SYMPOSIUM

Systems Biology and Biomedicine

Oral reports

7 July, Tuesday

Library

Morning session 1. Medicine in the "Omics" Era

Chairs: Ancha Baranova, *Fairfax, VA, USA*
Leonard Lipovich, *Detroit, MI, USA*
Vadim Klimontov, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

09:00 – 09:30	**PLENARY REPORT** **Understanding heterozygous carrying of deleterious variants as a key for personalized longevity** *Ancha Baranova*, School of Systems Biology, George Mason University, Fairfax, VA
09.30 – 11.10	**Medicine in the "Omics" Era** **Chairs:** Ancha Baranova *(Fairfax, VA, USA)* Leonard Lipovich *(Detroit, MI, USA)*
09.30 – 10.00	**Mass spectrometry, Ribo – seq, and RNA – seq integration reveals hormone – dependent translation of short open reading frames in human long non – coding RNAs** Leonard Lipovich *Center for Molecular Medicine and Genetics, Wayne State University, Detroit, MI, USA*
10.00 – 10.20	**Accessing the impact of fulnctional variants on human phenotypes by transcriptome analysis in individuals carrying different rSNP alleles** Elena E. Korbolina[1], Leonid O. Bryzgalov[1], Sergey N. Postovalov[2], Victor M. Nedelko[3], Vladimir B. Berikov[3], Tatiana I. Merkulova[1] *[1]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]Novosibirsk State Technical University, Novosibirsk, RUSSIA; [3]Sobolev Institute of Mathematics, Novosibirsk, RUSSIA*

10.20 – 10.40	**Identifying cell subtypes in the carotid atherosclerotic plaques by the Deconvolution MiRNA Analysis** Aleksei Zarubin, Anton Markov, Aleksei Sleptcov, Maria Nazarenko *Research Institute of Medical Genetics, Tomsk, RUSSIA*
10.40 – 11.00	**Targeted Sequencing From Roche: Fundamental and Clinical Aspects in Human Molecular Genetics** Irina Karpova, *LLC "Roche Diagnostics Rus", Moscow, RUSSIA* *Sponsor report – **LLC "Roche Diagnostics Rus"***
11.00 – 11.10	**Discussion**
11.10 – 11.40	**Break**

Morning session 2. B&B: Bioinformatics and Biomedicine

Chairs:
Vladimir Ivanisenko, ***Institute of Cytology and Genetics, SB RAS, Novosibirsk, Russia; Novosibirsk State University, Novosibirsk, Russia***
Sergey A. Lashin, ***Institute of Cytology and Genetics, SB RAS, Novosibirsk, Russia; Novosibirsk State University, Novosibirsk, Russia***
Vadim Klimontov, ***Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia***

11.40 – 12.10	**What will help neurobiology take the next step: rejuvennated classics, connectoms, bioinformatics or artificial intelligence?** Igor V. Bondar *Institute of Higher Nervous Activity and Neurophysiology of RAS, Moscow, RUSSIA*
12.10 – 12.30	**Gene network analysis: how can it help to study diseases?** Sergey A. Lashin *Institute of Cytology and Genetics SB RAS, Novosibirsk*
12.30 – 12.50	**Analysis of methylation of 2rapheme2nt – related genes in patiens with common cardio – and cerebrovascular diseases** Olga Bushueva[1], Ekaterina Barysheva[1], Anton Markov[2], Yulia Koroleva[2], Egor Churkin[2], Maria Nazarenko[2], Alexey Polonikov[1], Vladimir Ivanov[1] *[1]Kursh State Medical University, Kursk, RUSSIA; [2]Research Institute of Medical Genetics TNRMC RAS, Tomsk, RUSSIA*
12.50 – 13.10	**The mTOR pathway activity in ASD and post – infectious neuropsychiatric autoimmune disorders** Ekaterina A. Trifonova[1], Alexandra I. Klimenko[1], Sviatoslav L. Bezrodny[2], Zakhar S. Mustafin[1], Sergey A. Lashin[1], Alex V. Kochetov[1] *[1]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]Institute of Epidemiology & Microbiology, Moscow, RUSSIA*
13.10 – 13.30	**GenCoNet: Medical Information System to support the treatment of co – morbid diseases** Ralf Hofestädt[1], Elena Bragina[2], Victor Dosenko[3] *[1]University Beilefeld, Germany; [2]Institute of Medical Genetics, Tomsk, Russia; [3]National Academy of Science, Bogomolez Institute of Physiology, Kiev, Ukraine*

13:30 – 14:30	**Lunch**

Evening session 1. Endocrinology and Metabolism: from Animal Models to Clinical Trials

Chairs:
David Hodson, ***Institute of Metabolism and Systems Research, University of Birmingham, Birmingham, UK***
Vadim Klimontov, ***Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia***

15.00 – 15.30	**Understanding pancreatic beta cell diversity from the single molecule to the organism** David Hodson *Institute of Metabolism and Systems Research, University of Birmingham, UK*
15.30 – 15.50	**Adipose tissue, lipid metabolism and circadian clock** Olga Ramich *German Institute of Human Nutrition, Potsdam – Rehbrücke (DifE), Germany*
15.50 – 16.10	**Wingless – type inducible signaling pathway protein – 1 (WISP1) adipokine, inflammation, diabetes and aging** Natalia Rudovich *University of Zürich, Switzerland; Hospital of Bülach, Bülach, Switzerland; Charité – Medical University, Berlin, Germany*
16.10 – 16.30	**Autophagy: is it a target for new antidiabetic drugs?** Vadim V. Klimontov, Anton I. Korbut *Research Institute of Clinical and Experimental Lymphology – branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA*
16.30 – 16.50	**Fibroblast growth factor 21 (FGF21) has a beneficial effect on carbohydrate and lipid metabolism and taste preferences in male and female mice with diet – induced obesity** Natalia Balybina[1], A. Dubinina[2], A. Kazantseva[2], E. Makarova[2], T. Yakovleva[2], Nadezhda Bazhan[2] *[1]Novosibirsk State University, Novosibirsk, RUSSIA; [2]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA*
16.50 – 17.10	**Break**

Evening session 2. New Biomarkers and Molecular Targets

Chairs:
Julia Ragino, ***Institution of Internal and Preventive Medicine – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia***
Maxim Korolev, ***Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia***
Vadim Klimontov, ***Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia***

