

International Hypoxia Problems
Academy
National Academy of Sciences of
Ukraine

VII International Symposium
**“Actual problems of
biophysical medicine”**



INVITATION

Dear sir

**International Hypoxia
Problems Academy, National
Academy of Sciences of Ukraine,
invite You to participate in the V
International Symposium “*Actual
problems of biophysical medicine*”
which will take place in Kiev, in
A.A.Bogomoletz Physiology
Institute from 17.05 till 20.05.2012.**

**Chief of Organization committee
O.A. Krishtal**

Address of Organization committee:
A.A.Bogomoletz Physiology Institute,
Bogomoletz st., 4
01024 Kiev-24,
Managing secretary Responsible:
Litovka Irina Georgievna

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litir@serv.biph.kiev.ua
levashov@serv.biph.kiev.ua

Topics:

- Molecular principles of cell reactivity
- Biophysical and biological aspects environmental sanogenetics influences on human and animal
- Biophysical diagnosis and treatment methods in clinical medicine
- Biophysical methods for valueology, sports and space medicine
- Space weather and human health

Chairman of the Organizing Committee:

Academician of European Academy of
Sciences, National Academy of
Sciences of Ukraine,
Prof. OA Krishtal

Committee members:

Acad. RAMS, N. Aghajanian
(Moscow)

Acad. National Academy of Sciences
of the Kyrgyz Republic AA Aidaraliev
(Bishkek)

Acad. V.M.Baranov RAMS (Moscow)

Acad. NAS N.S.Veselovsky (Kiev)

Acad. NAS AA Moibenko (Kiev)

Acad. NAS and AMS of Ukraine Y.
Kundiev (Kiev)

Acad. NAS IS Magura (Kiev)

Corr. NAS VF Sagach (Kiev)

prof. GV Belov (Bishkek)

prof. VA Berezovsky (Kiev)

prof. V.A.Bernshteyn (Boston)

Professor. B. Valenzi (Lugano CH)

prof. EA Dotsenko (Minsk)

D., Professor. M.Pokorsky (Warsaw)

doctor of TN. OP Fedorov (Kiev)

Executive Secretary of the Organizing Committee:

Dr. IG Lithuanian (Kiev)

Program Committee Members:

prof. V.A.Berezovsky

prof. M.I.Levashov

prof. I.N.Mankovskaya

WORK PROGRAMME
5/17/12,
the I session - 10.00-13.00
Opening of the Symposium

Conference Hall of the
Institute of Physiology
named by A.A. Bogomoletz
(Bogomoletz Street, 4, high-
rise building in the yard)

Chairs: Acad. NAS O. Krishtal, Acad.
NAS A.A.Moybenko, Acad. NAS I.S.
Magura, prof. VA Berezovsky

Opening Remarks - Acad. NAS and
AMS of Ukraine Y. Kundiev.
Greetings from: - National Space
Agency of Ukraine -
Director of the Institute for Space
Studies O. Fedorov

1.1. Mechanisms of adaptation of
integrative functions of the neuron to
the conditions of hypoxia.
Magura, I.S.

Institute of Physiology named by A.A.
Bogomolets, National Academy of
Sciences of Ukraine, Kiev.

1.2. Preliminary data on some
development on biophysics and
medicine.

Vincenzo Valenzi ISREP / LIUM
Bellinzona Switzerland.

1.3. Membrane and molecular
components to ensure high
functionality of the body.
Aidaraliev A.A., Yakovlev, V.
International University of
Kyrgyzstan, Bishkek.

1.4. Water - the physico-chemical
basis of the new paradigm of
medicine.
Slesarev V.I.
Northwestern State Medical
University. Mechnikov, St. Petersburg,
Russia.

1.5. Features of development of
oxidative stress in tumor processes.
Shcherbatyuk T.G.
Nizhny Novgorod State Medical
Academy, Nizhny Novgorod, Russia.

1.6. Aspects of health caused by
detoxification enzymes in the
population of the central region of
Ukraine, the peculiarities of bronchial
asthma.

Yakovlev A.A., A.A. Zhamba,
Doroshevich I.A.

Vinnitsa National Medical University
named by N.I.Pyrohov, Vinnitsa.

