

## Russian Congress with International Participation

### “Molecular Basis of Clinical Medicine: State-of-the-Art and Perspectives”

Saint-Petersburg, Russian Federation, June 7 - 9, 2010

## FINAL PROGRAMME

June 7

### Congress Hall

9.30 – 11.10 **Opening Ceremony**

**Memorial Session** *Dedicated to the Memory of Prof. Eugeniy I. Shvarts, a Founder of Molecular Medicine in Russia*

11.10 - 11.30 **Coffee break**

11.30 – 14.00 **Plenary Session 1**

**Chairpersons:** *Novikov P.V., Govorun V.M., Arndt Rolfs, Maj A.Hulten*

11.30 – 12.00 *Novikov P.V. (Moscow): **Molecular Medicine as New Field of Diagnosis, Treatment, and Prevention of Hereditary and Non-Hereditary diseases***

12.00 – 12.30 *Govorun V.M. (Moscow): **Proteogenomic Technologies as New Methodology of Molecular Medicine***

12.30 – 13.15 *Hastings Rosalind (Oxford, UK): **The Impact of Whole Genome Testing on Laboratory Services in Europe***

13.15 – 14.00 *Hulten Maj A. (Warwick University, UK): **On the Origin and Diagnostics of Common Chromosome Disorders***

14.00 – 15.00 **Lunch**

15.00 - 17.00 **Plenary Session 2**

15.00 – 15.30 *Kuliev Anver M. (Chicago, USA): **Genetics in Human Reproduction***

15.30 – 16.00 *Lebedev Igor N. (Tomsk): **Epigenetics and Human Reproduction***

16.00 – 16.30 *Zakharova E.Ju. (Moscow): **Rare Diseases in Russia: Problems and Prospects***

16.30 – 17.00 *Baranov V.S. (St. Petersburg): **Predictive Medicine: The State-of-the Art and Prospective Developments***

17.00 – 17.30 **Coffee break**

17.30 – 18.30 **Lecture**

*Arndt Rolfs (Germany): **Genetics in Stroke***

### Red Hall D

15.15 – 19.00 **Workshop “Progress in Diagnosis and Treatment of Lysosome diseases”**

June 8

Congress Hall

9.00 - 10.00 **Lecture**

Arndt Rolfs (Germany): *Hereditary and Metabolic Diseases, Their Treatment*

10.15 – 12.00 **Plenary Session 3**

10.15 – 10.45 Polyakov A.V. (Moscow): *DNA Diagnosis of Hereditary Diseases: Potentials and Perspectives*

10.45 – 11.15 Golubovsky Michael D. (Berkeley, USA): *Human Chimera and Twins in Current Reproductive Cytogenetics*

11.15 - 11.45 Izhevskaya V.L. (Moscow): *Ethical Issues in Molecular Medicine*

11.45 – 12.00 Mikirtchian G.L. (St. Petersburg): *Opinion of Medical Professionals and Patients on Some Genetic Technologies. Medical Sociological and Ethical Analysis.*

12.00 – 12.20 **Coffee-break**

12.20 – 14.00 Workshop “**Mitochondrial Diseases**”

14.00 – 15.00 **Lunch**

15.00 – 19.00 Workshop “**Hereditary myopathies**”

Read Hall A

15.00 – 17.00 Symposium **Education and Integration in Medical Genetics and in Molecular Genetics**

**Chairpersons:** Novikov P.V., Nazarenko L.P., Coviello D.

15.00 – 15.45 Coviello Domenico (Genoa, Italy): *Medical Genetics Education: Organization Models and Examples from Undergraduate Medical Students Level to Continuing Medical Education*

15.45 – 16.30 Thurston Virginia C. (Indianapolis, USA): *Medical Genetics Education and Training for Medical Students, Genetic Counseling Students, and Residents*

16.30 – 17.00 Thurston Virginia C. (Indianapolis, USA): *Methods for Integrating Medical Genomics into a Medical School Curriculum*”

17.15 – 19.00 Symposium **Education and Integration in Medical Genetics and in Molecular Genetics** (continuation)

**Chairpersons:** Asanov A.Ju., Maslennikov A.B., Petrin A.N.

17.15. – 17.35 Asanov A.Ju. (Moscow): *Teaching in Medical Genetics in Russian Federation*

17.35 – 17.50 Mkheidze M.O. (St. Petersburg): *Teaching in Medical Genetics. Let Us Open New Doors to Success*

17.50 – 18.05 Imyanitov E. N. (St. Petersburg): *Experience of teaching in medical genetics in St. Petersburg Pediatric Medical Academy*

