

THE SCIENTIFIC PROGRAM
THE 6th INTERNATIONAL SCIENTIFIC CONFERENCE
“CURRENT PROBLEMS OF BIOCHEMISTRY, CELL BIOLOGY AND
PHYSIOLOGY”
6-7 October, 2022
Dnipro, Ukraine

Thursday, October 06

10.00-10.30 Official opening of Conference

WELCOME TO THE CONFERENCE

**The Vice-rector of scientific work of DNU, Oleg Marenkov,
Dean of Faculty of Biology and Ecology, Prof. Olena Severynovska,
Head of Dept. of Biochemistry and Physiology, Prof. Galyna Ushakova**

PLENARY SESSION: NEUROBIOLOGY

Chairmen: Prof. Galyna Ushakova, Prof. Galyna Skibo

10.30-10.45

**DEVELOPMENT OF ASTROGLIOSIS UNDER THE CONDITIONS OF
EXPERIMENTAL INTRACRANIAL HEMORRHAGE**

Galyna Ushakova¹, Iryna Lushnikova², Volodymyr Zhyliuk³, Anton Lievikh³, Olena Dovban¹,
Uliana Suvaryan¹, Olga Byla¹, Galina Skybo²

¹ Oles Honchar Dnipro National University, Dnipro, Ukraine

² Bogomoletz Institute of Physiology, NAS of Ukraine, Kyiv, Ukraine

³ Dnipro State Medical University, Dnipro, Ukraine

10.45-11.00

**ANTIBIOTIC ADMINISTRATION AT DIFFERENT PERIODS OF EMBRYOGENESIS
IMPACTS THE BRAIN MORPHOLOGY AND COGNITION IN MICE**

Dmytro Shepilov¹, Iryna Osadchenko¹, Tetiana Kovalenko¹, Dmytro Iliencko², Kateryna
Smozhanyk¹, Galyna Skibo¹

¹ Bogomoletz Institute of Physiology, NAS of Ukraine, Kyiv, Ukraine; ² Taras Shevchenko National
University of Kyiv, Kyiv, Ukraine

11.00-11.15

**THE INFLUENCE OF SUXAMETHONIUM ON THE LARGE CONDUCTANCE
CATION CHANNELS IN NUCLEAR MEMBRANES OF CEREBRAL PURKINJE
NEURONES**

Tarnopolska O., Kotyk O., Kotliarova A., Marchenko S.

Bogomolets Institute of Physiology, National Academy of Sciences of Ukraine, Kyiv

11.15-11.30

**SPERMIDINE ACTIVATES AUTOPHAGY IN HUMAN NEUROBLASTOMA SH-SY5Y
CELLS FROM EFFECTS OF ARGININE STARVATION**

Yaryna Nishtuk¹, Oleh Stasyk², Olena Stasyk^{1,2}

¹ Ivan Franko National University of Lviv, ² Institute of Cell Biology, NAS of Ukraine, Lviv,
Ukraine

11.30-11.45

AGE DEPENDENT BEHAVIORAL RESPONSES IN MICE UNDER THE INFLUENCE OF RHODIOLA ROSEA AND FERULIC ACID

Vladyslav Berezovsky, Vitaly Derkachov, Maria Bailyak

Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine

11.45-12.00

CHANGES IN BEHAVIORAL REACTIONS CAUSED BY CONTAGION DEPRESSION

Valery Mizin¹, Olena Severinovska², Matthew Boyko³

¹ Dnipro State Academy of Physical Culture and Sports, Dnipro, Ukraine

² Oles Honchar Dnipro National University, Dnipro, Ukraine

³ Department of Anesthesiology and Critical Care, Soroka University Medical Center, Ben-Gurion of the Negev, Beer-Sheva, Israel.