Poster Session: Dolgaya E.V.,
Pogorelaya N.H., Bogorad
Kobel'skaya-I.S., I.S.
Magura(Kiev), Ivan S.
Yermolenko, Bryant Doss,
Robert Ros, Stanislav P.
Oshkadyerov, and Tatiana P.
Ugarova (Kiev), Lazarenko
O.N., Aleksyeyeva T.A., Lytvyn
P.M., Oshkadyerov S.P.,
Prokopenko I.V. (Kiev),
Teplova V.V., Holmukhamedov
E.L., Malkov A., V.F. Kichigina
(Pushchino)

**5/17/12, the
Session II - 15.00-18.00
Conference Hall of the
Institute of Physiology. AA
Bogomoletz**

Chairmen: prof. Apanasenko G.L.,
prof. Slesarev V.I.

2.1. The principles of organization of nanostructured functional systems of biological tissues.
Vasina A.A., Paton B.E.
Institute of Theoretical and Experimental Biophysics, Pushchino Research Center "Kurchatov Institute", Moscow, Institute of Electric named by Paton, NAS of Ukraine.

2.2. Individual health as a control object.
Apanasenko G.L.
NMAPE named by Shupyk, Kiev.

2.3. High-frequency acoustic emission as a physical mechanism for communication with the effect of electro-resonance diagnostics.

Petrash V.V., Ilyin, L.V., A.B. Supin
Federal State Unitary Enterprise Scientific Research Institute of Industrial and Marine Medicine, Federal Medical-Biological Agency, Moscow, Russia.

2.4. Doppler shear elastography of soft tissues.
Marusenko A.I., E.A. Barannik
"Radmir" DPPAO "AONIIRI",
Kharkov.

2.5. Experience of using ultrasound densitometry in health care workers with the pathology of the cardiovascular system ..
Bridged S.E., Dynnik O.B.,
Berezovsky V.A.
Institute of Physiology named by A.A. Bogomoletz, Kiev, Medical Research and practical association "Medbud", Kiev.

2.6. Biophysical basis of non-invasive monitoring of motor activity in humans.
Alexanian Z.A., Romanov S.P.
Institute of Human Brain FGBUN named by N.P. Behtereva, Academy of Sciences, Institute of Physiology

FGBUN named by Pavlov, Academy of Sciences, Russia.

Poster Session: Butskaya L.V., N.V. Chukhrai, Samosyuk N.I., Chuhraeva O.M., Zhelezko O.V., I.S. Pachevsky (Kiev), Fedotcheva T.A., Rzheznikov V.M., Kruglov A.G., V.V. Teplova, Fedotcheva N.I., Szymanowski N.L. (Moscow, Pushchino).

5/18/12, the
Session III - 10.00 -13.00
Conference Hall of the Institute of Physiology named by A.A. Bogomoletz (Bogomoletz Street, 4, in the yard)

Chairmen: prof. Levashov M.I., prof. Savilov P.N.

3.1. The principle of "dose-effect" in biophysical medicine.
Berezovsky V.A.
Institute of Physiology named by Bogomolets, National Academy of Sciences of Ukraine, Kiev.

3.2. Genetic mechanisms of adaptation to hypoxia.

Savilov P.N.
Tambov State Technical University,
Tambov, Russia.

3.3. Effect of modified atmosphere on bone metabolism.

Litovka I.G.
Institute of Physiology named by A.A. Bogomoletz, Kiev

3.4. Hypoxia causes periodic changes in the phase of respiration and energy metabolism.

Portnichenko V.I., V.I. Nosar,
Drevitskaya T.I., Portnichenko A.G.,
Sidorenko A. , Mankovskaya I.N.
International Centre for Astronomical
and Medico-Ecological Research of
NASU, Institute of Physiology,
National Academy of Sciences of
Ukraine, Kiev.

3.5. Intermittent hypoxia and sport medicine: reality and perspectives.
Serebrovskaya T.V.
Bogomoletz Institute of Physiology,
Kiev.

3.6. Effect of different feeding regimes influence the normobaric hypoxia on oksiprolin contents in the lungs of young and adult rats.

Chuck O.
Institute of Physiology Bogomolets
NAS of Ukraine, Kyiv.

3.7. Dosed normobaric hypoxia increases the activity of the thyroid gland of young rats.

Janko R.
Institute of Physiology named by
Bogomolets, National Academy of
Sciences of Ukraine, Kiev.