18.05 – 18.20 Korzhanevskaya M.A. (St. Petersburg): *From classical genetics to molecular genetics. Problems and teaching issues*

18.20 – 18.35 Kharchenko T.V. (St. Petersburg): *From medical genetics to molecular medicine. Reality and Prospects of Continuing Medical Education*

18.35 – 18.50 Maslennikov A.B. (Novosibirsk): *Value of clinical information in molecular genetic diagnosis*

18.00 -19.00 Malinovskaya N.A. (Krasnoyarsk): *Trial of generation of electronic text book on molecular and translational medicine*

June 8

Red Hall B

15.00 – 17.00 Symposium **Molecular Oncohematology**

*Chairpersons: Afanasyev B.V., Wagemaker Gerard*

- 15.00 - 15.15 *Afanasyev B.V. (St. Petersburg): **Allogenic hematopoietic stem cell transplantation in treatment of inherited diseases***
- 15.15 – 15.45 *Gerard Wagemaker (Rotterdam, Netherlands): **Genetic modification of hematopoietic stem cells for advanced cell therapy of inherited disorders***
- 15.45 – 16.00 *Tsaur G.A. (Ekaterinburg): **MLL rearrangement in acute leukemias in children***
- 16.00 – 16.15 *Martynkevich I.S. (St. Petersburg): **Mutations of FLT3 and NPM1 genes in patients with AML, MDS and MDS/MPN***
- 16.15 – 16.30 *Zagrivnaya M.V. (St. Petersburg): **Prevention of false-positive results for detection of MRD after allogeneic HSCT***
- 16.30 – 16.40 *Aljansky A.L. (St. Petersburg): **HLA gene polymorphism in Russian populations***
- 16.40 – 16.50 *Dzhumagazieva D.S. (Saratov): **Cytogenetic and Molecular Genetic Diagnosis of Hemoblastosis in Saratov Region***
- 16.50 – 17.00 *Loginova Ju.A. (St. Petersburg): **FISH technologies in oncology***

17.15 – 19.00 Symposium **Innovative Technologies Roche in Genomics and Molecular Medicine**

Red Hall C

15.00 – 17.00 Workshop **"Rare disease in orthopedy"**

17.15 – 19.00 Symposium **Issues of Metrology, Certification, and Standardization in Molecular Diagnosis**

*Chairperson: Emanuel V.L.*

- 17.15 - 17.35 *Muravskaja N.P. (St. Petersburg): **Introduction of international principles of standardization in molecular genetics and molecular biology research to Russian public health service***
- 17.35 - 17.55 *Malakhov V. N. (St. Petersburg): **Results of quality assessment of molecular biology researchs in Federal system of external quality control***
- 17.55 - 18.15 *Konopelko L.A. (St. Petersburg): **Results of interlaboratory checking in the field of molecular biology research in COMET system***
- 18.15 - 18.35 *Emanuel A.V. (St. Petersburg): **Formation of interdisciplinary interaction of "physicists" and "lyric poets" in the system of quality management in the field of molecular researchs***
- 18.35 - 19.00 *Djuk V.A. (St. Petersburg): **Experience of application of information structural resonance method in analysis of DNA-microarrays***

June 8

Red Hall D

15.00 – 17.00 Symposium **Proteomic Technologies as New Methodology of Molecular Medicine**

*Chairperson* Govorun V.M.

- 15.00 - 15.15 *Borovskaja A.D. (Moscow): Possibilities and prospects of MALDI mass spectrometry in studies of human infectious disease*
- 15.15 - 15.30 *Generozov E.V. (Moscow): MALDI-TOF mass spectrometry as the tool for study of DNA structure*
- 15.30 - 15.45 *Ilina E.N. (Moscow): Molecular bacteriology as a new direction of molecular medicine*
- 15.45 - 16.00 *Kostin P A. (Moscow): Characteristics of a spectrum of hereditary and somatic mutations in Russian patients with colorectal cancer and precancer diseases of thick gut*
- 16.00 - 16.15 *Zaharzhhevskaja N.B. (Moscow): Detection of hyper methylation of genes SEPT9, HMTF, ALX4, and CDH1 in tumours of thick gut*
- 16.15 - 16.30 *Moshkovskij S.A. (Moscow): Proteome profiles for diagnosis of malignant tumours*
- 16.30 - 16.45 *Chogovadze A.G. (Moscow): Analysis of genetic factors of predisposition to cirrhosis of alcoholic and virus etiology*
- 16.45 - 17.00 *Pogoda T.V. (Moscow): Study on genes responsible for age-depended retina dystrophy*

17.15 – 19.00 Symposium **Current Approaches to Assessing Mutagenic Effects of Xenobiotics**

*Chairpersons:* Vorobtsova I. E., Slozina N.M.