12.00-12.10

THE ENDOPLASMIC RETICULUM STRESS DEPENDENT REGULATION OF THE EXPRESSION OF HOMEBOX TRANSCRIPTION FACTOR GENES IN GLIOMA CELLS

Dariia Krasnytska, Myroslava Sliusar, Oleh Halkin, Oleksandr Minchenko

Palladin Institute of Biochemistry of the National Academy of Sciences of Ukraine, Kyiv, Ukraine

12.10-12.20

DISTURBANCE OF GENE EXPRESSION IN NORMAL HUMAN ASTROCYTES UNDER THE IMPACT OF GRAPHENE OXIDE NANOPARTICLES

Olga Rudnytska

Palladin Institute of Biochemistry, NAS of Ukraine, Kiev, Ukraine

12.20-12.35

DYNAMIC REGULATION OF FEAR EXTINCTION BY INTERCALATED CELLS OF THE AMYGDALA

Olena Bukalo ^{#1}, Kenta M Hagihara ^{#2,3}, Martin Zeller ^{4 5}, Ayla Aksoy-Aksel ^{4 5 6}, Nikolaos Karalis ², Aaron Limoges ¹, Tanner Rigg ¹, Tiffany Campbell ¹, Adriana Mendez ¹ Chase Weinholtz ¹, Mathias Mahn ², Larry S Zweifel ^{7 8}, Richard D Palmiter ^{9 10 11}, Ingrid Ehrlich ^{4 5 6}, Andreas Lüthi ^{12 13}, Andrew Holmes ¹⁴

#Contributed equally.

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13 University of Basel, Basel, Switzerland.

14 Laboratory of Behavioral and Genomic Neuroscience, National Institute on Alcohol Abuse and Alcoholism, NIH, Bethesda, MD, USA.

Coffee break

PLENARY SESSION: MEDICAL BIOCHEMISTRY AND PHYSIOLOGY
Chairmen: Prof. Olena Severynovska, Prof. Volodymyr Zyluk

13.00-13.30

ENDOPLASMIC RETICULUM STRESS DEPENDENT REPROGRAMMING OF THE GENOME IN HEALTH AND DISEASE

Oleksandr Minchenko

Palladin Institute of Biochemistry of the National Academy of Sciences, Kyiv, Ukraine

13.30-13.45

THE SIGNIFICANCE OF ENDOPLASMIC RETICULUM STRESS IN THE DEVELOPMENT OF INSULIN RESISTANCE

Dmytro Minchenko, Yuliia Viletska, Oksana Ratushna, Oleksandr Minchenko

Palladin Institute of Biochemistry of the National Academy of Sciences, Kyiv, Ukraine

National O.O. Bohomolets Medical University, Kyiv, Ukraine

13.45-14.00

THE ROLE OF ENDOPLASMIC RETICULUM STRESS IN THE MECHANISM OF NANOPARTICLES ACTION

Yuliia Kulish, Olena Khita, Olha Rudnytska, Oleksandr Minchenko

Palladin Institute of Biochemistry, NAS of Ukraine, Kyiv, Ukraine

14.00-14.15

INHIBITION OF ERN1, A MAJOR ENDOPLASMIC RETICULUM STRESS SIGNALING PATHWAY, DISRUPTS MITOCHONDRIAL PROTEIN GENE EXPRESSIONS

Olena Khita, Oleksandr Minchenko

Palladin Institute of Biochemistry, Kyiv, Ukraine

14.15-14.30

OF HYPOXIA ON THE EXPRESSION OF GENES RESPONSIBLE FOR SERINE BIOSYNTHESIS IN ERN1 KNOCKDOWN GLIOMA CELLS

Myroslava Sliusar, Olena Khita

Palladin Institute of Biochemistry of the National Academy of Sciences of Ukraine, Kyiv, Ukraine

14.30-14.45

CYTOLYSIS SYNDROME IN COVID INFECTION

Tatyana Nikolayenko-Kamyshova

Dnipro State Medical University, Dnipro, Ukraine

14.45-15.00

EFFECTIVENESS OF CHOLECALCIFEROL ADMINISTRATION IN RATS WITH TYPE 2 DIABETES MELLITUS AND INTRACRANIAL HEMORRHAGE

Victoriia Tkachenko¹, Anton Lievykh¹, Yuliia Kharchenko¹, Yuliia Kovalchuk², Olena Dovban², Galyna Ushakova², Alla Shevtsova², Volodymyr Zhylyuk¹.

