Third Russian congress with international participation
«Molecular Basis of Clinical Medicine: State-of-the-Art and Perspectives»
March 26 – 29, 2015
St. Petersburg, Russian Federation

Venue:
Korablestroitelei str. 14, St. Petersburg 199226, Russian Federation
Hotel "Park Inn Pribaltyiskaja" ****

President of the Congress
Genrikh A. Sofronov, director, Scientific Research Institute of Experimental Medicine of the Northwestern Branch of the Russian Academy of Medical Sciences, member of the Russian Academy of Sciences (RAS)

Honorary President of the Congress
Mikhail A. Paltsev, Deputy Director, National Research Center "Kurchatov Institute", member of the Russian Academy of Sciences (RAS), Member of the RAS Board, Laureate of the State Award of the USSR and awards of the Russian Federation Government

Co-presidents
Genrikh A. Sofronov, professor, member of the Russian Academy of Sciences, head of Scientific Research Institute of Experimental Medicine
Maximtsev I.A., professor, rector of the St. Petersburg State Economic University

Vice-Presidents
Sergey A. Boytsov, professor, director of the National Research Centre for Preventive Medicine of the Ministry of Healthcare of the Russian Federation
Sergey F. Bagnenko, professor, member of the Russian Academy of Sciences, rector of Pavlov First St. Petersburg State Medical University
Otari G. Khurtsilava, professor, rector of the North-Western State Medical University named after I.I. Mechnikov
Eugeniy V. Shlyakhto, professor, Chief Cardiologist of St. Petersburg and North-West Federal Okrug, director of V.A. Almazov Federal Center for Heart, Blood & Endocrinology

Chairperson of the Scientific Program/Organizing Committee
Valentina I. Larionova, professor, Founder and Chairperson of North-Western Society of Predictive, Preventive & Personalized Medicine

Official Organizer
Scientific Research Institute of Experimental Medicine of the Northwestern Branch of Russian Academy of Medical Sciences

Under auspices of
- Federal Agency of Scientific Research Organizations
- Russian Academy of Sciences
- National Research Center "Kurchatov Institute"
- Pavlov First St. Petersburg State Medical University
- Federal Noth-West Medical Research Center
- Kirov Military Medical Academy
- Northwestern State Medical University named after I.I. Mechnikov

- St. Petersburg State University of Economics
- St. Petersburg State Polytechnic University
- Immanuel Kant Baltic Federal University
- Turner's Scientific and Research Institute for Children's Orthopedics
- Russian Ilizarov Scientific Center for Restorative Traumatology and Orthopaedics
- Russian Association for the Advancement of Science
- St. Petersburg Regional Branch of Russian Society of Medical Geneticists
- St. Petersburg Association of Neurologists
- Regional Public Organization "St. Petersburg Society of Anesthesiology and Resuscitation Research and Practice"
- European Association for Predictive Preventive & Personalized Medicine (EPMA)

With support of

- Russian Ministry of Health
- St. Petersburg Committee for Public Health
- Leningrad Oblast Committee for Public Health
- Russian Society of Medical Geneticists

The 3rd Russian Congress with International Participation "Molecular Basis of Clinical Medicine: State-of-the-Art and Perspectives" is scheduled by **the Federal Agency of Scientific Organizations** for 2015.

Information Partners

- Academy of Molecular Medicine
- Fund for Support of International Business Cooperation "Fund of International Innovative Programs"

Official Service Provider FINEC Congress Ltd

Official Web-Site www.molmed.spb.ru

Programme

March 26, 2015

8.00	**Registration**
8.30	**Expo opening**

Hall 1

14.30 - 16.00	**Round table: Molecular technologies in law** ***Moderator:*** *Kremleva O.K.* **Technologies of semiconductor sequence in criminalistics and forensic medicine** *Shagam L.I. (Chelicon)*
16.00 - 16.30	**Coffe break**
16.30 - 18.30	**Workshop: Legal issues of molecular medicine**

Hall 2

8.30 - 9.00 Registration for Workshop 1: Multidisciplinary aspects of clinical and laboratory diagnostics of hereditary metabolic diseases. Modern methods of treatment and prevention. Primary test control (for registered participants only)

Information on Workshop 1

The event designed for doctors of the all specialities, with the aim to distribute information about clinical manifestations, modern methods of diagnostics and treatment of some diseases, mostly metabolic, stated in the list of 24 nosologies and of 7 nosologies.