- 17.15 – 17.30 *Telnov V.I. (Ozersk): Human genetic susceptibility to radiation and chemical effects: own and literature data*
- 17.30 – 17.45 *Vorobtsova I.E. (St. Petersburg): The role of cytogenetic studies in assessment of late biological effects of ionizing radiation in humans*
- 17.45 – 18.00 *Vasilyeva Z. Zh. (St. Petersburg; Alma-Ata, Kazakhstan; Galveston, USA): Effect of polymorphism of XRCC1 and XRCC3 genes on the level of chromosome aberrations in uran mining labors*
- 18.00 – 18.15 *Ploshchanskaya O.G. (Chelyabinsk): Frequency of mutations in Tp53 gene and characteristics of the cell cycle under chronic radiation exposure in humans*
- 18.15 – 18.30 *Timoshevsky V.A. (Tomsk): Cytogenetic effects of ionizing radiation*
- 18.30 – 18.40 *Kolesnikova I.S. (St. Petersburg): Indirect adaptive response in mixed culture of opposite sex donors' lymphocytes*
- 18.40 – 18.50 *Vaschenko A.A. (Volgograd): DNA comet analysis in assessment of damage effects of exogenous toxicants in individual cells*
- 18.50 – 19.00 *Savina N.V. (Minsk, Belorussia): Genome instability in microdeletion syndrome*

June 8

Room 5

10.15 – 14.00 Round Table for patients/parents organizations

14.00 – 15.00 Lunch

15.00 – 17.00 Symposium **Molecular Genetic Basis of Lipid Metabolism Disorders**

**Chairpersons:** Mandelshtam M.Ju., Lipovetskij B.M., Denisenko A.D.

15.00 - 15.15 Lipovetsky B.M. (St. Petersburg): **Types of dislipidemia, their clinical presentation and effect on atherosclerosis development**

15.15 - 15.30 Mandelshtam M. Ju. (St. Petersburg): **Study on molecular genetics family hyper cholesterinemia in Russia: results and prospects**

15.30 - 15.45 Orlov S.V. (St. Petersburg): **Expression of mammalian gene apolipoprotein A-I monocyte-macrophage stock cells: its regulation and putative functions**

15.45 - 16.00 Meshkov A.N. (Moscow): **Moscow municipal programme of screening of patients with familial hypercholesterinemia: first results**

16.00 - 16.15 Miroshnikov V.V., Dyomina E.P. (St. Petersburg): **Key proteins of reverse transport of cholesterol and atherosclerosis**

16.15 - 16.30 Denisenko A.D. (St. Petersburg): **Adipokines at metabolic syndrome**

16.30 - 16.45 Konstantinov V.O. (St. Petersburg): **Medical social aspects of the care for patients with familial hyper cholesterinemia**

16.45 - 17.00 Sokolov A.A. (St. Petersburg): **Intensive therapy of hereditary hyperlipidemias**

17.15 – 19.00 Symposium **Molecular genetic basis of sports medicine**

**Chairpersons:** Didur M.D., Matveev S.V., Ahmetov I.I.

17.15 – 17.30 Ahmetov I.I. (Kazan): **Molecular genetic diagnostics of predisposition to sports**

17.30 – 17.45 Egorov V.M. (St. Petersburg): **Estimation of specialization and individualization of training process of elite athletes based on genetic data**

17.45 – 18.00 Lidov P.I. (Moscow): **Genetic testing in sports – strategic direction of sports medicine**

18.00 – 18.10 Linde E.V. (Moscow): **Role of hereditary factors involved in the pathological stress-induced transformation of the "Athlete's heart"**

18.10 – 18.20 Drozdovskaya S.B. (Ukraine, Kiev): **The dependence of cardiorespiratory system reactions on exercise hypoxia on genes polymorphism**

18.20 – 18.30 Pushkarev V.P. (Chelyabinsk): **Is there effect of the ACTN3 R577X polymorphism on high athletic achievements?**

18.30 – 18.40 Druzhevskaya A.M. (St. Petersburg): **Polymorphisms of myogenic factor 6 and alpha-actinin-3 genes and their association with physical activity and human skeletal muscle structure**

18.40 – 18.50 Topanova A.A. (St. Petersburg): **Polymorphism of genes associated with metabolism disorder and nutrition of athletes**

18.50 – 19.00 Fedotovskaya O.N. (St. Petersburg): **Association of A/G polymorphism of muscle creatinkinase gene with physical performance of athletes**