¹Dnipro State Medical University, Ukraine

²Oles Honchar Dnipro National University, Ukraine

15.00-15.15

THE EFFECT OF LOGANIC ACID ON GLYCEMIC PROFILE AND ACTIVITY OF BLOOD PLASMA AMINOTRANSFERASES TO ANIMALS WITH STREPTOZOTOCIN-INDUCED DIABETES MELLITUS

Chaban M.¹, Moroz A.¹, Brodyak I.¹, Kucharska A.², Sybirna N.¹

¹ Ivan Franko National University of Lviv, Lviv, Ukraine

² Wrocław University of Environmental and Life Sciences, C.K., Wrocław, Poland

15.15-15.30

ANTIOXIDANT IMPACT OF GRAPE POMACE EXTRACT ENRICHED WITH NATURAL POLYPHENOL COMPLEX ON PANCREATIC CELLS UNDER EXPERIMENTAL DIABETES MELLITUS

Dariya Chala, Mariya Sabadashka, Nataliia Sybirna

Ivan Franko National University of Lviv, Lviv, Ukraine

15.30-15.45

THE USE OF PLASMINOGEN IN THE TREATMENT OF CHRONIC WOUNDS IN PATIENTS WITH DIABETIC FOOT SYNDROME

Oleg Petrenko, Serhiy Badzyukh, Artem Tykhomyrov

O.O. Bogomolets National Medical University, Kyiv, Ukraine

Palladin Institute of Biochemistry of NAS of Ukraine, Kyiv, Ukraine

15.45-16.00

USE OF IN SILICO APPROACHES IN THE STUDY OF ANTI-RADICAL, ANTIOXIDANT EFFECTS IN A SERIES OF S-SUBSTITUTED PTERIDINS WITH POTENTIAL HEPATOPROTECTIVE EFFECTS

Groma N. V.¹, Nosulenko I.S.², Berest G.G.², Shvets V.M.², Kovalenko S.I.²

¹Zaporizhzhia National University, Ukraine; ²Zaporizhzhia State Medical University, Ukraine

16.00-16.15

THE EFFECT OF HUMILID ON PROTEOLYTIC-ANTIPROTEOLYTIC BALANCE IN RATS WITH DOXORUBICIN-INDUCED CARDIOPATHY

¹Iuliia Gordiienko, ²Olha Bekh, ¹Lilia Stepchenko, ^{2,3}Alla Shevtsova

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³Dnipro State Medical University, Ukraine

16.15-16.30

EFFECT OF *GANODERMA LUCIDUM* MYCELIUM SUSPENSION ON ALANINAMINOTRANSFERASE AND ASPARATAMINOTRANSFERASE ACTIVITY IN EXPERIMENTAL METABOLIC SYNDROME

Tetiana Petryn, Mariia Nagalievska, Nataliia Sybirna

Ivan Franko National University of Lviv, Ukraine

16.30-16.45

PROCESSING OF STIMULUS ADDRESSED TO I AND II SIGNAL SYSTEMS IN CONDITIONS OF ACTIVATION OF HUMORAL AND

NON-SPECIFIC LINKS OF THE IMMUNE SYSTEM

Valeriia Streltsova, Olena Kuchmenko

Mykola Gogol Nizhyn State University, Nizhyn, Ukraine

16.45-17.00

CHEMICAL COMPOSITION AND ANTIOXIDANT PROPERTIES OF *RHODIOLA ROSEA* AND FERULIC ACID

Tetiana Dmytriv, Myroslava Vatachchuk, Viktoria Hurza, Maria Bayliak

Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine

17.00-17.15

EFFECTS OF WATER EXTRACT OF YACON LEAVES ON THE ACTIVITY OF ANTIOXODANT SYSTEM ENZYMES OF RATS HEPATOCYTES WITH EXPERIMENTAL METABOLIC SYNDROME

Olha Pysanchyn, Mariia Nagalievska, Nataliia Sybirna

The Ivan Franko National University of Lviv, Lviv, Ukraine

17.15-17.30

THE EFFECTS OF A HIGH-FAT HIGH-FRUCTOSE DIET AND ALPHA-KETOGLUTARATE ON ANTIOXIDANT DEFENSE AND MITOCHONDRIAL FUNCTION OF MOUSE LIVER

Oleh Demianchuk, Myroslava Vatachchuk, Dmytro Gospodaryov

Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine.