3.8. The influence the normobaric hypoksytherapy the quality of life of children with cerebral palsy.

V. Martynyuk, Nazar A.
National Medical Academy of
Postgraduate Education named by
P.Ya.Shupik, Kyiv.

**Poster Session: Litovka I.G.,
Veselsky S.P., T.M. Zamorska
(Kyiv), Yatsenko K. V., Berezovskii
V. A. (Kiev), Plotnikov L.N.,
Berezovsky V.A. (Kiev), Lisuha
L.M. (Kyiv)**

**5/18/12, the
Session IV - 15.00-18.00
Conference Hall of the Institute
of Physiology named by A.A.**

**Bogomoletz (Bogomoletz Street,
4, in the yard)**

Chairmen: prof. Barannik E.A., prof.
Rozanov V.A.

4.1. Stress, epigenetics and behavior.
Rozanov V.A.

Institute of innovative and
postgraduate education of Odessa
National II Mechnikov University,
Odessa.

4.2. Methods of ultrasound
elastography of soft tissues.
Barannik E.A., A.I. Marusenko
KNU named by V.N. Karazin,
"Radmir" DPPAO "AONIIRI",
Kharkov.

4.3. Electrical resistance sections of
human skin at different frequencies.
Gorgo Yu.P., Lyabah M.O., Osipovich
T.

National Technical Institute of
Ukraine "KPI", Kyiv.

4.4. Bioelectric properties undergoing
bone

Levashov M.I., Safonov S.L.

Institute of Physiology named by Bogomolets, National Academy of Sciences of Ukraine, Kiev.

4.5. The dispersion mapping - a new campaign to biophysical assessment of the electrical activity of the myocardium.

Dynnik O.B., Mostovoy S., Berezovsky V.A., Tsybin I.N., N.V. Timofeeva

Institute of Physiology named by Bogomolets, National Academy of Sciences of Ukraine, Medical NGO "Medbud", Kiev, NPF "BIOSS" Zelenograd.

4.6. Metod biomikry as a way to increase the body's tolerance to the implant material of inorganic origin.

T.A. Alekseeva, Gomolyako I.V., Lazarenko O.N., Oshkaderov S.P. Institute of Metal named by G.V. Kurdyumov, National Academy of Sciences of Ukraine, Kiev, Institute of Transplantation and Surgery named by A.A. Shalimov, AMS of Ukraine, Kiev, NMAPE named by A.L. Shupik MOH of Ukraine, Kiev.

4.7. Personality traits in the reaction of the autonomic nervous system to the

application of ozokerite and the possibility of forecasting.

Popovych I.L., Popovych A. Institute of Physiology named by Bogomolets, National Academy of Sciences of Ukraine, Kiev.

4.8. Vibration in the treatment of congenital clubfoot.

Lazaretnik B.Sh., Daniel A. Interdisciplinary Health Research and Engineering Center, Kiev, National Medical Academy of Postgraduate Education named by Shupyk, Kiev.

Poster Session:

Fedotcheva N.I.
Zakharchenko A.V.
Zakharchenko M.V.,
Kondrashova
M.N.(Pushchino),
Temuryants N.A., Kostyuk
A.S., Tumanyants K.N., N.S.
Yarmolyuk (Simferopol).

**05/19/2012, the
V Meeting - 10.00-13.00
Conference Hall of the
Institute of Physiology. AA
Bogomoletz**

Chairmen: prof. G.V. Belov, prof. Martynyuk V.S.

5.1. The change of surface activity and lipid peroxidation in exhaled breath condensate in the rehabilitation of sickly children in the medium-resort. G.V. Belov, M.F. Altana, OB Bakalaeva
Kirghiz-Russian Slavic University, Bishkek, Kyrgyzstan. Republican Children's Clinical Sanatorium "Alatau", Almaty, Kazakhstan, Kirghiz Institute of Balneology and Rehabilitation, Bishkek, Kyrgyzstan.

5.2. Hypoxotherapy in complex treatment of pulmonary tuberculosis in children.

TS Miller, JO Kompaniets
Cherkasky natsionalny universitet im.
Bohdan Khmelnytsky, Cherkasy.

5.3. Effect of extremely low frequency magnetic fields on the functional properties of muscle tissue.

Martynyuk VS, Tsybalyuk OV
Tseysler YV, OV Shelyuk
Kyiv National University named by
Taras Shevchenko Kyiv.

5.4. Microelementology in reconstructive medicine.

Weeds AA Oshkaderov SP, AV
Pavlenko, O. Strebkova
National Medical Institute.
Bogomolets, Institute of Metal
Physics. G. V. Kurdyumova NASU,
Institute of Dentistry NMAPE them.
Shupyk MOH.