June 8

Room 6

15.00 – 17.00 Symposium **Pharmacogenetics**

*Chairpersons: Zvartau E.E., Sychev D.A.*

15.00 – 15.15 Sychev D.A. (Moscow): **A problem of adoption of pharmacogenetic testing by clinical practice**

15.15 – 15.30 Seredenin S.B. (Ufa): **Pharmacogenomics of ladasten**

15.30 – 15.45 Vavilova T.V. (St. Petersburg): **Pharmacogenetics of antitrombic drugs**

15.45 – 16.00 Krupitskij E.M. (St. Petersburg): **Pharmacogenetic aspects of opiates addiction therapy with naltrecson implant**

16.00 – 16.15 Burbello A.T. (St. Petersburg): **Pharmacogenetic issues in pharmacotherapy safety**

16.15 – 16.30 Mironova Z.A. (St. Petersburg): **Pharmacogenetic aspects of severe asthma**

*Discussion*

17.15 - 19.00 Symposium **Clinical, Biochemical, and Molecular Aspects of Skeleton Mineralization in Healthy and Sick Child**

*Chairpersons: Shcheplyagina L.A., Kostik M.M.*

17.15 - 17.45 Shcheplyagina L.A. (Moscow): **Endogenous and exogenous factors in skeleton formation in children at first year of life**

17.45 - 18.15 Larionova V.I., Moskalenko M.V. (St. Petersburg): **Polymorphism of genes associated with skeleton growth and mineralization in healthy children and in children with a chronic pathology**

18.15 - 18.30 Kostik M. M (St. Petersburg): **Genetic aspects of decrease in mineral bone density in children with juvenile rheumatoid arthritis**

18.30 - 18.45 Tyrtova L.V. (St. Petersburg): **Clinical and biochemical features of bone mineralization, polymorphism of vitamin D receptor gene, and osteocalcin in children with diabetes**

*Discussion*

June 9

Congress Hall

9.00 – 11.00 Workshop **“Diagnostics and treatment of inherited and aquired cardiomyopathies”**

11.00 – 11.30 **Coffee-break**

11.30 – 14.00 Workshop **“Organic acidemias, diagnosis, treatment, biotinidase deficiency, principles of clinical nutrition”**

14.00 – 15.00 **Lunch**

15.00 – 17.30 Workshop **“Aminoacidopathies. Current approaches to diagnostics and treatment. Principles of clinical nutrition”**

June 9

Red Hall A

9.00 – 11.00 Symposium **Oncogenetics**

**Chairpersons:** *Imyanitov E.N., Dubina M.V.*

- 9.00 – 9.15 *Mozgovoy E.D. (St. Petersburg): **Diagnostic significance of connexin-26 mutations in gastric cancer***
- 9.15 – 9.30 *Vasilyeva Z. Zh. (St. Petersburg): **Detection of bladder cancer using UroVision (FISH) assay in voided urine sample***
- 9.30 – 9.45 *Moiseyenko F.V. (St. Petersburg): **High efficacy of gefitinib in EGFR mutation-positive non-small cell lung cancer***
- 9.45 – 10.00 *Vinogradskaya G.R. (St. Petersburg): **Role of p73 protein in apoptosis, carcinogenesis and drug resistance.***
- 10.00 – 10.15 *Vostrukhina O. A. (St. Petersburg): **Genetic analysis of multiple tumors of gastrointestinal tract***
- 10.15 – 10.30 *Totskaya Y.G. (Novosibirsk): **Innovative medical technologies in the laboratory diagnostics of cancer***
- 10.30 – 10.45 *Volkov N.M. (St. Petersburg): **Molecular markers for the therapy of stomach cancer***
- 10.45 – 11.00 *Imyanitov E.N. (St. Petersburg): **Hereditary cancer syndromes***

11.00 – 11.20 **Coffee-break**

11.20 – 14.00 Symposium **Molecular Neurology**

**Chairpersons:** *Guzeva V.I., Gorbunova V.N., Chukhlovina M.L.*

- 11.20 – 11.40 *Chukhlovina M.L. (St. Petersburg): **Genetics aspects of the stroke***
- 11.40 – 12.00 *Vakharlovsky V.G. (St. Petersburg): **Diagnosis and treatment of spinal muscle atrophy***
- 12.00 – 12.20 *Saikova L.A. (St. Petersburg): **Molecular genetic profile and clinical polymorphism of mitochondrial myopathies***
- 11.20 – 12.40 *Ledascheva T.A. (St. Petersburg): **Clinical molecular correlations and prenatal diagnosis of Duchenne-Bekker myodystrophy***
- 12.40 – 13.00 *Pchelina S.N. (St. Petersburg): **Hereditary forms of Parkinson disease***
- 13.00 – 13.20 *Kislik G.A. (St. Petersburg): **Synaptic protein deficiency in the brain of transgenic *Drosophila melanogaster* with hyper expression of human app gene***
- 13.20 – 13.40 *Guzeva V.I. (St. Petersburg): **Genetics of epilepsy***
- 13.40 – 14.00 *Pischik E.G. (St. Petersburg): **Acute intermittent porphyria with neurologic manifestation: clinical and molecular genetic examination***