17.10 – 17.30	**The biomarkers for genetic predisposition to some connective tissue autoimmune disorders in Belarus** Hanna Yatskiu[1], Elizabeth Siniauskaya[1], Nataliya Nikitchenko[1], Natalia Dostanko[2], Victor Yagur[2], Alexandr Sukalo[2], Tatyana Kuzhir[1], Roza Goncharova[1] *[1]Institute of Genetics and Cytology, Minsk, Belarus; [2]Belarusian State Medical University, Minsk, Belarus*
17.30 – 17.50	**Dendritic cells as a key part in rheumatoid arthritis pathogenesis** Yuliya Kurochkina, Maxim Korolev, Elena Letyagina, Vitaliy Omelchenko, Alexander Lykov, Olga Poveshenko *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA*
17.50 – 18.10	**Association between total plasma N – glycan levels and chronic back pain: a prospective study** Elizaveta E. Elgaeva[1], Yakov A. Tsepilov[2], Irena Trbojevic Akmacic[3], Andrea Skelin[4], Concetta Dagostino[5], Massimo Allegri[6], Jan Van Zundert[7], Dragan Primorac[8], Gordan Lauc[3], Frances M. K. Williams[9], Maxim B. Freidin[9] *[1]Institute of Cytology and Genetics SB RAS, Novosibirsk, FR; [2]Novosibirsk State University, Novosibirsk, RUSSIA; [3]Genos Ltd., Zagreb, Croatia; [4]St Catherine Hospital* *Zabok, Croatia; [5]University of Parma, Italy; [6]Policlinico Monza Hospital Monza, Italy; [7]Ziekenhuis Oost – Limburgl Genk, Belgium; [8]St Catherine Hospital* *Zabok, Croatia; [9]Kings College, London, UK*
18.10 – 18.30	**The main phenotypic parameters in the differential diagnosis of monogenic forms of diabetes mellitus and type 2 diabetes in young people** Alla Ovsyannikova, Oksana Rymar, Dinara Ivanoshchuk, Elena Shakhtshneider *Research Institute of Internal and Preventive Medicine – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA*
18.30 – 18.45	**The changes in the panel of circulating cytokines in patients with type 2 diabetes and chronic kidney disease** Anton Korbut, Nikolaj Orlov, Maksim Dashkin, Ilya Vinogradov, Vyacheslav Romanov, Vadim Klimontov *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RF*
18.45 – 19.00	**COMT gene polymorphism and antipsychotic – induced hyperprolactinemia in patients with schizophrenia** Svetlana Ivanova[1], Diana Paderina[1], Anastasia Boiko[1], Olga Fedorenko[1], Ivan Pozhidaev[1], Vladimir Tigunsev[1], Elena Kornetova[1], Nikolay Bokhan[1], Bob Wilffert[2], Anton Loonen[2] *[1]Mental Health Research Institute Tomsk, RUSSIA; [2]Groningen Research Institute of Pharmacy, University of Groningen, The Netherlands*

Oral reports

8 July, Wednesday

Library

Morning session 3. Human Microbiome: an Orchestra to Listen Better

Chairs:
Andrew Wallace Hayes, ***University of South Florida, Tampa, Florida, USA)***
Marina Osipenko, ***Novosibirsk State Medical University, Novosibirsk, Russia***
Vadim Klimontov, ***Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia***

9.00 – 9.30	**PLENARY REPORT** **Human Genome, Anesthesiology and Critical Care. 20 Years Later** Vladimir Zelman, *Keck School of Medicine - USC*
09.30 – 10.00	**Toxicity Testing in the 21st Century: An Overview** John Michael Sauer *Predictive Safety Testing Consortium, Critical Path Institute, Tucson, Arizona, USA*
10.00 – 10.20	**Impact of the Gut Microbiota on Chemical Risk Assessment** Andrew Wallace Hayes *University of South Florida, USA*
10.20 – 10.40	**Dynamic relationships between gastrointestinal microbes and environmental chemicals: Toward an immunotoxicology of the microbiome** Peter Pressman *The Daedalus Institute, USA*
10.40 – 11.00	**Application of a multi – layer systems toxicology framework for in vitro assessment of the biological effects of liquids and corresponding aerosols** Nikolai Ivanov *Philip Morris International R&D, Neuchâtel, Switzerland*
11.00 – 11.20	**The functionalized grapheme oxide as new anti – cancer therapeutics** Natalia Krasteva, Milena Keremidarska – Markova, Kamelia Hristova – Panusheva, Bela Vasileva, George Miloshev, Milena Georgieva *Institute of Biophysics and Biomedical Engineering, Bulgarian Academy of Sciences, Sofia, Bulgaria*
11.20 – 11.40	**Break**
11.40 – 12.00	**Genome mining for novel bioactive peptides**

	Dmitrii Travin *Center of Life Sciences, Skolkovo Institute of Science and Technology, Moscow, RUSSIA*
12.00 – 12.20	**Gut microbiome and inflammatory bowel disease (IBD) – is there a link?** Tatiana Grigoryeva *Interdisciplinary Center for Proteomic Research, Kazan Federal University, Kazan, RUSSIA*
12.20 – 12.40	**sbvIMPROVER Metagenomics Diagnostics for Inflammatory Bowel Disease Challenge: Results and Lesson Learned** Lusine Khachatryan *Philip Morris International R&D, Neuchâtel, Switzerland*
12.40 – 13.30	**Panel discussion and Q&A**
13:30 – 14:30	**Lunch**

Evening session 3. COVID – 2019: Challenges and Opportunities

Chairs:
Andrey Komissarov, *Smorodintzev Research Institute of Influenza, St. Petersburg, Russia*
Alexander Shestopalov, *Federal Research Center of Fundamental and Translational Medicine, Novosibirsk, Russia*
Vadim Klimontov, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