The list of 24 nosologies compraises rare diseases assorted by the Russian Federation government regulation, April 26, 2012, No 403. The list of 7 nosologies compraises diseases approved by the Russian Federation government regulation October 2, 2007, No 1328-p. The education program includes some diseases for which diagnostics and pathogenetic treatment has been elaborated ("curable diseases"), for example, acid lipase defect, hypophosphatasia, and disorders of primary bile synthesis.

Reports on each disease should deliver information listed below:

1. Multidisciplinary approaches of clinical diagnostics
2. Age aspects of the pathology
3. Modern aspects of instrumental and laboratory diagnostics
4. Modern aspects of treatment
5. Indications for selective screening for the disease

The reports are followed by presentation of clinical cases.

9.00 - 9.30	**Workshop opening:** Rychkova *S.V., Simahodsky A.S., Romanenko O.P., Melnikova I.Yu., Larionova V.I., Ivanov D.O.*
9.30-11.00	**Multidisciplinary aspects of clinical and laboratory diagnostics of hereditary metabolic diseases. Modern methods of treatment and prevention** ***Chairpersons:*** *Nikolaeva E.A., Nazarenko L.P., Bushueva T.V., Romanenko O.P.*

9.30 - 10.00	**General ideas about hereditary metabolic diseases. Modern diagnostics and treatment** *Larionova V.I. (St. Petersburg)*
10.00 - 10.30	**Hyperphenylalaninemia. Differential diagnosis. Diagnostics of pterin metabolism disorders. Treatment** *Bushueva T.V. (Moscow)*
10.30 - 11.00	**Rare manifistations of lisosomal storage diseases. Modern classification and diagnostics. Gaucher disease. Differential diagnosis, treatment** *Nazarenko L.P. (Tomsk)*
11.00 - 11.30	**Coffe break**
11.30 - 13.30	**Workshop 1: Multidisciplinaly aspects of clinical and laboratory diagnostics of hereditary metabolic diseases. Modern methods of prevention and treatment (continuation)** ***Chairpersons:*** *Erman M.V., Tsygin A.N., Smirnova N.N., Volgina S.J.*
11.30 - 12.00	**Cystinosis. Modern diagnostics and treatment** *Tsygin A.N. (Moscow)*
12.30 - 13.00	**1st type tyrosinemia. Diagnostics. Treatment. Indications for selective screening** *Polykova S.I. (Moscow)*
13.00 - 13.30	**Atypical hemolytic uremic syndrome. Modern diagnostics and treatment** *Tsygin A.N. (Moscow)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Workshop 1 (continuation)** *Chairpersons: Polyakova S.I.,Tkachenko E.I., Revnova M.O.*
14.30 - 15.30	**Abnormalities in the synthesis of preliminary bile acids (progressive familial cholestatic cirrhosis). Modern methods of diagnostics and successful treatment** *Dr. Antoine Ferry (Lab CTPC, Paris, France)*
15.30 - 16.00	**Diseases with cholestasis. Differential diagnostics and treatment** *Polyakova S.I.(Moscow)*
16.00 - 16.30	**Coffe break**
16.30 - 18.30	**Workshop 1 (continuation)** ***Chairpersons:*** *Melnikova I.Yu., Tkachenko E.I., Liazina L.V.*
16.30 - 17.00	**Galactosemia. Classification. Diagnostics. Treatment** *Liazina L.V. (St. Petersburg)*
17.30 - 18.00	**Hereditary diseases in gastroenterology. Diagnostics. Treatment** *Melnikova I.Yu. (St. Petersburg)*
18.00 - 18.30	**Hereditary apoprotein metabolic disorders. Acid lipase deficiency. Visceral manifestations of Niemann - Pick type C disease. Diagnostics and treatment: a new era in modern pediatrics and hepatology** *Larionova V.I. (St. Petersburg)*