14.00 – 15.00 **Lunch**

15.00 – 17.30 Symposium **Molecular Endocrinology**

**Chairpersons:** *Tjulpakov A.N., Krasilnikova E.I.*

- 15.00 – 15.15 *Kolodkina A.A. (Moscow): **Anomalies of sexual development in 46XY individuals with normal testosterone secretion: problems of differential diagnosis***
- 15.15 - 15.30 *Zubkova N.A. (Moscow): **Clinical and molecular genetic characteristic of MODY type diabetes in Russian population***
- 15.30 - 15.45 *Melikjan M.A. (Moscow; Odens, Denmark): **Clinical polymorphism and genetic variants of congenital hyperinsulinism***
- 15.45 - 16.00 *Tjulpakov A.N. (Moscow): **New potential partners and new functions of nuclear receptor DAX1, a key regulator of development of adrenal glands and gonads***
- 16.00 - 16.15 *Tjulpakov A.N. (Moscow): **Hereditary forms of growth hormone insufficiency: a value of molecular analysis for diagnosis and treatment***
- 16.15 - 16.30 *Volkov I.E. (Moscow): **Anticytokin therapy of diabetes type 1 in children***

- 16.30 – 16.45 *Beljaeva O.D. (St. Petersburg): Polymorphisms of adipocytokin genes in patients with abdominal obesity*
- 16.45 - 17.00 *Babenko A.J. (St. Petersburg): Effect of genetic polymorphisms on clinical course and cardiovascular complications caused by thyreotoxicosis*
- 17.00 - 17.15 *Bystrova A.A. (St. Petersburg): Genetic aspects of atherogenic dislipidemia in patients with diabetes type 2*
- 17.15 - 17.30 *Sinitsyn P.A. (Moscow): Biochemical and molecular genetic basis of metabolic syndroms development in teenagers*

**June 9**

**Red Hall B**

**9.00 – 11.00 Symposium Molecular Basis of Trombosis**

*Chairpersons: Vavilova T.V., Papajan L.P.*

- 9.00 – 9.30 *Papajan L.P. (St. Petersburg): History of exploration and modern approaches to hereditary trombophilias diagnosis*
- 9.30 – 10.00 *Vavilova T.V. (St. Petersburg): Genetic counseling of patients with thromboses: practical aspects, benefits, and hazards*
- 10.00 – 10.15 *Sirotkina O. V. (St. Petersburg): Molecular genetic basis of arterial thromboses development*
- 10.15 – 10.30 *Kapustin S.I. (St. Petersburg): Genetic polymorphisms of haemostasis systems and heterogeneity of clinical manifestation of venous thromboembolism*
- 10.30 – 10.45 *Vorobyeva N.A. (Arkhangelsk): Epidemiology of thrombosis of deep veins in bottom hollow vein system in Arkhangelsk*
- 10.45. – 11.00 *Glotov A.S. (St. Petersburg): Joint research on development of new methods of diagnosis and prevention of obstetric complications in pregnant women with hereditary thrombophilia in Russia and Ukraine*

**11.00 – 11.30 Coffee-break**

**11.30 – 17.30 Symposium Molecular Cardiology**

*Chairpersons: Berkovich O. A, Baranova E.I., Shalygin L.D.*

- 11.30 - 11.55 *Berkovich O.A. (St. Petersburg): Genetic aspects of ischemic cardiac disease*
- 11.55 - 12.20 *Baranova E.I. (St. Petersburg): Is arterial hypertension genetically caused disease?*
- 12.20 - 12.45 *Sitnikova M.Ju. (St. Petersburg): Gene-gene interactions and their role in prediction of clinical manifestation of chronic cardiac failure*
- 12.45 - 13.00 *Parmon E.V. (St. Petersburg): Problem of sudden coronary death in modern cardiology*
- 13.00 - 13.20 *Kostareva A.A. (St. Petersburg): Molecular genetic mechanisms of primary cardiomyopathias development*
- 13.20 - 13.40 *Bogdanova M. A (St. Petersburg): Heterogeneity of genetic predisposition to IDC and potentials of mathematical modelling of disease dynamics on the basis of SNP candidate genes analysis*
- 13.40 - 14.00 *Vojtovich A.N. (St. Petersburg): Difference between the sexes in distribution of genetic polymorphisms in patients with various presentation of metabolic syndrome*