17.30-17.45

MICROFLUIDIC DEVICES FOR TUMOR METASTASIS INVESTIGATIONS

Olena Bondarenko, Hanna Maslak, Olga Netronina, Olga Abraimova

Dnipro State Medical University, Dnipro, Ukraine

17.45-18.00

ISCHEMIA MODIFIED ALBUMIN AND ITS CLINICAL APPLICATION

Alla Shevtsova¹, Iuliia Gordiienko², Viktoriia Tkachenko³, Galyna Ushakova¹

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²Dnipro State Agrarian and Economic University, Ukraine

³Dnipro State Medical University, Ukraine

18.00-18.15

Natalia Lutay

Clinical Applications of 18F-FDG and 18F-PSMA PET-CT

Lund University, Sweden

Poster presentation

Friday, October 07

PLENARY SESSION: MEDICAL BIOCHEMISTRY AND PHYSIOLOGY

Chairmen: Prof. Galyna Ushakova, Olena Khomenko

8.00-8.20

PRECISE MODULATION OF TRANSCRIPTION FACTOR LEVELS REVEALS DRIVERS OF DOSAGE SENSITIVITY

Sahin Naqvi^{1,2,3}, Seungsoo Kim^{1,3,4}, Hanne Hoskens^{5,6,7}, Harry S. Matthews^{5,6}, Richard A. Spritz⁸, Ophir D. Klein⁹, Benedikt Hallgrímsson⁷, Tomek Swigut⁴, Peter Claes^{5,6,10,11}, Jonathan K. Pritchard^{2,12,*}, Joanna Wysocka^{1,3,4,12*}

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8.20-8.40

ACQUIRED DISORDERS OF PROTEIN STRUCTURES AND THEIR FUNCTIONAL CONSEQUENCES

Serhij Verevka

O.S. Kolomiychenko Institute of Otolaryngology, Ukrainian NAMS, Kyiv, Ukraine

8.40-9.00

CALIX[4]ARENES – EFFECTORS OF THE FUNCTIONAL ACTIVITY OF SMOOTH MUSCLE MITOCHONDRIA

Hanna Danylovych¹, Illa Pimenov², Sergiy Cherenok³, Yuriy Danylovych¹

Palladin Institute of Biochemistry, National Academy of Sciences of Ukraine, Kyiv, Ukraine¹

Taras Shevchenko National University of Kyiv, Kyiv, Ukraine²

Institute of Organic Chemistry, National Academy of Sciences of Ukraine, Kyiv, Ukraine³

9.00-9.15

BIOLOGICALLY ACTIVE SUBSTANCES OF *GALEGA OFFICINALIS* L. AND YACON MODULATE THE FUNCTIONAL STATE OF LEUCOCYTES UNDER EXPERIMENTAL DIABETES MELLITUS

Halyna Hachkova, Maria Nagalievskaya, Natalia Sybirna

Ivan Franko National University of Lviv, Lviv, Ukraine

9.15-9.30

EFFECT OF THREE-DIMENSION ORGANISATION ON METABOLIC STATE AND EFFICACY OF MESENCHYMAL STROMAL CELLS PRESERVATION UNDER HYPOTHERMIC CONDITIONS

Natalia Trufanova^{1,2}, Olexandra Hubenia¹, Svitlana Mazur¹, Yurii Kot², Kateryna Kot², Ruslana Oberemok², Alexander Petrenko^{1,2}

¹Institute for Problems of Cryobiology and Cryomedicine, NAS of Ukraine, Kharkiv, Ukraine, ²V.N. Karazin Kharkiv National University, Kharkiv, Ukraine

9.30-9.45

CORRECTION OF PHAGOCYTIC ACTIVITY OF LEUCOCYTES BY EXTRACTS OF *CORNUS MAS* L. FRUITS UNDER EXPERIMENTAL DIABETES MELLITUS

Anna Moroz, Maria Chaban, Iryna Brodyak, Natalia Sybirna
Ivan Franko National University of Lviv, Lviv, Ukraine

9.45-10.00

EFFECT OF THE DOUBLE DELETION OF GCR1 AND HXT1 GENES ON THE GLUCOSE INTAKE IN THE CELLS OF METHYLOTROPHIC YEAST OGATAEA POLYMORPHA