14.30 – 15.00	**PLENARY REPORT** **Understanding the evolution of complex regions in bird genomes** Alexander Sang-Jae Suh, *Department of Evolutionary Biology, Uppsala University, Uppsala, Sweden*
15.00 – 15.30	**Sequencing of SARS – CoV – 2 viruses from Russia: challenges and outputs** Andrey Komissarov, Artem Fadeev, Anna Ivanova, Mariia Sergeeva, Daria Danilenko *Smorodintzev Research Institute of Influenza, St. Petersburg, RUSSIA*
15.30 – 15.50	**Novel tools and methods for detecting pathogenic RNA on SARS – CoV – 2 model** Grigory A. Stepanov, Denis N. Antropov, Igor P. Oscorbin, Evgenii S. Zhuravlev, Georgiy Y. Shevelev, Maxim S. Kupryushkin, Daria S. Novopashina, Maksim L. Filipenko, Vladimir A. Richter, and Dmitrii V. Pyshnyi *Institute of Chemical Biology and Fundamental Medicine SB RAS, Novosibirsk, RUSSIA*
15.50 – 16.10	**Current research of antiviral drugs specific to SARS – CoV – 2** Olga I. Yarovaya *N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry SB RAS, Novosibirsk, RUSSIA*
16.10 – 16.25	**SARS – CoV – 2 spike protein: a target for in silico attack** Borisevich S. Sophia *Ufa Institute of Chemistry UFRS RAS, Ufa, RUSSIA*
16.25 – 16.40	**Developing a pseudovirus panel as a part of a modern antiviral drug search system** Dmitriy N. Shcherbakov

	State Research Center of Virology and Biotechnology VECTOR, Koltsovo, Novosibirsk Region, RUSSIA
16.40 – 16.50	**Interleukin – 6: the target for COVID – 19 associated cytokine release syndrome management** Anton A. Lutskii *BIOCAD, St. Petersburg, RUSSIA* Sponsor report – ***BIOCAD***
16.50 – 17.10	**Break**

Evening session 4. Advances in Precision and Digital Medicine

Chairs:
Andrey Letyagin, *Research Institute of Clinical and Experimental Lymphology – branch of the Institute of Cytology and Genetics, Novosibirsk, Russia*
Alexander Kvashnin, *(Novosibirsk, Russia*
Vadim Klimontov, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

17.10 – 17.40	**Polygenic prediction for a range of quantitative traits having different heritability** Arina V. Nostaeva[1], Tatiana I. Shashkova[1], Sodbo Z. Sharapov[1], Yakov A. Tsepilov[1], Gennady V. Khvorykh[2], Yurii S. Aulchenko[1,2], Lennart C. Karssen[2] *[1]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]PolyKnomics, 's – Hertogenbosch, the Netherlands*
17.40 – 18.00	**The visualization of fluid content during intestinal MRI** Olga A. Subbotina[1], Andrey Y. Letyagin[2], Mariya V. Rezakova[1] *[1]State Scientific – Research Institute of Physiology & Basic Medicine, Novosibirsk, RUSSIA* *[2]Research Institute of Clinical and Experimental Lymphology – branch of the Institute of Cytology and Genetics, Novosibirsk, RUSSIA*
18.00 – 18.20	**The Siberian multimodal brain tumor image segmentation dataset (SBT)** Sergey Golushko[1], Mihail Amelin[2], Bair Tuchinov[1], Evgeniya Amelina[1], Nikolay Tolstokulakov[1], Evgeniy Pavlovskiy[1], Vladimir Groza[3] *[1]Novosibirsk State University, Novosibirsk, RUSSIA* *[2]FSBI "Federal Neurosurgical Center", Novosibirsk, RUSSIA* *[3]Median Technologies, Valbonne, France*
18.20 – 18.40	**Diagnosis of neuro – oncological diseases via automatic brain tumor segmentation** Bair N. Tuchinov, N. Tolstokulakov *Novosibirsk State University, Novosibirsk, RUSSIA*
18.40 – 19.00	**Experimental substantiation of transdermal transport of photosensitizers by fractional laser photothermolysis (FLP)** Danila Chernopyatov[1], Sergey Nikonov[1], Vadim Nimaev[2] *[1]Novosibirsk State University, Novosibirsk, RUSSIA; [2]Research Institute of Clinical and Experimental Lymphology – branch of the Institute of Cytology and Genetics, Novosibirsk, RUSSIA*

Poster session 1 – 4

7 July, Tuesday

PS 1. Genotyping and Personalized Medicine

Moderator: Olga Posukh, *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

13.30 – 14.30

1. Genetic polymorphism associated with infectious pulmonary diseases in Siberian populations and among patients with community acquired pneumonia.
Svetlana V. Mikhailova[1], Liliya V. Shcherbakova[2], Nadejda I. Logvinenko[3], Irina I. Logvinenko[2], Mikhail I. Voevoda[1]
[1]ICG SB RAS; [2]IIPM – a branch of the ICG SB RAS; [3]Novosibirsk State Medical University, Novosibirsk, RUSSIA

2. Why we need more complex gene diagnostic: the case study of exome from patient with congenital glaucoma
Dinara Ivanoshchuk[1], Mikhail Voevoda[1], Natalia Konovalova[1], Konstantin Gunbin[2]
[1]ICG SB RAS, Novosibirsk, Russia; [2]TSMA, Tumen, RUSSIA

3. The role of NGS in diagnosis of hereditary ophthalmic pathology
Andrey Marakhonov, Tatyana Vasilyeva, Vitaly Kadyshev, Rena Zinchenko
Research Center for Medical Genetics, Moscow, RUSSIA

4. DNA diagnosis in case series of hereditary retinal dystrophy
Tatyana Vasilyeva, Andrey Marakhonov, Vitaly Kadyshev, Rena Zinchenko
Research Center for Medical Genetics, Moscow, RUSSIA

5. Molecular diagnostics of hearing loss due to mutations in the SLC26A4 gene in indigenous people of Southern Siberia (Russia)
Valeriia Y. Danilchenko[1], Marina V. Zytsar[1], Marita S. Bady – Khoo[3], Ekaterina A. Maslova[1], Olga L. Posukh[1,2]
[1]Federal Research Center Institute of Cytology and Genetics; [2]Novosibirsk State University, Novosibirsk, RUSSIA; [3]Perinatal Center of the Republic of Tyva, Kyzyl, RUSSIA

6. Generation of the panel of transgenic human cell lines with stable expression of mutant variants of the GJB2 gene associated with hearing loss for comparative in vitro studies
Ekaterina A. Maslova[1,2], Marina V. Zytsar[1], , Valeriia Yu. Danilchenko[1], Olga L. Posukh[1,2], Konstantin E. Orishchenko[1,2]
[1]Federal Research Center Institute of Cytology and Genetics; [2]Novosibirsk State University, Novosibirsk,RUSSIA

7. Gene polymorphism IL13 in moderate – to – severe asthmatic Siberian children with different diseases control
Marina Smolnikova, Nina Gorbacheva, Marina Malinchik, Sergey Tereshchenko
Scientific Research Institute of Medical Problems of the North FRC KSC SB RAS, Krasnoyarsk, RUSSIA