Hall 3

9.30 - 11.00	**Venture Business Workshop** Conducted by mentors from St. Petersburg State Economic University and by representatives of venture capital funds ***Mediators:*** *Abdalova E.B., Kozlov M.L.*
9.30 - 11.00	**Registration for venture business workshop**
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Venture business guide: how to organize your own business, writing business plan, fundraising (part 1)** *Gorulev D.A., Metelev P., Kulizhnikov A. (St. Petersburg)*
	Master class: Marketing of medical innovations as a part of business planning *Simonova M. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Master class: Rumor marketing of medical centers** *Vostrikova I.Yu. (St. Petersburg)*
16.00 - 16.30	**Coffee break**
16.30 - 18.30	**Venture business guide: how to organize your own business, writing business plan, fundraising (part 2)** *Gorulev D.A., Metelev P., Kulizhnikov A. (St. Petersburg)*
	Insurance and risk management: training for doctors *Kozlov M.L., Gorulev D.A. (St. Petersburg)*

Hall 4

9.30 - 11.00	**Master class: Pedigrees constructing** ***Instructor:*** *Mkheidze M.O. (St. Petersburg)*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Round table: Paradoxes of medical genomics** ***Instructor:*** *Khromov-Borisov N.N. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Master class: Freely available software for statistical analysis in molecular medicine** ***Instructor:*** *Khromov-Borisov N.N. (St. Petersburg)*
16.00 - 16.30	**Coffee break**
16.30 - 18.30	**Clinical bioinformatics Workshop: Informational and analytic technologies in molecular diagnostics and medicine** ***Moderator:*** *Iourov I.Y.* Clinical bioinformatics workshop is conducted by Ivan Iourov, doctor of biological science, professor of medical genetic department, the head of laboratory of brain medical genetic. Research interests: molecular and cellular genetics of nervous and mental diseases, molecular genetics of the brain, and neurogenomic. Co-authored more then 200 publications, 3 monographies, and 2 textbooks on medical and molecular cytogenetics. All participants of the Workshop will be granted with a certificate of attendance.

Hall 5

9.30 - 11.00	**Round table: Organisation of biobanks in the Russian Federation. Legal support** ***Chairpersons:*** *Maslennikov A.B., Glotov A.S., Ivanov D.V., Lidov P.I.*
9.30 - 9.50	**Approaches to the development of regulatory legal documents for storage and analysis of biological material** *Maslennikov A.B. (Novosibirsk)*
9.50 - 10.10	**Peculiar properties of biobanks informatization within a system of developments of predictive medicine and biology** *Lidov P.I. (Moscow)*
10.10 - 10.30	**Issues of regenerative medicine and rehabilitation. Biobanking aspects** *Sarana A.M. (St. Petersburg)*
10.30 - 11.00	**Legal support for establishment of biobanks in the Russian Federation** *Ivanov D.V. (St. Petersburg)*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Round table: Biobanks, research and practical organization issues in the field of translational medicine in the Russian Federation** ***Chairpersons:*** *Baranov V.S., Chernov Yu.O., Glotov O.S. (St. Petersburg)*
11.30 - 11.45	**Research potentials of biobanks as resource centres** *Glotov A.S. (St. Petersburg)*
11.45 - 12.00	**Implementation of medical genetics practical objectives within the framework of biobanks** *Glotov O.S. (St. Petersburg)*
12.00 - 12.20	**Registers, databases, and biobanks designed for science and public health** *Ledashcheva T.A., Larionova V.I. (St. Petersburg)*
12.20 - 12.40	**Experimental models for exploring molecular mechanisms of amioid diseases. Issues of biomaterial storage** *Chernov Yu.O. (USA)*
12.40 - 13.00	**Selection of optimal technological solutions when setting up a biobank** *Konorova A.L. (Qvadros-Bio, Moscow)*
13.00 - 13.20	**Biobanking and technology of management a large amount of valuable biological samples** *Muraviev A.I. (Qvadros-Bio, Moscow)*
13.20 - 13.30	**Discussion**
13.30 - 14.30	**Lunch**