Mudra O.^{1,2}, Stasyk O. V.², Stasyk O. G.^{1,2}

¹Ivan Franko Lviv National University, ²Institute of Cell Biology of the National Academy of Sciences of Ukraine, Lviv, Ukraine

10.00-10.15

SEX CHARACTERISTICS OF ECHOCARDIOGRAPHY INDICATORS UNDER CAFFEINE LOAD

Viktoria Mukvych, Olena Severynovska

Oles Honchar Dnipro National University, Dnipro, Ukraine

10.15-10.30

IMMUNOCHEMICAL DETECTION OF LACTOFERRIN LEVELS IN THE TEAR FLUID IN HEALTH AND AFTER CORNEAL INJURY

Vasyl Bilous¹, Olena Yusova¹, Lada Kapustyanenko¹, Tetiana Drobotko¹, Iryna Gavryliak², Natalia Greben², Artem Tykhomyrov¹

¹ Palladin Institute of Biochemistry of NASU, Kyiv, Ukraine

² Bogomolets National Medical University, Kyiv, Ukraine

10.30-11.00 Coffee break

PLENARY SESSION: VETERINARY BIOCHEMISTRY AND PHYSIOLOGY

Chairmen: Prof. Alla Shevtsova, Olga Dyomshyna

11.00-11.15

HEATING DIMINISHES THE PRO-APOPTOTIC EFFECT OF NOVEL ANTI-CANCER DRUG SALINOMYCIN AND MICROPLASTIC ON BIVALVE MOLLUSC

Viktoriia Martyniuk¹, Vira Khoma¹, Tetyana Matskiv^{1,2}, Katerina Yunko¹, Lesya Gnatyshyna², Alla Mudra², Oksana Stoliar¹, Caterina Faggio³

¹ Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

² I. Ya. Horbachevsky Ternopil National Medical University, Ternopil, Ukraine

³ University of Messina, Messina, Italy

11.15-11.30

CHANGES IN THE CONTENT OF LIPID PEROXIDATION PRODUCTS IN TISSUES AND ORGANS OF SCALE CARP UNDER THE ACTION OF POLLUTANTS

Natalia Simonova, Lidiya Polotnyanko, Olga Mekhed

T.H. Shevchenko National University "Chernihiv Colehium" 14033, Ukraine

11.30-11.45

THE INFLUENCE OF HOMEOSTASIS CORRECTION OF BEEF COWS ON THE RESISTANCE OF THE BODY OF NEWBORN CALVES

Maria Kambur¹, Andriy Zamazii², Olexandr Demidko¹

¹Sumy National Agrarian University, Sumy, Ukraine;

²Poltava National Agrarian University, Poltava, Ukraine

11.45-12.00

THE INFLUENCE OF THE PREPARATION "APIPLASMA" ON DEVELOPMENT RATE COLONIES OF DIFFERENT SUBSPECIES OF *APIS MELLIFERA*

¹Liudmyla Yazlovytska, ¹Ostap Palamar, ²Vasyl Kravchuk, ¹Irina Panchuk

¹ Yuri Fedkovich Chernivtsi National University, Chernivtsi, Ukraine

²Private enterprise, Chernivtsi, Ukraine

12.00-12.15

THE APPLICATION OF LEUCOCYTE INDICES DURING THE EVALUATION OF THE EFFECTS OF HUMIC SUBSTANCES ON THE ORGANISM OF PIGS

Vladyslav Chumak

Dnipro State Agrarian and Economic University, Dnipro, Ukraine

PLENARY SESSION: CELL BIOLOGY

Chairmen: Prof. Victor Nedzvetsky, Olena Dovban

12.15-12.30

DECIPHERING THE ANTI-NEOPLASTIC EFFECT OF SMALL MOLECULE INHIBITOR KAN438757 AND CURCUMIN COMBINATION ON NON-SMALL CELL LUNG CANCER CELL LINE

Deniz Özdemir¹, Can Ali Ağca²

^{1,2} Department of Molecular Biology and Genetics, Bingöl University, 12000, Bingöl, Türkiye

12.30-12.45

IDENTIFICATION OF POTENTIAL IVERMECTIN BINDING SITES ON THE β -TUBULIN OF *FUSARIUM GRAMINEARUM*

Yevhen Kustovskiy^{1,2}, Alla Yemets^{1,2}

¹ Institute of Food Biotechnology and Genomics, National Academy of Sciences of Ukraine, Kyiv, Ukraine; ² National University of Kyiv Mohyla Academy, Kyiv, Ukraine

