

Program of 7th International Weigl Conference, Lviv, Ukraine, September 26-29, 2017

September 26 (TUESDAY)

9.00 – 16.00 Registration, Poster Mounting

12.00 – 12.30 **Opening Ceremony:** Greetings from Lviv National University, Lviv city Council, Presidium of NAS of Ukraine, Ukrainian and Polish co-organizers

12.30 – 15.00 **Plenary Session 1**

Chairs, A. Sibirny, Ukraine; G. Wegrzyn, Poland

12.30 – 13.00 **Bauke Oudega** (Amsterdam, The Netherlands) FEMS: PRESENT, FUTURE AND STRATEGY

13.00 – 13.30 **Serhiy Komisarenko** (Kyiv, Ukraine) BIOSAFETY IN UKRAINE AND BIOTHREATS DUE TO THE PROGRESS IN MODERN BIOLOGY

13.30 – 14.00 **Grzegorz Wegrzyn** (Gdansk, Poland) LIGHT AND DARK SIDES OF THE (PHAGE) FORCE: 100 YEARS OF STUDIES ON BACTERIOPHAGES

14.00 – 14.30 **Andrzej Gamian** (Wroclaw, Poland) ENTEROBACTERIAL OmpC PROTEIN RECOGNIZED BY PROTECTIVE UMBILICAL CORD ANTIBODIES AS A POTENTIAL ANTIGEN FOR CONJUGATE VACCINE

14.30 – 15.00 **Andriy Sibirny** (Lviv, Ukraine) THE ROLE OF AUTOPHAGY IN DEGRADATION OF THE CYTOSOLIC ENZYMES OF METHANOL METABOLISM IN THE YEAST *KOMAGATAELLA PHAFFII* (*PICHIA PASTORIS*)

15.00 – 15.30 **Coffee Break**

15.30 – 17.00 **Session 1 Metabolism and Regulation**

Chairs, O. Tehlivets, Austria, R. Daugelavicius, Lithuania

15.30 – 15.50 **Oleh Stasyk** (Lviv, Ukraine) *HANSENULA (OGATAEA) POLYMORPHA* HEXOSE TRANSPORTER Gcr1 IS A NON-CONVENTIONAL GLUCOSE RECEPTOR

15.50 – 16.10 **Rimantas Daugelavičius** (Kaunas, Lithuania) POSSIBILITIES TO CONTROL OF EFFLUX ACTIVITY IN MICROORGANISMS

16.10 – 16.30 **Magdalena Kotowska** (Wroclaw, Poland) REGULATORY TARGETS OF A ZINC BINDING GNTR-LIKE PROTEIN OF *STREPTOMYCES COELICOLOR* A3(2)

16.30 – 16.50 **Dagmara Jakimowicz** (Wroclaw, Poland) THE HIGHLY PROCESIVE TOPOISOMERASE I – WHY DO THE ACTINOBACTERIA NEED ONE?

17.20 – 18.00 **Concert**

18.00 – 20.00 Get-Together Party

September 27 (WEDNESDAY)

8.30 – 10.00 Poster Session 1

10.00 – 11.30 Session 1 Metabolism and Regulation, continued

Chairs, O. Stasyk, Ukraine, D. Jakimowicz, Poland

10.00 – 10.20 Oksana Tehlivets (Graz, Austria) HOMOCYSTEINE DEREGULATES FATTY ACID SYNTHESIS VIA DIFFERENT MECHANISMS IN YEAST

10.20 – 10.40 Paweł Olszewski (Gdansk, Poland) RNAP CRASH TEST: DISSECTING ROLES OF PROMOTER SEQUENCE ELEMENTS IN TRANSCRIPTIONAL INTERFERENCE BETWEEN CONVERGENT PROMOTERS IN *ESCHERICHIA COLI*

10.40 – 11.00 Anna Pawlik (Lublin, Poland) LIGHT: AN IMPORTANT ENVIRONMENTAL FACTOR INFLUENCING METABOLIC PROPERTIES AND CHEMICAL SENSITIVITY OF WOOD DECAY FUNGUS *CERRENA UNICOLOR*

11.00 – 11.10 Volodymyr Antonyuk (Lviv, Ukraine) *LACTARIUS* FUNGI PROTECTION SYSTEM FROM INSECTS AND ANIMALS EATING AND MICROBIAL DAMAGE

11.10 – 11.20 Maciej Dylewski (Gdansk, Poland) THE AUTOREGULATION OF THE *greA* GENE EXPRESSION- THE IN CIS ROLE OF THE GRAL SMALL RNA

11.20 – 11.30 Michał Sobala (Gdansk, Poland) ENZYMATIC AND FUNCTIONAL ANALYSIS OF A NOVEL (p)ppGpp SYNTHETASE USING AN *IN VIVO/IN VITRO* APPROACH

11.30 – 12.00 Coffee Break

12.00 – 13.30 Session 2 Immunology

Chairs, S. Komisarenko, Ukraine, M. Czerwinski, Poland

12.00 – 12.20 Marcin Czerwinski (Wroclaw, Poland) ANTIGENS OF HUMAN BLOOD GROUP SYSTEM P1PK AS RECEPTORS FOR SHIGA TOXINS