Hall 6

9.30 - 11.00	**Skin and hair diseases. Metabolic and molecular genetic ground. Modern diagnostics and treatment** **Readings dedicated to the memory of professor F.A. Zverkova** ***Chairpersons:*** *Gorlanov I.A., Kornisheva V.G.*
9.30 - 9.45	**A role of Professor F.A. Zverkova in studies on genodermatosis in the USSR** *Gorlanov I.A., Glotov O.S. (St. Petersburg)*
9.45 - 10.15	**Hereditary hypotrichosis** *Kornisheva V.G. (St. Petersburg)*
10.15 - 10.30	**Genodermatosis in pediatric practice** *Leina L.M. (St. Petersburg)*
10.30 - 11.00	**Diagnostics and methods in trichology** *Kharitonova E.E. (St. Petersburg)*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Skin and hair leisure. Metabolic and molecular genetic ground Modern diagnostics and treatment** ***Chairpersons:*** *Gorlanov I.A., Kornisheva V.G., Larionova V.I. (St. Petersburg)*
11.30 - 12.00	**Algorithm of examination of patients with diffuse hair loss** *Vashkevich A.A. (St. Petersburg)*
12.00 - 12.30	**Hereditary syndromes with hair leisure. Clinical cases: biotinidase deficiency, menkes disease, cardio-facio cutaneous syndrome, noonan-like syndrome with hair loss in anagen phase** *Bulatnikova M.A., Vasilishina A.A., Kitova E.A. (St. Petersburg)*
12.30 - 13.00	**Nevuses of the scalp** *Oganesyan M.V. (St. Petersburg)*
13.00 - 13.15	**Phototherapy in treatment of alopecia areata** *Mzaximova M.D. (St. Petersburg)*
13.15 - 13.30	**Efficiency of minoxidil and platelet-rich plasma in men with androgenetic alopecia treatment** *Glotov A.S. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Skin and hair leisure. Metabolic and molecular genetic ground. Modern diagnostics and treatment** ***Chairpersons****: Sokolovsky E.V., Korolkova T.N., Gorlanov I.A., Monakhov K.N.*
14.30 - 15.00	**Cutaneous manifestations of hereditary metabolic diseases. Angikeratoms as a manifestation of Fabry disease. What should you know about the disease as a doctor? Differential diagnosis. Treatment** *Bulatnikova M.A., Larionova V.I. (St. Petersburg)*
15.00 - 15.30	**Differential diagnosis of neurofibromatosis type 1 (with Proteus syndrome, Sjogren-Larsson, Bloch-Sulzberger, neurocutaneous melanosis, and others)** *Ledashcheva T.A. (St. Petersburg)*
15.30 - 16.00	**Laminopathies in practice of dermatologists** *Spivak I.M. (St. Petersburg)*
16.00 - 16.30	**Coffee break**
16.30 - 18.30	**Skin and hair diseases. Metabolic and molecular genetics ground. Modern diagnostics and treatment** ***Chairpersons****: Nazarenko L.P., Gorlanov I.A., Ledashcheva T.A.*

16.30 - 17.00	**Xanthomatosis. Differential diagnosis. A role of a dermatologist in a proper route of the patient** *Larionova V.I. (St. Petersburg)*
17.00 - 17.30	**Genodermatosis in practice of dermatologists** *Nazarenko L.P. (Tomsk)*
17.30 - 18.15	**Presentation of clinical cases: focal dermal hypoplasia (Goltz syndrome), Fabry disease, epidermolysis bullosa**
18.15 - 18.30	**Discussion**