12.45-13.00

DEXTRAN-GRAFT-POLYACRYLAMIDE COPOLYMER NANOCARRIER HAS NO CYTOTOXIC EFFECT ON CULTURED FIBROBLASTS

Volodymyr Prokopiuk^{1,2}, Anton Tkachenko¹, Nataliya Kutsevol³, Anna Kaverinska², Anatolii Onishchenko¹

¹Kharkiv National Medical University, Kharkiv, Ukraine; ²Institute for Problems of Cryobiology and Cryomedicine of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine; ³Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

13.00--13.15

ERYPTOSIS IS AN EFFICIENT TOOL FOR EVALUATING THE TOXICITY OF NANOMATERIALS

Anton Tkachenko¹, Nataliya Kutsevol², Volodymyr Prokopiuk^{1,3}, Anatolii Onishchenko¹

¹Kharkiv National Medical University, Kharkiv, Ukraine; ²Taras Shevchenko National University of Kyiv, Kyiv, Ukraine; ³Institute for Problems of Cryobiology and Cryomedicine of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine

13.15 -13.30

CELL SELECTION WITH HEAVY METAL IONS FOR OBTAINING PLANT FORMS WITH COMBINED STRESS TOLERANCE

Larisa Bronnikova¹, Irina Zaitseva²

¹Institute of Plant Physiology and Genetics, National Academy of Sciences of Ukraine, Kyiv, Ukraine; ²Oles Honchar Dnipro National University, Dnipro, Ukraine

13.30-13.45

CONSTRUCTION OF *KOMAGATAELLA PHAFFII* YEAST STRAINS WITH DEFECTIVE AUTOPHAGY TO DETERMINE THE MECHANISM OF DEGRADATION OF THE CYTOSOLIC ENZYME FORMATE DEHYDROGENASE

N. Mykhalchak¹, K. Dmytruk², N. Sybirna¹

¹ Ivan Franko National University of Lviv, ² Institute of Cell Biology NAS of Ukraine, Lviv, Ukraine

13.45-14.00

OVEREXPRESSION OF THE *HXS1* GENE FOR INVESTIGATION OF THE INFLUENCE OF THE HEXOSE SENSOR Hxs1 ON THE LEVEL OF XYLOSE ABSORPTION AND ITS METABOLISM BY THERMAL TOLERANT YEAST *OGATAEA POLYMORPHA*

Kovtsun P., Semkiv M., Zazulya A., Sibirna N.

¹ Ivan Franko National University of Lviv, ² Institute of Cell Biology NAS of Ukraine, Lviv, Ukraine

14.00-14.15

CURCUMIN DECLINES ASTROCYTE REACTIVITY VIA PARP-1 SUPPRESSES AND GLIAL CYTOSKELETON REARRANGEMENT

Victor Nedzvetsky^{1,2}, Dmitry Masiuk², Can Ali Agca¹, Giyasettin Baydas³

¹Bingöl University, Bingöl, Turkey, ²Dnipro State Agrarian and Economic University, Dnipro, Ukraine, ³Altinbas University, Istanbul, Turkey

14.15-14.30

PROTECTIVE EFFECT OF ISOTONIC-PROTEIN SOLUTION ON THE BARRIER FUNCTION AND ADAPTIVE IMMUNE RESPONSE IN THE SMALL INTESTINE TISSUES OF PIGLETS AT PED

Eduard Romanenko, Dmitry Masiuk, Victor Nedzvetsky
Dnipro State Agrarian and Economic University, Dnipro, Ukraine

14.30-16.00 Poster presentation

THE MEETING OF THE STUDENT SCIENTIFIC SOCIETY OF BIOCHEMISTRY AND PHYSIOLOGY DEPARTMENT

16.00-17.00 Conclusion speech and closing of the conference

POSTERS

POSTER SESSION: NEUROBIOLOGY

REGIONAL AND AGE-SPECIFIC ACCUMULATION OF PHOSPHORYLATED A-SYNUCLEIN AT S129 IN IN THE HGSK-3B-S9A PARKINSON'S DISEASE MOUSE MODEL