**14.00 – 15.00 Lunch**

**15.00 - 17.30 Symposium Molecular cardiology (continuation)**

*Chairpersons: Konradi A.O., Matveev S.A., Pinelis V.G.*

- 15.00 – 15.20 *Pinelis V.G. (Moscow): Molecular genetic mechanisms of hereditary cardiomyopathia*

- 15.20 - 15.50 *Fomicheva E.V. (USA): Search for new pharmaceutical agents ensuring the mechanism of heart ischemic pre – conditioning*
- 15.50 – 16.10 *Pchelina S.N. (St. Petersburg): Activity of paraoxinasa 1 (PON1) and allele variants of gene PON1 as a risk factor of cardiovascular pathology development*
- 16.10 - 16.25 *Goncharov L.N. (Saransk): Polymorphism of renin-angiotensin system genes and of haemostasis system genes in patients with arterial hypertension in Republic Mordovia*
- 16.25 - 16.40 *Havinson V.H. (St. Petersburg): Analysis of correlations between genetic markers, associated with ischemic cardiac disease, indicators of lipid metabolism, and arterial pressure*
- 16.40 - 16.55 *Andreenko E.J. (Moscow): Combined effects of genetic and traditional risk factors on development of ischemic cardiac disease*
- 16.55 - 17.10 *Kuzmina S.V. (St. Petersburg): Remodeling of heart left ventricle myocardium depending on clinical genetic factors in children with arterial hypertension*

*Discussion*

**June 9**

**Red Hall C**

**9.00 – 11.00 Symposium Prenatal Diagnosis**

**Chairpersons:** *Hulten Maj A., Baranov V.S., Zolotukhina T.V.*

- 9.00 – 9.15 *Rubtsov Nikolay B. (Novosibirsk): Prenatal diagnosis of chromosomal abnormalities: approaches, methods, and results*
- 9.15 – 9.45 *Cirigliano Vincenzo (Barcelona, Spain): Large scale clinical application of QF-PCR for rapid prenatal diagnosis of common chromosome aneuploidies*
- 9.45 – 10.15 *Ruosaari Salla (Perkin Elmer): BACS –on- BEADSTM, a new technology for rapid detection of fetal microdeletions and aneuploidies*
- 10.15 – 11.00 *Nilsson Mats (Uppsala, Sweden): New Developments in Prenatal Diagnosis*

**11.00 – 11.30 Coffee-break**

**9.00 – 12.00 Symposium Reproductive Genetics**

**Chairpersons:** *Lebedev I.N., Zukin V. D.*

- 11.20 – 11.50 *Golubovsky Michael D. (Berkeley, USA): Reproductive genetics and Dr. Jekyll - Mr. Hyde oddities*
- 11.50 – 12.20 *Zukin Valeriy D. (Kiev, Ukraine): Array CGH in reproductive medicine - new horizons*
- 12.20 – 12.40 *Kremenskoy Maxim O. (Kiev, Ukraine): Using array-CGH in PGD for carriers of balanced translocation*
- 12.40 – 13.00 *Kovaleva Natalia V. (St. Petersburg): The genetics of gonadal mosaicism*
- 13.00 – 13.15 *Fetisova I.N. (Ivanovo): Hereditary factors in various reproductive disorders*
- 13.15 – 13.30 *Markova Ekaterina V. (Krasnoyarsk): Screening of CFTR gene mutations in infertile men*
- 13.30 – 13.45 *Sadekova Olga N. (Moscow): Angiogenesis and habitual miscarriages*