March 27, 2015

9.15	**Congress opening**
	Greetings: ***Kazanskaya O.A.****, vice-governor of St. Petersburg* ***Kolabutin V.M****., Chairperson of* St. Petersburg Committee for Public Health **Genrikh A. Sofronov**, director, Scientific Research Institute of Experimental Medicine of the Northwestern Branch of the Russian Academy of Medical Sciences, member of the Russian Academy of Sciences (RAS) **Paltsev M.A.,** deputy director, National Research Center "Kurchatov Institute", member of the Russian Academy of Sciences (RAS), Member of the RAS Board, Laureate of the State Award of the USSR and awards of the Russian Federation Government **Sofronov G.A.**, professor, member of the Russian Academy of Sciences, head of Scientific Research Institute of Experimental Medicine Maximtsev I.A., professor, rector of the St. Petersburg State Economic University **Sergey A. Boytsov,** professor, director of the National Research Centre for Preventive Medicine of the Ministry of Healthcare of the Russian Federation **Sergey F. Bagnenko**, professor, member of the Russian Academy of Sciences, rector of Pavlov First St. Petersburg State Medical University **Otari G. Khurtsilava,** professor, rector of the North-Western State Medical University named after I.I. Mechnikov **Eugeniy V. Shlyakhto,** professor, Chief Cardiologist of St. Petersburg and North-West Federal Okrug, director of V.A. Almazov Federal Center for Heart, Blood & Endocrinology ***Baranov V.S****., professor, head of the Laboratory for Prenatal diagnostics of congenital and hereditary diseases, Research Institute for Obstetrics and Gynecology* ***Khavinson B.Kh.****, professor, corresponding member of the Russian Academy of Medical Siences*
10.00 - 12.00	**Plenary session 1** **Molecular diagnostics in practical medicine** ***Chairpersons:*** *Sofronov G.A., Boytsov S.A., Silin A.V., Bagnenko S.F.*
10.00 - 10.20	**Innovational molecular technologies: a new era in evolving of modern medicine** *Yurov I.Yu., Vorsanova S.G., Iourov Yu.B. (Moscow)*

10.20 - 10.40	**Rare diseases in Russian Federation. Diagnostics and treatment** *Zakharova E.Yu. (Moscow)*
10.40 - 11.10	**Practice of diagnostics and screening of bile acids deficiency in Europe** *Dr. Antoine Ferry (Lab CTPC, Paris, France)*
11.10 - 11.30	**Molecular genetics in cardiology: yesterday, today, and tomorrow** *Boytsov S.A. (Moscow)*
11.30 - 11.50	**Economic aspects of modern medicine** *Maximtsev I.A., Karlik A.E. (St. Petersburg)*
11.50 - 12.00	**Finance for innovative medicine. Master degree program**
12.00 - 12.30	**Coffee break**
12.30 - 14.00	**Scientific readings dedicated to the memory of Professor Eugeny I. Schwarz** ***Chairpersons:*** *Baranov V.S., Larionova V.I., Pchelina S.N., Gorbunova V.N., Emanuel V.L.*
12.30 - 12.50	**Molecular medicine: yesterday, today, and tomorrow** *Baranov V.S. (St. Petersburg)*
12.50 - 13.05	**Studies conducted under Prof. E.I. Schwartz's supervision. Historical aspects** *Pchelina S.N. (St. Petersburg)*
13.05 - 13.20	**Professor Eugeny I. Schwartz: First PCR in the USSR. Pioneer studies on molecular ground of monogenic diseases at Leningrad Institute of Nuclear Physics, Academy of Sciences of the USSR** *Khalchitsky S.E. (St. Petersburg)*
13.20 - 13.35	**Professor Eugeny I. Schwartz: Organization of the Department of Medical Genetics at LPMI (1989). First educational programs on Molecular Medicine in the country** *Pushnova E.(USA, Russia), Gorbunova V.N. (St. Petersburg)*
13.35 - 13.50	**Professor Eugeny I. Schwartz: Organization of the Department of molecular genetics and nanobiological technologies at the Pavlov Medical Institute (2002) as the root of basic research in the field of molecular medicine** *Pchelina S.N., Dubina M.V. (St. Petersburg)*
13.50 - 14.00	**Professor Eugeny I. Schwartz: Organization of the Scientific and Methodological Center of the Ministry of Health of Russian Federation on molecular medicine at the Pavlov First Medical Institute in 1999 as a step towards systematic introduction of personalized medicine in the Russian Federation** *Emanuel V.L. (St. Petersburg)*
14.00 - 15.00	**Lunch**
15.00 - 16.30	**Scientific readings dedicated to the memory of Professor Eugeny I. Schwarz (continuation)** ***Chairpersons****: Zalevskaya A.G., Fomicheva E.V., Scheplyagina L.A., Baranovskaya S.S.*
15.00 - 15.20	**Professor Schwartz and development of molecular cardiology and lipidology in Russian Federation. New horizons in diagnostics of cardiovascular diseases** *Fomicheva E.V., (USA, Russia), Larionova V.I. (St. Petersburg)*
15.20 - 15.35	**Professor Eugeny I. Schwartz: First studies on molecular ground of hereditary and multifactorial diseases in children as an onset of development of molecular pediatrics in the country** *Larionova V.I. (St. Petersburg)*