Victor Dukat, Anita Sidhu and Tetyana Duka

Department of Biochemistry and Molecular & Cellular Biology,
The Georgetown University Medical Center, Washington, DC, USA

A DONOR-ACCEPTOR STENHOUSE ADDUCT DISPLAYING REVERSIBLE PHOTOSWITCHING IN WATER AND NEURONAL ACTIVITY

Galyna Maleeva[†], Rossella Castagna^{†‡¶}, Deborah Pirovano[†], Carlo Matera^{†‡#}, Pau Gorostiza^{†‡§*}

[†] Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute for Science and Technology (BIST), Baldri Reixac 10-12, 08028 Barcelona, Spain [‡] Network Biomedical Research Center in Bioengineering, Biomaterials and Nanomedicine (CIBERBBN), Spain [§] Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain [¶] Present affiliation: Latvian Institute of Organic Synthesis, Aizkraukles 21, Riga 1006, Latvia [#] Present affiliation: Department of Pharmaceutical Sciences, University of Milan, 20133 Milan, Italy

HYPERGLYCEMIA INDUCES CHANGES IN THE LEVEL OF GLIAL FIBRILLAR ACIDIC PROTEIN IN THE DIFFERENT PART OF RATS BRAIN

Yulia Kovalchuk, Boubacar Sylla, Younis Abdulhafith, Galyna Ushakova
Oles Honchar Dnipro National University, Dnipro, Ukraine

MECHANISMS OF α -KETOGLUTARATE -MEDIATED NEUROPROTECTION DURING OXYGEN-GLUCOSE DEFICIENCY

Iryna Lushnikova, Olha Kostyuchenko, Galyna Skibo
O.O. Bogomolets Institute of Physiology, Kyiv, Ukraine

INFLUENCE OF HYPERCALORIC DIET AND α -KETOGLUTARIC ACID ON ACTIVITY OF GLYCOLYTIC ENZYMES IN MURINE BRAIN

Marian Ivanochnko, Maria Bayliak
Department of Biochemistry and Biotechnology, Precarpathian National University, Ivano-Frankisk, Ukraine

BEHAVIORAL RESPONSES IN MICE CONSUMING A CAFETERIA DIET WITH THE ADDITION OF ALPHA-KETOGLUTARATE AND FERULIC ACID

Vitalii Derkachov, Vladyslav Berezovsky, Maria Bayliak
Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine

ANIMAL MODELS OF MENTAL COMPLICATIONS AFTER TRAIN INJURY AND EARLY LIFE STRESS

Kateryna Shtokina¹, Olena Severinovska¹, Matvii Boyko²

¹ Oles Honchar Dnipro National University, Dnipro, Ukraine

²Department of Anesthesiology and Critical Care, Soroka University Medical Center, Ben-Gurion of the Negev, Beer-Sheva, Israel.

POSTER SESSION: MEDICAL BIOCHEMISTRY AND PHYSIOLOGY

THE EFFECT OF THIACALIX[4]ARENE C-1193 ON PLASMA MEMBRANE Na⁺,K⁺-ATPase AND MYOMETRIUM CONTRACTILITY

Tetyana Veklich, Olga Tsymbalyuk, Olexander Shkrabak
Palladin Institute of Biochemistry NASU, Kyiv

CHANGES IN THE HEMOSTATIC SYSTEM AT COMBAT-CAUSED ACOUSTIC INJURIES

Yuliia Burlaka, Olena Poimanova, Natalia Voroshylova

O.S. Kolomiychenko Institute of Otolaryngology, Ukrainian NAMS, Kyiv, Ukraine

EXTRAMITOCHONDRIAL ATP AS $[Ca^{2+}]$ AND CARDIOLIPIN CONTENT REGULATOR

Bavelska-Somak A.O., Babich L.G., Shlykov S.G., Zagoruiko A.G., Horid'ko T.M., Kosiakova H.V., Hula N.M., Kosterin S.O.

Palladin Institute of Biochemistry, National Academy of Sciences of Ukraine, Kyiv

LOCALIZATION OF PLASMINOGEN FRAGMENT K5 BINDING SITES IN THE POLYPEPTIDE CHAINS OF THE FIBRIN(OGEN) MOLECULE

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