12.20 – 12.40 Yuriy Kit (Lviv, Ukraine) APPLICATION OF THE MAGNETIC MICROSPHERES FOR DETERMINATION AND PURIFICATION THE ANTIBODIES POSSESSING A DIAGNOSTIC AND PROGNOSTIC VALUE

12.40 – 13.00 Rostyslav Stoika (Lviv, Ukraine) ANTIOXIDANTS IN CANCER TREATMENT AND IMMUNE RESPONSE

13.00 – 13.20 Joanna Koziel (Krakow, Poland) CORRUPTION OF NEUTROPHIL EXTRACELLULAR TRAPS BY PATHOGENS

13.20 – 13.30 Maria Sabadashka (Lviv, Ukraine) EVALUATION OF NITRATIVE STRESS IN RATS' LEUKOCYTES UNDER EXPERIMENTAL DIABETES MELLITUS

13.30 – 14.30 Lunch

15.00 – 18.00 City tour

19.00 – 23.00 Banquet (optional)

September 28 (THURSDAY)

8.30 – 10.00 Poster Session 2

10.00 – 11.30 Session 3 Microbial Biotechnology

Chairs, V. Passoth, Sweden, A. Rapoport, Latvia

10.00 – 10.20 Mykhailo Gonchar (Lviv, Ukraine) (HIS)₆-TAGGED *CORYNEBACTERIUM GLUTAMICUM* CREATININE DEIMINASE AS A BIOSENSING ELEMENT FOR CREATININE ASSAY

10.20 – 10.40 Kostyantyn Dmytruk (Lviv, Ukraine) YEAST *CANDIDA FAMATA* AS A PRODUCER OF RIBOFLAVIN AND ITS DERIVATIVES

10.40 – 11.00 Dariya Fedorovych (Lviv, Ukraine) CHROMIUM: BIOLOGICAL IMPORTANCE, TOXICITY AND DETOXIFICATION STRATEGIES IN YEASTS

11.00 – 11.20 Rostyslav Panchuk (Lviv, Ukraine) *STREPTOMYCES* ANTIBIOTICS OF LANDOMYCIN FAMILY AS NOVEL ANTICANCER DRUGS

11.20 – 11.30 Oresta Vasylyv (Lviv, Ukraine) COMPARISON OF POWER DENSITY OF AN ONE-CHAMBER AND A TWO-CHAMBER MICROBIAL FUEL CELL

11.30 – 12.00 Coffee Break

12.00 – 13.30 Session 3 Microbial Biotechnology, continued

Chairs, P. Fickers, Belgium, M. Gonchar, Ukraine

12.00 – 12.20 Derya Önal Darilmaz (Aksaray, Turkey) EVALUATION OF PROBIOTIC POTENTIAL AND OXALATE DEGRADING ACTIVITY OF EXOPOLYSACCHARIDE PRODUCER LACTOBACILLUS STRAINS ISOLATED FROM TRADITIONAL TURKISH CHEESES

12.20 – 12.40 Marta Semkiv (Lviv, Ukraine) IMPROVEMENT OF GLYCEROL PRODUCTION DURING ANAEROBIC FERMENTATION BY THE YEAST *SACCHAROMYCES CEREVISIAE*

12.40 – 13.00 Olena Kurylenko (Lviv, Ukraine) ROLE OF PEROXISOMAL AND CYTOSOLIC TRANSKETOLASE AND TRANSALDOLASE IN XYLOSE ALCOHOLIC FERMENTATION IN THE METHYLOTROPHIC THERMOTOLERANT YEAST *OGATAEA (HANSENULA) POLYMORPHA*

13.00 – 13.20 Justyna Ruchala (Rzeszow, Poland) PEROXISOMES ARE INDISPENSABLE FOR XYLOSE ALCOHOLIC FERMENTATION IN THE METHYLOTROPHIC BUT NOT IN THE NON-METHYLOTROPHIC YEASTS

13.20 – 13.30 Joanna Żur (Katowice, Poland) BIODEGRADATION OF PARACETAMOL BY IMMOBILIZED *PSEUDOMONAS MOOREI* KB4 STRAIN

13.30 – 14.30 Lunch

14.30 – 16.00 Session 4 Medical Microbiology

Chairs, A. Gamian, Poland, J. Dziadek, Poland

14.30 – 14.50 Maxim Lootsik (Lviv, Ukraine) STUDIES ON THE ANTIBACTERIAL ACTIVITY OF HONEYBEE CHITOSAN AND ITS DERIVATIVES

14.50 – 15.10 Jolanta Zakrzewska-Czerwińska (Wroclaw, Poland) HUPB: A MYCOBACTERIAL NUCLEOID-ASSOCIATED PROTEIN WITH AN INDISPENSABLE EUKARYOTIC-LIKE TAIL

15.10 – 15.30 Katarzyna Kosznik-Kwaśnicka (Gdansk, Poland) BACTERIOPHAGES AS A POTENTIAL MEAN FOR PREVENTION AGAINST *SALMONELLA SPP.* CONTAMINATION OF POULTRY