8. The rs12255372 and rs7903146 polymorphisms of the TCF7L2 gene among Buryats and Russians of Eastern Siberia
Ludmila Tabikhanova[1,2], Ludmila Osipova[1,2], Tatiana Churkina[1,2], Daria Lichman[1,2], Elena Voronina[2,3], Maxim Filipenko[2,3]
[1]Federal Research Center Institute of Cytology and Genetics Siberian Branch of the Russian Academy of Science; [2]Novosibirsk State University; [3]Institute of Chemical Biology and Fundamental Medicine Siberian Branch of the Russian Academy of Sciences, Novosibirsk, RUSSIA

9. Study of serotonin transporter gene polymorphism Stin2 in two Siberian indigenous populations
Mira Khantemirova[1,2], Daria Lichman[1,2], Daria Bazovkina[1], Anatoly Bragin[2], Vladimir Naumenko[1], Ludmila Osipova[1,2]
[1]Institute of cytology and genetics; [2]Novosibirsk State University, Novosibirsk, RUSSIA

10. Possible effect of SNP TATA – boxes of human erythropoiesis gene promoters on cognitive disorders
Ekaterina Sharypova, Irina Drachkova, Irina Chadaeva, Mikhail Ponomarenko, Ludmila Savinkova
Institute of Cytology and Genetics, Novosibirsk, RUSSIA

11. IL1b T – 31C and VEGFA C+936T SNPs may be used as prognostic markers of rheumatoid arthritis treatment inefficiency
Vitaly Omelchenko, Elena Letyagina, Alla Shevchenko, Yuliya Kurochkina, Anna Akimova, Maxim Korolev
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics, Novosibirsk, RUSSIA

PS 2. Omics – Based Technologies and Bioinformatics

Moderator: Elena Ignatjieva, *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

13.30 – 14.30

1. How miRNAs can protect humans from coronaviruses COVID – 19, SARS – CoV, and MERS – CoV
Anatoliy T. Ivashchenko, Aizhan K. Rakhmetullina, Aigul N. Akimniyazova, Dana E. Aisina
Al – Farabi Kazakh National University, Almaty, Kazakhstan

2. Biological data mining of HIV – host interactions
Olga Tarasova, Sergey Ivanov, Dmitry A. Filimonov
IBMC, Moscow, RUSSIA

3. Melatonin as a key regulator in molecular – genetic network of glucose variability related to circadian rhythm
Olga Saik[1,2], Pavel Demenkov[1], Vladimir Ivanisenko[1], Vadim Klimontov[2]
Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

4. Modelling of Nef interaction with ABCA1 revealed potential binding sites for inhibitor compounds
Anastasia Anashkina, Yaroslav Tkachev, Alexei A. Adzhubei
EIMB RAS, Moscow, RUSSIA

5. Whole – exome sequencing association studies on impaired spermatogenesis in different ethnic groups in Russia
Semyon K. Kolmykov, Gennadiy V. Vasiliev, Mikhail P. Ponomarenko, Maxim A. Kleshev, Aleksandr V. Osadchuk, Ludmila V. Osadchuk
Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

6. Placental transcriptome co – expression analysis reveals key biomarkers and pathways of preeclampsia
E. Trifonova[1,2], A. Zarubin[1], A. Babovskaya[1], A. Markov[1], V. Stepanov[1]
[1]TNRMC RAS; [2]SibMed, Tomsk, RUSSIA

7. Quantitative differences in the proteomic composition of the blood serum of patients with simple and paranoid schizophrenia
Liudmila Smirnova[1], Victor Zgoda[2], Elena Dmitrieva[1], Alexandr Seregin[1], Arkadiy Semke[1], Svetlana Ivanova[1]
[1]Mental Health Research Institute of Tomsk National Research Medical Center, Tomsk, Russia; [2]Institute of Biomedical Chemistry, Moscow, RUSSIA

8. Semi – quantitative analysis of serum proteome in patients with bipolar disorder
Alexander A. Seregin, Lyudmila P. Smirnova, German G. Simutkin
Mental Health Research Institute Tomsk National Research Medical Center of the Russian Academy of Sciences, Tomsk, RUSSIA

9. Whole genome of novel Lactobacillus fermentum HFD1 strain producing various antimicrobial metabolites
Georgii Ozhegov[1,2], Monyr Nait Yahia[1], Alexey Vasilchenko[3], Natalya Gogoleva[1,4], Dina Yarullina[1], Airat Kaumov[1]
[1]Kazan Federal University, Kazan, Russia; [2]Perm State Pharmaceutical Academy, Perm, Russia; [3]University of Tyumen, Tyumen, Russia; [4]Kazan Institute of Biochemistry and Biophysics, FRC Kazan Scientific Center of RAS, Kazan, RUSSIA

10. Metabolic response of the Siberian frog Rana amurensis to anoxia
Sergei V. Shekhovtsov[1], Nina A. Bulakhova[2], Yuri P. Tsentalovich[3], Ekaterina A. Zelentsova[3], Daniil I. Berman[2]
[1]ICG SB RAS, Novosibirsk, Russia; [2]IBPN FEB RAS, Magadan, Russia; [3]ITC SB RAS, Novosibirsk, RUSSIA

PS 3. Experimental Modeling in Biomedicine

Moderator: Anastasia O. Solovjeva, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

13.30 – 14.30

1. Nerve tissue DNA damage due to lead intoxication in combination with glucose loading Natalya Yakimova, Elizaveta Andreeva, Ekaterina Buinova
FSBSI ESIMER, Angarsk, RUSSIA

2. MicroRNAs (221,429) correlate with lymphocytes of axillary lymph nodes in experimental breast cancer
Aleksey Kabakov[1], Alexander Lykov[1], Oleg Kazakov[1], Alexander Poveshchenko[1], Olga Poveshchenko[1], Nikolai Orlov[1], Dmitriy Strunkin[1], Lyudmila Gulyaeva[2], Andrey Letyagin[1], Vladimir Konenkov
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS; [2]Research Institute of Molecullar Biology and Biophysycs – Federal research center of Fundamental and Translational Medicine), Novosibirsk, RUSSIA

3. Correlations between lymph concentrations of cytokines and cell morphometric parameters of mesenteric lymph nodes in rats with chemically induced breast cancer
Oleg Kazakov, Alexandr Poveshchenko, Nikolai Orlov, Alexey Kabakov, Alexandr Lykov, Dmitry Strunkin, Vladimir Konenkov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics Siberian Branch of the Russian Academy of Sciences, Novosibirsk, RUSSIA

