

**6th Ukrainian Congress for Cell Biology with
international representation**

Yaremche, recreation center "Arnika"

Ivano-Frankivsk National Medical University

**CONFERENCE
PROGRAMME**

June 18-21, 2019

CONFERENCE PROGRAM

June 18 (TUESDAY)

- 13:00 – 15:00 Registration of participants of the conference, recreation center “Arnika”, central building, I. Petrasha Str. 30, Yaremche
- 15:00 – 15:30 Conference opening, press release for the media**
- 15:30 – 17:30 **Plenary session**
Chair, Andriy Sibirny (Lviv)
- 15:30 – 16:10 Maryna Skok. "Mesenchymal stem cells as a therapeutic tool to cure cognitive impairment caused by neuroinflammation or alpha7 nicotinic acetylcholine receptor deficiency "
- 16:10 – 16:50 Grzegorz Wegrzyn. "Changes in transcriptomes of cells derived from patients suffering from different types of mucopolysaccharidosis"
- 16:50 – 17:30 Patrick Fickers. "The quest for the best cell factory for the production of recombinant proteins: *Pichia pastoris* vs *Yarrowia lipolytica*"
- 17:30 – 19:00 **Get together party**

June 19 (WEDNESDAY)

- 9:00 – 11:00 Session "**Cell signaling, apoptosis, autophagy**"
Chair, Oleh Stasyk (Lviv)
(recreation center “Arnika”, central building, I. Petrasha Str. 30, Yaremche)
- 9:00 – 9:20 Lecture 1. Andriy Sibirny. "Autophagy is the primary mechanism involved in degradation of the cytosolic enzymes of methanol metabolism in the methylotrophic yeast *Komagataella pastoris*"
- 9:20 – 9:40 Lecture 2. Lyudmila Drobot. "The epithelial-mesenchymal plasticity is a driving force of tumor progression"
- 9:40 – 10:00 Lecture 3. Olexandr Korchynskyy. "Overexpression of direct bone morphogenetic protein/Smad target gene inhibitory kBa upon BMP7 treatment is insufficient to prevent and treat rheumatoid arthritis"
- 10:00 – 10:20 Lecture 4. Kostyantyn Dmytruk. "The role of peroxisomes in xylose alcoholic fermentation in the engineered *Saccharomyces cerevisiae*"
- 10:20 – 10:40 Lecture 5. Yuriy Kit. "Identification of cortactin-like proteins in human urine at norm and pathology: diagnostic and prognostic potentials"
- 10:40 – 11:00 *Presentation of "Bionix Lab" company*
- 11:00 – 11:30 **Coffee break**
- 11:30 – 13:30 Session "**Tumor cell biology**"
Chair, Rostyslav Stoika (Lviv) (recreation center “Arnika”, central building, I. Petrasha Str. 30, Yaremche)

- 11:30 – 11:50 Lecture 1. Rimantas Daugelavicius. "Conditions and factors leading to multidrug resistance in bacteria and eukaryotic cells"
- 11:50 – 12:10 Lecture 2. Rostyslav Stoika. "Potentials of nanocarriers in circumventing tumor cell resistance to anticancer drugs and diminishing negative side effects of their action in the treated organism"
- 12:10 – 12:30 Lecture 3. Oleh Stasyk. "Metabolic anticancer enzymotherapy based on arginine deprivation and new combinational approaches"
- 12:30 – 12:50 Lecture 4. Rostyslav Panchuk. "Circumvention of tumor drug resistance by quinone-containing compounds: role of extramitochondrial ROS"
- 12:50 – 13:10 Lecture 5. Nataliya Hudz. "Leaning points around biocompatibility of PD solutions measured as *in vitro* proliferation of HepG2 and Vero cells"
- 13:10 – 13:30 Lecture 6. Nelia Kyshynets. "Biological drugs obtained by means of high-tech processes: quality assurance in accordance with the requirements of the State Pharmacopoeia of Ukraine"
- 13:30 – 14:30 **Lunch** (in cafeteria at central building of recreation center "Arnika", I. Petrasha Str. 30, Yaremche)
- 14:30 – 16:50 Session "**Cell response on stress**"
Chair, Rostyslav Panchuk (Lviv)
(recreation center "Arnika", central building, I. Petrasha Str. 30, Yaremche)
- 14:30 – 14:50 Lecture 1. Alexander Rapoport "Anhydrobiosis: Survival without water"
- 14:50 – 15:10 Lecture 2. Sergiy Beschasnyi. "Effects of the carbon monoxide releasing molecule-2 on human erythrocyte membranes"
- 15:10 – 15:30 Lecture 3. Kostyantyn Kuznetsov. "Cell membrane permeability changes under exposure to neutron radiation"
- 15:30 – 15:50 Lecture 4. Oksana Stolyar. "Application of the novel integrative index of oxidative stress basing on the experience of aquatic mollusks study"
- 15:50 – 16:10 Lecture 5. Raisa Piskun. "Compensatory-adaptive potential of cardiocytes under conditions of experimental cholesterol loading the animal models"
- 16:10 – 16:30 Lecture 6. Anastasiia Rozhyna. "The influence of low power microwave radiation of 2,4 GHz frequency on human cells"
- 16:30 – 16:50 Lecture 7. Oksana Novikova. "Viability and proliferative activity of cryopreserved cultures of dermal papillas of rabbits "
- 16:50 – 17:10 **Coffee break**
- 17:10 – 18:30 Poster session №1 (sections 1, 2, 4, 6)
- 18:30 – 19:30 **Dinner** (in cafeteria at central building of recreation center "Arnika", I.

