michael Sauer (Austria), Alexander Netrusov (Russia), Maria Franciska Colom (Spain), Andriy Halushka (Ukraine), Colin Harwood (UK), Armen Trchounian (Armenia), Justyna Ruchala (Poland), Volkmar Passoth (Sweden), Patrick Fickers (Belgium).
- 10.40 – 11.00 Coffee break
- 11:00 – 12:40 Session 5 "**Bioanalytics**"

***Chairs, Oleksiy Soldatkin (Ukraine), Mykhailo Gonchar (Ukraine)***

- 11:00 – 11:20 Lecture 1. M. Gonchar (Ukraine). Recombinant creatinine deiminase from *Corynebacterim glutamicum*: overexpression, isolation, characterization, and bioanalytical application.
- 11:20 – 11:40 Lecture 2. O. Soldatkin (Kyiv). Multifunctional application of enzymes in biosensors development.
- 11:40 – 12:00 Lecture 3. S. Dziadevych (Kyiv). Application of nanomaterials of different nature in biosensorics.
- 12:00 – 12:20 Lecture 4. Lecture 3. G. Gaida (Ukraine). Peroxidase-like nanozymes: synthesis, characterization and bioanalytical application
- 12:20 – 12:40 Lecture 5. O. Smutok (Ukraine). New amperometric multibiosensors based on micro- and nanocomposites.
- 12.40 – 13.00 Coffee break
- 13:00 – 14:20 **Plenary Session**  
***Chair, Andriy Sibirny (Lviv)***
- 13:00 – 13:40 J. Anne (Belgium). New advances in biotechnology of *Streptomyces*.
- 13:40 – 14:20 M. Sauer (Austria). Lactic acid bacteria as promising biotechnological organisms.
- 14:20 – 14:50 Short oral presentations of 6 best posters of young scientists (under 35 years) - 5 min presentations.
- 14:50 – 15:00 Conference closing ceremony. Young Scientists Award for the best poster presentation.
- 15:00 – 16:00 **Lunch** (cafeteria of Lviv house of scientists)