*Discussion*

**14.00 – 15.00 Lunch**

15.00 – 17.30 Symposium **Clinical Epigenetics and Non-Mendelian Inheritance**

**Chairperson:** Lebedev I.N.

- 15.00 - 15.20 Nazarenko L.P. (Tomsk): **Diseases of trinucleotide repeats expansion in Sakha (Yakutia) Republic**
- 15.20 - 15.40 Moskalev E.A. (Moscow, Voronezh; Heidelberg, Germany): **Abnormal changes of genomic DNA methylation in chronic B-cell lymphatic leukemia: hybridization analysis on DNA arrays and functional significance**
- 15.40 - 16.00 Rykova E.Yu. (Novosibirsk): **Epigenetic tumor markers in the circulating DNA: their distribution in blood and use in oncodiagnostics**
- 16.00 - 16.15 Tolmacheva E.N. (Tomsk): **Epigenetic status of embryo genome with chromosomal mosaicism**
- 16.15 - 16.30 Kholodov B.V. (Moscow): **Combination of P53 gene mutations and methylation of MGMT in children glial tumors**
- 16.30 - 16.45 Pitsik E.V. (St. Petersburg; Berlin-Buch, Germany): **Genetic and epigenetic features of B2VNTR minisatellite in BDKRB2 gene in normal and cardiovascular system diseases**
- 16.45-17.00 Grechanina E.Ya. (Kharkov, Ukraine): **Regular association between epigenetic diseases and DNA methylation disturbance resulted from deficiency of folate cycle enzymes**
- 17.00 - 17.15 Spivak I.M. (St. Petersburg): **Ataxia telangiectasia as a model for research on accelerated aging and increased radiosensitivity**
- 17.15 - 17.30 Kuranova M.L. (St. Petersburg): **Epigenetic markers in ataxia telangiectasia and prognosis of the disease manifestation**

June 9

Red Hall D

9.00 – 11.00 Symposium **Modern Laboratory Technologies. Quality Control**

**Chairpersons:** Gorovenko N.G., Hastings Rosalind

- 9.00 - 9.15 Pitel E.A. (Moscow): **Production of QIAGEN: Modern solutions for molecular medicine**
- 9.15 - 9.30 Kashirina M.C. (Moscow): **Ready solutions for molecular medicine**
- 9.30 - 9.45 Gorovenko N.G. (Kiev, Ukraine): **Estimation of prevalence of polymorphic variants of genes associated with common diseases in inhabitants of Ukraine**
- 9.45 - 10.00 Gusar V.A. (Kharkov, Ukraine): **Prevalence of polymorphisms C677T MTHFR and A66G MTRR genes of folate cycle system in population of East Ukraine**
- 10.00 – 10.30 Coviello Domenico (Genoa, Italy): **Organization and Quality in the Provision of Medical Genetic Services in Europe**
- 10.30 – 10.00 Hastings Rosalind (UK): **Quality Control in Genetic Laboratories in Europe**

11.00 – 11.20 **Coffee break**

11.20. – 14.00 Symposium **Modern Methods of Neonatal Screening**

**Chairpersons:** Mönch E., Vokhmianina N.V., Romanenko O.P.

- 11.20 – 12.00 Mönch E. (Berlin, Germany): **Neonatal screening in Germany: premises and results**
- 12.00 – 12.20 Vokhmianina N.V. (St. Petersburg): **Optimization of neonatal screening in St. Petersburg**
- 12.20 – 12.40 Osin N.S. (Immunoscreen, Moscow): **Fluorescent immunobiochips as next-generation technology in neonatal screening**
- 12.40 – 13.00 Podvalny E. (Moscow): **Mass spectrometry in clinical trials: possibility and reality**
- 13.00 – 13.20 Grechanina E.Y. (Kharkov, Ukraine): **Now potentials of old method**

*Discussion*

14.00 – 15.00 **Lunch**

15.00 – 17.30 Symposium **Molecular Allergology and Pulmonology**

**Chairpersons:** Asanov A.J., Larionova V.I., Novik G.A.

- 15.00 – 15.30 *Ivashchenko T.E. (St. Petersburg): **Molecular genetic aspects of atopic bronchial asthma***
- 15.30 – 16.00 *Lavrova O.V. (St. Petersburg): **A propos the role of external and genetic factors in formation of predisposition to bronchial asthma***
- 16.00 – 16.30 *Zhdanov M.B (St. Petersburg): **Clinical genetic approaches to selection of basic therapy of bronchial asthma***
- 16.30 – 17.00 *Ulitina A.S. (St. Petersburg): **Effect of genetic factors on manifestation of steroid osteoporosis in patients suffered from idiopathic fibrosic alveolitis***
- 17.00 – 17.30 *Sardarjan I.S. (St. Petersburg): **Clinical features of bronchial asthma in children with various allele polymorphisms of "predisposition" genes (GSTT1, GSTM1, ACE, eNOS)***