Petrasha Str. 30, Yaremche)

June 20 (THURSDAY)

9:00 – 11:50 Session "**Cellular, genetic and metabolic engineering**"

Chairs, Yaroslav Blume (Kyiv)

(recreation center “Arnika”, central building, I. Petrasha Str. 30, Yaremche)

9:00 – 9:20 Lecture 1. Mykhailo Gonchar. "Recombinant enzymes, human arginase i and microbial arginine deiminase, as the biorecognition elements for arginine-selective amperometric biosensors and enzymatic kits"

9:20 – 9:40 Lecture 2. Justyna Ruchala. "Importance of peroxisomes and peroxisomal enzymes of pentose phosphate pathway for xylose alcoholic fermentation in the thermotolerant methylotrophic yeast *Ogataea polymorpha*"

9:40 – 10:00 Lecture 3. Daria Fedorovych. "New approaches to improve riboflavin production in the yeast *Candida famata*"

10:00 – 10:20 Lecture 4. Olena Kurylenko. "Evaluation of transcriptional factors involved in regulation of xylose metabolism and fermentation in the thermotolerant yeast *Ogataea polymorpha*"

10:20 – 10:40 Lecture 5. Marta Semkiv. “Crude glycerol bioconversion to fuel ethanol by methylotrophic yeasts”

10:40 – 11:00 Lecture 6. Nataliya Finiuk. "Application of poly-DMAEMA-containing carriers for delivery of plasmid DNA to mammalian cells"

11:00 – 11:20 Lecture 7. Oleh Smutok. The recombinant yeast *Ogataea polymorpha*, overproducing flavocytochrome b₂, as a tool for L-lactate and chromate analysis, as well as for chromate bioremediation

11:20 – 11:40 Lecture 8. Volodymyr Granovski. "Expression of heterologous proteins in *E.coli* and *H. polymorpha* using recombinant DNA technologies for vaccine development and diagnostics applications"

11:40 – 11:50 *Presentation of Xema Company*

11:50 – 12:10 **Coffee break**

12:10 – 13:00 Poster session №2 (sections 3, 5)

13:00 – 14:00 **Lunch** (in cafeteria at central building of recreation center “Arnika”, I. Petrasha Str. 30, Yaremche)

14:00 – 18:00 Yaremche tour

18:00 – 19:00 **Dinner** (in cafeteria at central building of recreation center “Arnika”, I. Petrasha Str. 30, Yaremche)

Or

19:00 – 22:00 **Banquet**

CONFERENCE PROGRAM
June 21 (FRIDAY)

- 9:00 – 10:40 Session "**Plant cell biology**"
Chair, Alla Yemets (Kyiv)
(recreation center “Arnika”, central building, I. Petrasha Str. 30, Yaremche)
- 9:00 – 9:20 Lecture 1. Alla Yemets. "Lactoferrin expression as a tool for the enhancement of non-specific plant pathogen resistance"
- 9:20 – 9:40 Lecture 2. Yuriy Kolupayev. " Nitric oxide, synthesized by nitrate reductase, as participant of transduction of hydrogen sulphide signal at induction of heat resistance of wheat plantlets "
- 9:40 – 10:00 Lecture 3. Galyna Shevchenko. "Adaptative changes of proteome in arabidopsis seedlings from chernobyl zone "
- 10:00 – 10:20 Lecture 4. Olena Kravets “Role of cytomixis in a mechanism of microsporocyte karyotype rearrangement”
- 10:20 – 10:40 Lecture 5. Volodymyr Shkarupa ”Optimized system of analysis of mutagenic modifiers based on the model plant of *Allium cepa L.*”
- 10:40 – 11:00 Coffee break
- 11:00 – 12:20 **Plenary session**
Chair, Andriy Sibirny (Lviv)
- 11:00 – 11:40 Yaroslav Blume. " New inhibitors of FtsZ proteins: the way from high-throughput molecular screening up to verification in vitro "
- 11:40 – 12:20 Alicja Jozkowicz. “Nrf2 and Keap1: a quintessential duet moonlights in endothelium”
- 12:20 – 12:40 Report of Audit Commission on the activities of the Ukrainian Society of Cell Biology for the 2016-2019.
- 12:40 – 13:20 Short oral presentations of 5 best posters of young scientists (under 35 years). 5 min presentation+2 min questions.
- 13:20 – 13:40 Conference closing ceremony. Young Scientists Award for the best poster presentation.
- 13:40 – 14:40 **Lunch** (in cafeteria at central building of recreation center “Arnika”, I. Petrasha Str. 30, Yaremche)