4. Correlations between lymph concentrations of cytokines and morphometric parameters of mesenteric lymph nodes after breast cancer chemotherapy
Oleg Kazakov, Alexandr Poveshchenko, Nikolai Orlov, Alexey Kabakov, Alexandr Lykov, Dmitry Strunkin, Vladimir Konenkov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics Siberian Branch of the Russian Academy of Sciences, Novosibirsk, RUSSIA

5. Influence of the factors of maternal milieu on taste preferences and metabolic parameters in mouse male and female offspring
Elena Denisova[1], Elena Makarova[1], Maria Savinkova[2]
[1]Institute of Cytology and Genetics SB RAS; [2]Novosibirsk State University, Novosibirsk, RUSSIA

6. Inflammation is associated with desynchronosis in the immune system (experimental study)
A.M. Abdalova, A.V. Shurlygina, Dergacheva T.I., V.V. Klimontov, A.Yu. Letyagin
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

7. The effect of round – the – clock illumination on blood hemoglobin level, body composition and endurance of C57Bl/6 mice
Irina Yu. Ishchenko[1], Svetlana V. Michurina[1], Andrey Yu. Letyagin[1], Maxim A. Korolev[1], Lyubov N. Rachkovskaya[1], Anna S. Khotskina[2], Nikita V. Khotskin[2], Svetlana O. Maslennikova[2], Evgenii L. Zavjalov[2]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics, Siberian Branch of Russian Academy of Sciences; [2]Institute of Cytology and Genetics, Siberian Branch of Russian Academy of Sciences, Novosibirsk, RUSSIA

8. The effect of the melatonin – containing preparation on the histological structure of the organs of the immune system of mice under round – the – clock illumination
Anna V. Shurlygina[1], A.E. Serykh[1,2], L.N. Rachkovskaya[1], S.V. Michurina[1], E.E. Rachkovsky[1], A.Yu. Letyagin[1]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS; [2]Novosibirsk State University, Novosibirsk, RUSSIA

9. Opisthorchis felineus extracellular vesicles increase cell proliferation and migration rates of human H69 cholangiocytes
D.V. Ponomarev, O. Zaparina, M.Y. Pakharukova, V.A. Mordvinov
Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

PS 4. Cellular and Molecular Biology in Human Health and Diseases

Moderator: Natalia P. Bgatova, Institute of Cytology and Genetics, SB RAS, Novosibirsk, Russia

13.30 – 14.30

1. Calcium signaling dynamics in single platelets during optically – induced activation
Darya Spiryova, Alexander E. Moskalensky, Alexei Vorob'ev
Novosibirsk State University, Novosibirsk, RUSSIA

2. Nonvascular pathways of aqueous humor outflow in the choroid of the human eye
Sabina Nogovitsina[1], Nataliya Bgatova[1], Alena Eremina[2], Valeriy Chernykh[2], Aleksandr Trunov[2], Vladimir Konenkov[1]
*1*Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences*; 2The academician S.N. Fyodorov Federal State Institution National Medical Research Center «Intersectoral Research and Technology Complex «Eye microsurgery» Ministry of Health of the Russian Federation», Novosibirsk Branch, Novosibirsk, RUSSIA*

3. Human retinal photoreceptor cells in glaucoma: destructive changes of mithochondria and mitophagy
Natalia Obanina[1,2], Nataliya Bgatova[1], Valerii Chernykh[3], Aleksandr Trunov[3], Alena Eremina[3], Vladimir Konenkov[1]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences; [2]Novosibirsk State University; [3]The academician S.N. Fyodorov Federal State Institution "Intersectoral Research and Technology Complex "Eye Microsurgery", Ministry of Healthcare of Russian Federation, Novosibirsk Branch, Novosibirsk, RUSSIA

4. Mitochondrial dysfunction and redox balance alterations in the development of AD – like pathology in OXYS rats
Mikhail Tyumentsev[1], Natalia Muraleva[1], Yulia Polienko[2], Artyom Gorodetsky[2], Elena Bagryanskaya[2]
ICG SB RAS; [2]NIOCH SB RAS, Novosibirsk, RUSSIA

5. The development of compensatory processes in the liver and kidney in conditions of distant tumor growth
Nataliya Bgatova[1], Asel Rakhmetova[2], Saule Bakhbaeva[2], Viktoriia Makarova[1], Iuliia Taskaeva[1]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, RUSSIA; [2]Pavlodar State University, Pavlodar, Kazakhstan

6. The expression of Bcl – 2 family proteins in liver cells of C57Bl/6 mice under conditions of functional pinealectomy
Svetlana V. Michurina[1], Irina Yu. Ishchenko[1], Sergey A. Arkhipov[1], Andrey Yu. Letyagin[1], Maxim A. Korolev[1], Evgenii L. Zavjalov[2]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

7. LYVE – 1 expression in liver cells of mice with functional pinealectomy
Irina Yu. Ishchenko[1], Svetlana V. Michurina[1], Sergey A. Arkhipov[1], Andrey Yu. Letyagin[1], Maxim A. Korolev[1], Evgenii L. Zavjalov[2]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

8. The lithium effects on morphology and apoptosis in hepatocellular carcinoma cells
Iuliia Taskaeva, Izabella Gogaeva, Natalia Obanina, Viktoriia Makarova, Nataliya Bgatova
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

9. Human dermal fibroblasts and bone – marrow mesenchymal stem cells properties under silver and lithium condition
Alexander Lykov[1], Lubov Rachkovskaya[1], Olga Poveshchenko[1], Maria Surovtseva[1], Irina Kim[1], Edmund Rachkovsky[1], Alena Philippova[2]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS; [2]Municipal autonomous educational institution Education center Gornostay, Novosibirsk, RUSSIA

Poster session 5 – 8

8 July, Wednesday

PS 5. Gene Expression and Gene Network Analysis

Moderator: Yuri Orlov, *Institute of Digital Medicine I.M. Sechenov First Moscow State Medical University, Moscow, Russia; Novosibirsk State University, Novosibirsk, Russia*

1. Functional study of potential regulatory SNPs (rs590352, rs11542583, rs3829202, rs78317230, rs2072580, rs4796672)
Arina Degtyareva[1], Elena Leberfarb[1], Ilya Brusentsov[1], Tatiana Kuzina[2], Tatiana Merkulova[1]
[1]ICG SB RAS; [2]NSU, Novosibirsk, RUSSIA