15.30 – 15.40 Volodymyr Shchodryi (Kyiv, Ukraine) SPECTRAL STUDY OF INTERACTION BETWEEN MANITOL AND RIBONUCLEOSIDES BY FLUORESCENT PROBE

15.40 – 15.50 Nataliia Melnichuk (Kyiv, Ukraine) CHANGE OF SOME GENE EXPRESSION IN MICE LUNG AFTER PREVENTION AND TREATMENT WITH **OLIGORIBONUCLEOTIDES-D-MANNITOL COMPLEXES** OF INFLUENZA A VIRUS H1N1 (A/FM/1/47) INFECTION

15.50 – 16.00 Sebastian Wawrocki (Lodz, Poland) IL-18 SECRETION IN RELATION TO IL-18 GENE POLYMORPHISM IN *MYCOBACTERIUM TUBERCULOSIS*-INFECTED AND UNINFECTED INDIVIDUALS

16.00 – 16.30 Coffee Break

16.30 – 17.20 Session 5 Pharmacology

Chairs, W. Barabasz, Poland, R. Stoika, Ukraine

16.30 – 16.50 Wiesław Barabasz (Krakow, Poland) MASKED MYCOTOXINS

16.50 – 17.00 Andrii Lozynskyy (Lviv, Ukraine) ANTIMICROBIAL ACTIVITY OF SOME THIOPYRANO[2,3-D]THIAZOLES AND THEIR STRUCTURE-RELATED ANALOGUES

17.00 – 17.10 Danylo Kaminskyi (Lviv, Ukraine) 5-ENE-THIAZOLIDINONES: MEDICINAL CHEMISTRY ASPECTS

17.10 – 17.20 Anna Kryshchyshyn (Lviv, Ukraine) THIAZOLIDINONE CORE IN THE DESIGN AND DEVELOPMENT OF NEW ANTITRYPANOSOMALS

17.20 – 17.40 Sponsor presentations

18.00 – 21.30 Performance in Lviv Opera (optional)

September 29 (FRIDAY)

9.00 – 10.30 Session 6 Environmental Microbiology

Chairs, N. Kuisiene, Lithuania, J. Truu, Estonia

9.00 – 9.20 Esra Deniz Candan (Ankara, Turkey) MOLECULAR IDENTIFICATION OF BACTERIAL AND FUNGAL COMMUNITIES OF GREEN TURTLE (*CHELONIA MYDAS*) NESTS

9.20 – 9.40 Jarosław Grządziel (Pulawy, Poland) METAGENOMIC APPROACH TO INVESTIGATE THE MICROBIOTA OF DIFFERENT SOIL TYPES

10.40 – 11.00 Nomedas Kuisiene (Vilnius, Lithuania) EVALUATION OF BIOACTIVITY OF MICROORGANISMS ISOLATED FROM KRUBERA-VORONJA CAVE: CLASSICAL VS. MOLECULAR APPROACH

11.00 – 11.20 Jaak Truu (Tartu, Estonia) INTEGRATION OF MULTIPLE OMICS DATA FOR ASSESSMENT OF SPECIFIC MICROBIAL COMMUNITY RESPONSE TO ACCIDENTAL RELEASE OF OIL INTO THE MARINE ECOSYSTEM

11.20 – 11.30 Amanda Pacholak (Poznan, Poland) INTERACTIONS BETWEEN ENVIRONMENTAL MICROORGANISMS AND NATURAL CARBOHYDRATE SURFACTANTS

11.30 – 12.00 Coffee Break

12.00 – 14.00 Plenary Lectures 2

Chairs, A. Sibirny, Ukraine, G. Wegrzyn, Poland

12.00 – 12.30 Andrzej Dzugaj (Wroclaw, Poland) COLLABORATION BETWEEN POLISH AND UKRAINIAN BIOCHEMISTS HAVE BEGAN IN THIRTIES OF THE LAST CENTURY IN PARNAS LABORATORY

12.30 – 13.00 Volkmar Passoth (Uppsala, Sweden) YEAST LIPID PRODUCTION FROM SECOND GENERATION SUBSTRATES FOR BIODIESEL AND FISH FEED

13.00 – 13.30 Patrick Fickers (Gembloux, Belgium) METABOLIC ENGINEERING OF *YARROWIA LIPOLYTICA* FOR THE SYNTHESIS OF ADDED VALUE CHEMICALS

13.30 – 14.00 Alexander Rapoport (Riga, Latvia) DEVELOPMENT OF WASTE-LESS PROCESS FOR THE CONSECUTIVE PRODUCTION OF FURFURAL, BIOETHANOL AND OTHER VALUABLE COMPOUNDS FROM HEMICELLULOSE AND LIGNOCELLULOSE-CONTAINING RESOURCES

14.00 – 14.30 Jarosław Dziadek (Lodz, Poland) DNA REPAIR IN THE PATHOGENICITY OF TUBERCLE BACILLI

14.30 – 15.00 Best poster presentations

15.00 – 15.30 Awards for the best poster presentations. Closing Ceremony, information on the next Weigl conference

15.30 Optional tours and/or departure