**June 9**

**Room 5**

9.00 – 11.00 Symposium **Hereditary Disease in Pulmonology. Cystic Fibrosis**

**Chairpersons:** Zhelenina L.A., Orlov A.V.

- 9.00 - 9.20 *Orlov A.V. (St. Petersburg): **Prospects of treatment of patients with cystic fibrosis***
- 9.20 - 9.40 *Simonov O.I. (Moscow): **Prospects of physical methods of treatment of patients with cystic fibrosis (yesterday, today, tomorrow)***
- 9.40 - 10.00 *Larionova V.I. (St. Petersburg): **Metabolic disorders in patients with cystic fibrosis and possibilities of their correction***
- 10.00 - 10.15 *Nazarenko M.S. (Tomsk): **First case of diagnosis of rare hereditary disease, congenital central hypoventilating syndrome, in Russia***
- 10.15 - 10.30 *Shamanovskaja J.A. (St. Petersburg): **Vital scenarios of patients with cystic fibrosis***

*Discussion*

11.00 – 11.20 **Coffee break**

11.20 – 14.00 Symposium **Cell Technologies**

**Chairpersons:** Filatov M.V., Zajchik A.S., Anisimov S.V.

- 11.20 - 11.50 *Zajchik A.S. (St. Petersburg): **Stem cells in endocrinology***
- 11.50 - 12.20 *Anisimov S.V. (St. Petersburg): **Regenerative therapy at cardiac failure***
- 12.20 - 12.50 *Filatov M.V (St. Petersburg): **Cellular technologies in therapy of malignant tumours***
- 12.20 - 12.40 *Ivanov D.V. (Tula): **Cellular technologies and DKMP***
- 12.40 - 13.10 *Ivanov D.V. (Tula): **Role of endometrial stem cell in replacement therapy***
- 13.10 - 13.40 *Margulis B.A. (St. Petersburg): **Hsp70 inside or out of a tumor cell as a guard of a cell/organism***

*Discussion*

14.00 – 15.00 **Lunch**

**15.00 – 17.30 Symposium Molecular Basis of Hereditary Connective Tissue Disorders**

*Chairpersons: Kadurina T.I., Zemtsovskij E.V.*

- 15.00 – 15.20 Zemtsovskij E.V. (St. Petersburg): **The first Russian guide «Hereditary disorders of connective tissue». General principles**
- 15.20 – 15.30 Kadurina T.I. (St. Petersburg): **Molecular genetic basis of hereditary connective tissues disorders. General description. Achievements and problems**
- 15.30 – 16.30 Chuhlov A.B. (St. Petersburg): **Polymorphism of matrix metalloproteinases and its role in conditions connected with remodeling of extracellular matrix**
- 16.30 – 16.45 Moiseyev O.M. (St. Petersburg): **Role of matrix proteinases in pathogenesis of aneurysms of ascending section of aorta**
- 16.45 – 17.00 Smolnova T.J. (Moscow): **Hereditary connective tissue disorders in obstetrics and gynecology**
- 17.00 – 17.15 Donnikov A.E. (Moscow): **Molecular-genetic features of connective tissue disorders in obstetric practice**

**June 9**

**Room 6**

**9.00 – 11.00 Round Table DNA Technologies in Forensic Practice**

*Chairperson: Khalchitsky S.E.*

**11.00 – 11.20 Coffee break**

**11.20 – 14.00 Round Table DNA Technologies in Forensic Practice (continuation)**

**14.00 – 15.00 Lunch**

**15.00 - 17.30 Symposium Statistics and Information Technologies in Medical Research. Issues of Genetic Terminology**

*Chairpersons: Khromov-Borisov N.N., Razorenova T.S., Shavlovsky M.M.*

- 15.00 – 15.30 Khromov-Borisov N.N. (Saint-Petersburg): **Syndrome of Statistical Leniency or the Meaning and Value of the P-value**
- 15.30 – 15.45 Brazhnikova E.A. (Kemerovo): **Multivariate Statistical Analysis of Cytogenetic Profile in Two Ethnic Groups**
- 15.45 – 16.00 Vorobiev N.I. (Saint-Petersburg): **Upgrade of the Component Analysis for the Purposes of Graphic Presentation of Intercomponent Relationships in Complex Biomedical Systems**
- 16.00 – 16.15 Grechanina E.J. (Kharkov, Ukraine): **Application of Cluster Analysis Methods to the Diagnosis of Mitochondrial Diseases**
- 16.15 – 16.30 Shikhlyarova A.I. (Rostov-on-Don) **Potentials of Information Technologies in the Functional Rehabilitation of Oncologic Patients**
- 16.30 – 16.45 Filimonova A.A. (Kazan): **New Phenotyping Procedure for Prediction of Efficiency of the Crush Syndrome Treatment by Means of Mathematical Modeling**
- 16.45 – 17.30 Shavlovsky M.M. (Saint-Petersburg): **Terminology Issues in Molecular Medicine**

**18.00 Closing Ceremony**