2. Consideration of pathogenicity of nsSNVs in CDKN2A gene, as a new tumor marker for leukemia, using bioinformatics methods
Farzaneh Ghasemi[1], Mohammad Mehdi Heidari[1], Yuriy L. Orlov[2,3], Mehri Khatami[1]
[1]Yazd university, Yazd, Iran; [2]I.M.Sechenov First Moscow State Medical University, Moscow, RUSSIA; [3]Novosibirsk State University, Novosibirsk, RUSSIA

3. Associations of methylation level of promoter region of MLH1 gene and genotypes of the exonic rs1799977
Nadezhda Babushkina, Anton Markov, Irina Goncharova, Ramil Salakhov, Iuliia Koroleva, Anna Postrigan, Alexei Zarubin, Alexei Sleptcov, Aksana Kucher, Maria Nazarenko
Research Institute of Medical Genetics, TNRMC RAS, Tomsk, Russia

4. The structure of the cytokine gene network in uterine fibroids
Viktor Prokofiev, Alla Shevchenko, Vladimir Konenkov, Nikolay Orlov, Elena Koroleva, Alexey Novikov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

5. Cluster organization of miRNA binding sites in mRNA of atherosclerosis candidate genes
Dina Mukushkina, Dana Aisina, Anatoliy T. Ivashchenko
SRI of biology and biotechnology problems Al – Farabi Kazakh National University, Almaty, Kazakhstan

6. MirNA expression profile in abnormally invasive placenta: accreta, increta and percreta cases
Angelika Timofeeva, Oksana Vasilchenko, Mariya Pirogova, Ivan Fedorov, Vitaliy Chagovets, Larisa Ezhova, Roman Shmakov, Gennadiy Sukhikh
FSBI «National Medical Research Center For Obstetrics, Gynecology And Perinatology Named After Academician V.I.Kulakov» Ministry of Healthcare of the Russian Federation, Moscow, RUSSIA

7. The role of microRNA – 370 in steroid – resistant focal segmental glomerulosclerosis
Sepideh Zununi Vahed, Seyedeh Mina Hejazian, Mohammadreza Ardalan
Kidney Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

8. Endoglycosidase expression in pubocervical fascia is up – regulated in menopause patients with severe pelvic organs prolapsed
Svetlana V. Aidagulova[1], Fedor A. Rakitin[2], Mikhail Yu. Soluyanov[2], Vadim V. Nimaev[2], Igor O. Marinkin[1]
[1]Novosibirsk State Medical University; [2]Research Institute of Clinical and Experimental Lymphology – Branch ICG SB RAS, Novosibirsk, RUSSIA

9. Syndecan – 1 expression in ovarian endometrioid cancer tissue has negative correlation with estrogen status
Alexander V. Volchek[1], Yulia S. Timofeeva[1], Ya.M. Evseeva[1], Dmitriy V. Morozov[2], Igor O. Marinkin[1], Svetlana V. Aidagulova[1]
[1]Novosibirsk State Medical University; [2]City Clinical Hospital №1, Novosibirsk, RUSSIA

10. Reconstruction and analysis of regulatory gene networks involving human genes associated with main forms of pathozoospermia
Elena V. Ignatieva, Alexander V. Osadchuk, Maxim A. Kleshev, Ludmila V. Osadchuk
The Federal Research Center Institute of Cytology and Genetics, SB RAS, Novosibirsk, RUSSIA

11. Towards a comprehensive catalog of human genes associated with main forms of pathozoospermia and its functional annotation
Elena V. Ignatieva, Alexander V. Osadchuk, Maxim A. Kleshev, Ludmila V. Osadchuk
The Federal Research Center Institute of Cytology and Genetics, SB RAS, Novosibirsk, RUSSIA

PS 6. Experimental Pharmacology and Regenerative Medicine

Moderator: Pavel Madonov, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

1. Exploration of newer microbicides by in silico approaches
Shanmughavel Piramanayagam[1], Lokesh Thangamani[1], Yuriy L. Orlov[2,3]

[1]Bharathiar University,TN,India; [2]First Moscow State Medical University, Moscow, RUSSIA; [3]Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

2. Hydrogels for tissue regeneration
Timothy E.L. Douglas
Engineering Department and Materials Science Insitute, Lancaster University, UK

3. Pharmacological effects of recombinant FGF21 in ovariectomized mice C57Bl/6J
Antonina Kazantseva, Tatyana Yakovleva, Elena Makarova, Nadezhda Kriklivaya, Nadezhda Bazhan
ICG SB RAS, Novosibirsk, RUSSIA

4. Influence of immobilized subtilisins on perfomance indicators of rat heart in experiment
Pavel Madonov[1,2], Roman Knyazev[3], German Baykalov[1,2], Konstantin Ershov[2]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics Siberian Branch of the Russian Academy of Sciences; [2]Novosibirsk State Medical University; [3]Research Institute of Biochemistry – Branch of the Federal Research Center of Fundamental and Translational Medicine, Novosibirsk, RUSSIA

5. Prevention of tumor growth by photo – and X – ray activation of tunsgen cluster complex and its conjugate with DNA molecules
Natalia A. Sitnikova[1], Anastasiya O. Solovieva[1], Tatiana N. Pozmogova[1], Yuri A. Vorotnikov[2], Svetlana M. Miroshnichenko[1], Michael A. Shestopalov[2], Andrey O. Kushnarenko[1]
[1]RICEL – Branch of ICG SB RAS; [2]NIIC SB RAS, Novosibirsk, RUSSIA

6. Chemotherapeutic agent cisplatin suppresses stabilin – 1 – mediated clearance of EGF by tumor – associated macrophage
Irina Larionova[1,2], Elena Kazakova[1], Artyem Kiselev[3], Marina Patysheva[1,2], Julia Kzhyshkowska[4]
[1]National Research Tomsk State University; [2]Cancer Research Institute, Tomsk National Research Medical Center, Russian Academy of Sciences, Tomsk, RUSSIA; [3]Almazov National Medical Research Centre, Saint Petersburg, Russia; *[4]German Red Cross Blood Service Baden – Württemberg – Hessen, Mannheim, Germany*

7. Evaluation of biological activity of the conjugates of granulocyte – macrophage colony stimulating factor with alendronic acid
Ekaterina A. Volosnikova, Tat'yana I. Esina, Alena V. Bateneva, Galina G. Shimina, Elena D. Danilenko
IMBT FBRI SRC VB «Vector», Rospotrebnadzor, Berdsk, RUSSIA