15.35 - 15.50	**A role of molecular genetics in development of clinical endocrinology** *Zalevskaya A.G. (St. Petersburg)*
15.50 - 16.10	**A physiological role of vitamin D receptor gene polymorphism** *Scheplyagina L.A. (Moscow)*
16.20 - 16.30	**В памятных заседаниях нет вопросов и дискуссий**
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**Scientific readings dedicated to the memory of Professor Eugeny I. Schwarz (continuation)** ***Chairpersons:*** *Baranovskaya S.S., Sheydina A.M., Sirotkina O.V*
17.00 - 17.20	**Clinical and genetic parallels in patients with PKU. From research initiated under Prof. Schwartz's leadership to nowadays** *Odaj Joni (Latakia, Syria)*
17.20 - 17.40	**An unconventional approach to the understanding of resistance to hypoxia** *Sheydina A.M. (USA, Russia)*
17.40 - 18.00	**Diagnostic production of the company Agilent** *Baranovskaya S.S. (USA, Russia)*
18.00 - 18.15	**Transgenomic technology – denaturating high effective liquid chromatography WAVE/dHPLC yesterday and today** *Voitovich A.N. (Optec)*
18.15 -18.30	**NGS – sequencing in cardiology** *Kostareva A.A. (St. Petersburg)*

Hall 2

15.00 - 16.30	**Workshop 1 (continuation): Multidisciplinary aspects of clinical and laboratory diagnostics of inherited metabolic diseases. Modern methods of treatment and prevention. Diseases with development of acute intoxication and acute forms** ***Chairpersons:*** *Nikolaeva E.A., Larionova V.I., Liazina L.V.*
15.00 - 16.00	**Organic aciduria (isovaleric, methylmalonic, propionic, and glutaric aciduria type 1). Maple syrup urine disease. Diagnostics, treatment. Analysis of clinical cases** *Nikolaeva E.A. (Moscow)*
16.00 - 16.30	**Disorder of the urea cycle. New methods of thediagnostics and treatment** *Larionova V.I. (St. Petersburg)*
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**Workshop 1 (continuation):** ***Chairpersons:*** *Nikolaeva E.A., Sokolov A.A., Nazarenko L.H.*
17.00 - 17.30	**Phenylketonuria. Diagnostics. Identifying of patients with sensitivity to tetrahydrobiopterin. Diet and shapironoterapy** *Nazarenko L.H. (Tomsk)*
17.30 - 18.00	**Disorders of fatty acids' β- oxidation. Modern diagnostics and treatment** *Nikolaeva E.A. (Moscow)*
18.00 - 18.30	**Copper metabolism disorders (Wilson's disease)** *Sokolov A.A. (St. Petersburg)*