5.5. Elastically properties of the liver tissue of healthy rats in vitro and in vitro according to the ultrasound elastometry.

Dynnuk OB, Kobylyakov NN
Barannik EA Litovka I., Yanko R.

Institute of Physiology. Bogomolets
NASU, National Medical
University. Bogomolets NASU,
Kharkov Medical University.
VN Karazin.

5.6. Modern approaches to comprehensive assessment of adaptive capacity in the correction of oxidative damage.

Yeliseyev AP, Kaminsky D., Simon
H.O., Sirota TV, Ostrovskaya GV,
Rybalchenko VK Nektyehayev IO,
OD Luchyk
National Medical University .. D.
Chee, Lviv, Institute of Theoretical
and Experimental Biophysics,
Pushchino, Russia, the National
University. Taras Shevchenko Kyiv.

5.7. Matrix layered effect of implants in the formation of ordered cytoarchitectonic regenerating tissues.

Petrash VV Nikityuk IE, Kubasov VA
Shtrupp BM, Ilyina, LV
Institute of Industrial and Marine
Medicine, Federal Medical-Biological
Agency, Moscow, Research Institute
of Children's Orthopedic Institute.
G.I. Turnera, Ministry of Public
Health, St. Petersburg, Research
Institute of Electrophysical

Apparatus. D. V. Efremova Rosatom,
Saint-Petersburg.

5.8. Influence of acute hypoxia on the system of proteolysis in the basal ganglia of the brain in the pineal gland hypofunction.

Sopova IY, Overseas II
Bukovina State Medical University,
Chernivtsi.

Poster presentations: Borovets, OV,
OV Bondzik, Reshetnik E.M.,
Veselsky SP, MY Makarchuk (Kyiv),
Yanko R., O. Volovich (Kiev), Vasina
AA, Lanin LF, Zabelin AV, VN
Korneev, Marinsky GS, Podpriatov
SE, SG gig, Monk A. Tkachenko VA,
Podpriatov SS, Paton BE (Pushchino,
Moscow), Lanin NF, Vasina AA, AA
Vasiliev, VN Korneev, Zabelin AV,
Stepanov VV, Kupriyanov TA,
Legkodymov A. A., Kundu SC
(Moscow)

**5/19/12, the
VI session - 15.00-18.00
Conference Hall of the
Institute of Physiology. AA
Bogomoletz**

Chairmen: prof. Koltover VK, Dr.
Litovka IG

6.1. Fluctuations in atmospheric
pressure and suicidal injuries.
Didyk LA, Gorgo Yu.P., Prigantsova
A.
Institute of Physics, National
Academy of Sciences of Ukraine,
National Technical University of
Ukraine "KPI", Institute of
Geophysics of the Slovak Academy of
Sciences, Slovakia.

6.2. Free radical theory of aging: from
BHT to resveratrol.
Koltover VK
Institute of Problems of Chemical
Physics, Russian Academy of
Sciences, Chernogolovka, Moscow
Region.

6.3. Influence of low-frequency
fluctuations of atmospheric pressure
and geomagnetic field on the vital
activity of blood cells.

Gorgo Yu.P., Pet'ko B., Didyk L.A.
National Technical University of
Ukraine, Medical - Engineering
Faculty, Ukraine.

Parasitological Institute, Slovak
Academy of Sciences, Košice,
Slovakia.

Institute of Physics National Academy
of Sciences, Ukraine

6.4. Electromagnetic foundations of
life.

Limansky JP
Institute of Physiology. Bogomolets
National Academy of Sciences of
Ukraine, Kiev.

6.5. Study of person adaptation to
chronic exposure to electromagnetic
radiation of a mobile phone and its
influence on the activity change of
acetylcholinesterase in human
erythrocytes.

Rybalko S., Yashchenko S., Shlapak
M., Butirskaya I.
Crimean State Medical University
named after S. I. Georgievsky,
Simferopol.

6.6. Information and communication
technologies

in large-scale biophysical project
"Geliomed"

Vishnevsky VV, MV Ragulsky
Institute of Mathematical Machines
and Systems, Kyiv, Ukraine
Institute of Terrestrial Magnetism and
Radio Wave Propagation, Troitsk,
Russia.

6.7. Some aspects of the relationship
between physiological processes of
regeneration and metabolism in
children of all school age.
Semenyaka DM, Miller TA
Cherkasy National University. Bohdan
Khmelnitsky, Cherkasy.

**Adoption of a resolution
closing the symposium**

20/05/12

The cultural program.