8. Investigation of the allergenic properties of the interferon – lambda 1, pegylated by electron – beam method
[1]Nikolai Kikhtenko, [2]Larisa Oleynik, [1,2]Pavel Madonov, [3]Evgeniy Sherstoboev
[1]Novosibirsk State Medical University, Novosibirsk, RUSSIA; [2]Research Institute of Clinical and Experimental Lymphology – branch of IC&G of SB RAS, Novosibirsk, RUSSIA; [3]E.D. Goldberg Research Institute of Pharmacology and Regenerative Medicine of Tomsk National Research Medical Center of SB RAS, Tomsk, Russia

9. Study of mutagenic properties of PEG – internferon – λ1
[1]Larisa A. Oleynik, [2]Nikolai Kikhtenko, [1,2]Pavel G. Madonov
[1]Research Institute of Clinical and Experimental Lymphology – branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]Novosibirsk State Medical University, Novosibirsk, RUSSIA

10. The effect of aluminium – silicon sorbent on the viability of lactobacilli at various pH indicators
Tatiana V. Popova[1], Irina S. Andreva[2], Lubov N. Rachkovskay[1], Anastasiya A. Kotlyarova[1]
[1]RICEL – Branch of IC&G SB RAS; [2]FBRI State Research Center of Virology and Biotechnology Vector of Rospotrebnadzor, Novosibirsk, RUSSIA

11. Application of flow cytometry to analyze effect of aluminum – silicon carrier on blood erythrocytes
A.V. Pivkina[1], L.N. Rachkovskaya[2], V.V. Nimaev[2], A.A. Smagin[2], A.V. Shurlygina[2], E.E. Rachkovsky[2], E.S. Yastrebova[3], M.A. Korolev[2], V.P.Maltsev[3], A.Yu. Letyagin[2]
[1]Novosibirsk State University; *[2]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS*; *[3]V.V. Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, RUSSIA*

12. Effect of bispidine containing monoterpenoid moieties on physical performance in mice
Anastasiya A. Kotlyarova[1], Dina V. Korchagina[2], Tatyana G. Tolstikova[2], Konstantin Yu. Ponomarev[2]
[1]Research Institute of Clinical and Experimental Lymphology – a branch of the Institute of Cytology and Genetics of Siberian Branch of Russian Academy of Sciences; [2]Novosibirsk Institute of Organic Chemistry of Siberian Branch of Russian Academy of Sciences, Novosibirsk, RUSSIA

13. Toxicity of fucoxanthin on balb/c mice splenocytes and thymocytes
Alexander Lykov[1], , Lubov Rachkovskaya[1], Olga Poveshchenko[1], Maria Surovtseva[1], Irina Kim[1], Edmund Rachkovsky[1], Ruslan Gevorgiz[2], Svetlana Zheleznova[2], Maxim Korolev[1], Anastasiya Kotlyarova[1], Andrey Letyagin[1]
[1]Research Institute of Clinical ans Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia; [2]A.O. Kovalevsky Institute of Biology of the Southern Seas RAS, Sevastopol, RUSSIA

14. Cytotoxicity of γ – aluminum – silica – single – wall carbon nanotubes carriers on mesenchymal stem cells and endothelial cell line EA.hy 926
Irina Kim[1], Alexander Lykov[1], Lubov Rachkovskaya[1], Maria Surovtseva[1], Edmund Rachkovsky[1], Olga Poveshchenko[1,2]
[1]Research Institute of Clinical ans Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS; [2]Meshalkin National Medical Research Center, Ministry of Health of Russian Federation, Novosibirsk, RUSSIA

15. Cytotoxicity of titanium oxynitride obtained by reactive magnetron sputtered on endothelial cells line eaHy 926
Maria Surovtseva[1], Olga Poveshchenko[2], Alexander Lykov[1], Irina Kim[1], Vladimir Pichugin[3], Irina Zhuravleva[2]
[1]Research Institute of Clinical ans Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS; [2]E. Meshalkin National Medical Research Center of the RUSSIA Ministry of Health, Novosibirsk, RUSSIA; [3]Tomsk Polytechnic University, Tomsk, RUSSIA

16. ReLEx SMILE method to expansion and create scaffolds from corneal fibroblasts
Kristina Krasner[1], Alexander Lykov[2], Maria Surovtseva[2], Valeriy Chernykh[1], Irina Kim[2], Alexander Trunov[1], Olga Poveshchenko[1]
[1]S. Fedorov Eye Microsurgery Federal State Institution; [2]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS Novosibirsk, RUSSIA; [3]Meshalkin National Medical Research Center Novosibirsk, RUSSIA

PS 7. New Biomarkers of Widespread Human Diseases

Moderator: Elena Koroleva, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

1. Catalytically active bispecific antibodies – new biochemical markers of HIV/AIDS
Svetlana Baranova, Sergey Sedykh, Georgy Nevinsky
ICBFM SB RAS, Novosibirsk, RUSSIA

2. Serum actin – binding proteins as markers of metastasis of larynx and laryngeal pharynx cancer
G.V. Kakurina, E.S. Kolegova, M.N. Staheeva, O.V. Cheremisina, I.V. Kondakova, E.L. Choynzonov
Cancer Research Institute, Tomsk National Research Medical Center SB RAS, Tomsk, RUSSIA

3. Circulating microRNAs potentially associated with progression of castration – resistant prostate cancer
Elena A. Pudova[1], Boris Ya. Alekseev[2], Kirill M. Nyushko[2], Anastasiya A. Kobelyatskaya[1], Georgy S. Krasnov[1], Anna V. Kudryavtseva[1]
[1]EIMB RAS; [2]FSBI NMRRC, Moscow, RUSSIA

4. Cytokines as markers of oncogenesis and therapy efficiency in chemically induced breast cancer
Alexandr Poveshchenko, Oleg Kazakov, Nikolai Orlov, Alexey Kabakov, Dmitry Strunkin, Vladimir Konenkov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

5. The analysis of different longitudinal biomarkers association with the overall survival in non – small cell lung cancer by means of joint modeling
Alina Sofronova[1], Sergey Gavrilov[1], Oleg Stepanov[1], Kirill Peskov[1,2], Kirill Zhudenkov[1]
[1]M&S decisions LLC, Moscow, RUSSIA; [2]I.M. Sechenov First Moscow State Medical University, Moscow, RUSSIA

6. Proteins and cytokines of blood cells supernatant and histological atypical cells markers in the breast diseases
Kristina Davletova[1,2], Albina Bernado[1], Sergey Arkhipov[1,2], Igor Zhurakovsky[1,2], Nikolay Varaksin[3], Alexander Autenshlyus[1,2]
[1]Novosibirsk State Medical University; [2]Institute of Molecular Biology and Biophysics – subdivision of FRC FTM; [3]AO Vector – Best, Novosibirsk, RUSSIA

7. Markers of oxidative and atherogenic processes in individuals with hand – arm vibration syndrome and metabolic disorders
Liudmila Masnavieva, Irina Kudaeva, Nadezhda Chistova
ESIMER, Angarsk, RUSSIA

8. Dysbiosis in the gut microbiota of adolescents with obesity
Evgenia A. Novikova, Tatyana A. Bairova, Natalia L. Belkova, Anna V. Pogodina, Anastasia I. Romanitsa, Lyubov V. Rychkova
Scientific Centre of Family Health and Human Reproduction Problems, Irkutsk, RUSSIA

9. Cytokines of the IL – 6 family in the modulation of carbohydrate and lipid metabolism in patients with metabolic syndrome
Daria Skuratovskaia, Alexandra Komar, Maria Vulf, Egor Shunkin, Larisa Litvinova
IKBFU, Kaliningrad, RUSSIA

10. MBP – hydrolyzing abzymes as peripheral markers associated with impaired myelination in schizophrenia
Daria Parshukova[1], Liudmila Smirnova[1], Ekaterina Dmitrieva[1], Arkady Semke[1], Vasily Yarnykh[2], Svetlana Ivanova
[1]Mental Health Research Institute Tomsk National Research Medical Center RAS, Tomsk, Russia; [2]University of Washington, Seattle WA, USA

11. Immunoglobulins with proteolytic activity as a biomarker of impaired humoral immune system in schizophrenia
Evgeny Ermakov[1,2], Valentina Buneva[1,2], Georgy Nevinsky[1,2]
[1]ICBFM SB RAS; [2]NSU, Novosibirsk, RUSSIA

12. Amino acid and acylcarnitine levels relate with chronic schizophrenia
Irina Mednova[1], Alexandr Chernonosov[2], Marat Kasakin[2], Elena Kornetova[1], Arkadiy Semke[1], Nikolay Bokhan1, Vladimir Koval[2], Svetlana Ivanova[1]
[1]Mental Health Research Institute, TNRMC, Tomsk, Russia; [2]Institute of Chemical Biology and Fundamental Medicine SB RAS, Novosibirsk, RUSSIA

13. Bone remodeling in men with type 2 diabetes: is it just the same thing as in women?
Olga Fazullina, Vadim Klimontov, Maksim Dashkin
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

PS 8. Innovative Technologies in Digital Medicine and Medical Imaging

Moderator: Vadim Nimaev, *Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*

1. Clinical and metabolic parameters associated with time in ranges and glucose variability in patients with type 2 diabetes treated with insulin
Julia F. Semenova, Maksim V. Dashkin, Olga N. Fazullina
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

2. Continuous glucose monitoring parameters in insulin – treated type 2 diabetic patients: relationships with obesity and body composition
Julia F. Semenova, Olga N. Fazullina
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

3. Glucose variability in subjects with type 1 diabetes: the relationships with non – enzymatic glycation, albuminuria and renal function
Vadim V. Klimontov, Julia F. Semenova, Alla K. Vigel
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

4. The prevalence and risk factors of carotid artery stenosis in type 2 diabetic patients
Elena Koroleva, Rustam Khapaev, Alexandr Lykov, Vadim Klimontov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

5. The combined approach to treatment of patients witn chronic ischemia and diabetic foot syndrome
Mikhail Smagin, Oleg Shumkov, Rustam Khapaev, Mariya Surovtseva, Olga Poveshchenko, Vadim Nimaev
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosbirsk, RUSSIA

6. Negative – pressure wound therapy of purulent wounds in patients with diabetic foot syndrome
Oleg Shumkov, Mikhail Smagin, Rustam Khapaev
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosbirsk, RUSSIA

7. Personification of the surgical treatment of pelvic organ prolapse in older women
M.Yu. Soluyanov[1], O.A. Shumkov[1], M.A. Smagin[1], V.V. Nimaev[1], F.A. Rakitin[1], I.A. Eyzenakh[2]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]SAPHI KR «Novokuznetsk City clinical hospital № 1», Novokuznetsk, RUSSIA

8. The tendency to hypercoagulation in the perioperative period of uterine artery embolization
Irina Siutkina[1], Dmitriy Khabarov[1], Alexandr Smagin[1], Pavel Bulychev[1], Alexander Demura[1], Alisa Inyoshina[2,3]
[1]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA; [2]Novosibirsk State University; [3]V. Zelman Institute for Medicine and Psychology, Novosibirsk , RUSSIA

9. Opportunities of trabecular bone score to evaluate ankylosing spondilitis structural progression in young male patients
Konstantin Kolpakov, Maxim Korolev, Elena Letyagina
Research Institute of Clinical and Experimental Lymphology – branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

10. A new method for the diagnosis of osteoporosis based on standing waves
Konstantin Fedin[1], Vadim Klimontov[2], Olga Fazullina[2], Yuriy Kolesnikov[1]
[1]Trofimuk Institute of Petroleum Geology and Geophysics of Siberian Branch Russian Academy of Sciences; [2]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

11. The prevalence and the risk factors for low – energy fractures in women with type 2 diabetes
Olga Fazullina, Vadim Klimontov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

12. Thyroid disfunction is associated with osteoporosis in patients with Hodgkin's lymphoma
Mariya S. Voytko[1], Vadim V. Klimontov[2], Tatyana I. Pospelova[1], Olga N. Fazulina[2], Alexander I. Autenshlyus[1]
[1]Novosibirsk State Medical University; [2]Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA

13. Laser 3D – modeling in research of molecular features of skin lymphatic vessels in the patients with urticaria pigmentosa
Svetlana V. Michurina, Natalia N. Svechnikova, Andrey Yu. Letyagin, Irina Yu. Ishchenko, Sergey A. Arkhipov, Anastasia O. Solovyova, Vladimir I. Konenkov
Research Institute of Clinical and Experimental Lymphology – Branch of the Institute of Cytology and Genetics SB RAS, Novosibirsk, RUSSIA