Hall 3

15.00 - 16.30	**Modern technologies in diagnostics of genomic and chromosomal diseases** ***Chairpersons:*** *Yurov Y.B., Vorsanova S.G., Iourov I.Y.*
15.00 - 15.15	**Genomic and chromosomal diseases in children** *Vorsanova S.G., Yurov Y.B., Voinova V.Y., Iourov I.Y. (Moscow)*
15.15 - 15.30	**FISH technologies in potgenomic era** *Liehr T., Kosyakova N.S. (Jena, Germany)*
15.30 - 15.45	**Cytogenetic and molecular cytogenetics technologies in diagnostics of genomic and chromosomal diseases** *Yurov Y.B., Kurinnaya O.S., Vorsanova S.G. (Moscow)*
15.45 - 16.00	**Molecular cytogenetics technologies in silico in diagnostics of genome pathology** *Iourov I.Y., Vasin K.S., Yurov Y.B. (Moscow)*
16.00 - 16.15	**High resolution cytogenetic technologies in diagnostics of chromosomal diseases** *Kolotii A.D., Demidova I.A., Kravets V.S. (Moscow)*
16.15 - 16.30	**Modern solutions for molecular cytogenetic testing from the company PerkinElmer** *Mironova Yu.E. (Pribori Oy)*
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**Problems of diagnostics, prevention, and treatment of nervous and mental diseases** ***Chairpersons:*** *Vorsanova S.G., Korostelev S.A., Yurov Y.B. (Moscow)*
17.00 - 17.15	**Idiopathic mental retardation and autism: problems of molecular cytogenetic diagnostics** *Yurov Y.B., Vorsanova S.G., Iourov I.Y. (Moscow)*
17.15 - 17.30	**Atypical forms of Rett syndrome: problems of diagnostics** *Vorsanova S.G., Yurov Y.B., Kurinnaya O.S., Iourov I.Y. (Moscow)*
17.30 - 17.45	**Autism: potentials of treatment and prevention** *Voinova V.Y., Iourov I.Y., Vorsanova S.G., Yurov Y.B. (Moscow)*
17.45 - 18.00	**Whole-genome analysis in diagnostics of genetic diseases** *Korostelev S.A., Kanivets I.V. (Moscow)*
18.00 - 18.15	**Modern strategy of molecular genetic diagnostics of genomic imprinting diseases, Prader-Willi and Angelman syndromes as examples** *Sazhenova E.A., Lebedev I.N. (Tomsk)*
18.15 - 18.30	**Potentials of cytogenetic high resolution methods, complex cases of chromosomal abnormalities as examples** *Kolotii A.D., Demidova I.A., Zelenova M.A., Kravets V.S. (Moscow)*

Hall 4

12.30 - 14.00	**Round Table: Remote education as an element of continuing education of physicians** *Mediator: Korotun G. (Evrika Group, Moscow)* **Discussion objectives:** 1. Potentials of remote education 2. Application potentials for universities and professional communities 3. How to built educational programm 4. Formats of remote education 5. System of knowledge control 6. Existing projects (Russian surgeons society as an example)
14.00 - 15.00	**Lunch**
15.00 - 16.30	**Moilecular pharmacology** ***Chairpersons:*** Babak S.V., Sychev D.A.
15.00 - 15.30	**Mathematical modeling of metabolic processes in systems biology** *Lavrova A. (Kaliningrad)*
15.30 - 15.45	**Pathway de novo, the way of regulation** *Babak* S.V. *(Kaliningrad)*
15.45 - 16.00	**Targeted drug therapy as a natural result of the evolution of molecular biology** *Savelieva M. (Moscow)*
16.00 - 16.15	**Metabolomics and systemic pharmacology: Integration of "Omiks" and clinical pharmacology** *Babak* S.V. (*Kaliningrad)*
16.15 - 16.30	**The problem of pharmacoresistant targeted therapies - new challenges of the 21st century or a natural evolution?** *Savelieva M. (Moscow)*
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**Molecular genetic and metabolic bases of choice of drug therapy. Multidisciplinary approach in clinical pharmacology** ***Chairpersons:*** *Sychev* D.A.*, Hadzhidis A.K.*
17.00 - 17.10	**Biobanks as a resource for pharmacogenetic studies** *Glotov A.S. (St. Petersburg)*
17.10 - 17.30	**The value of decision support systems for implementation of pharmacogenetic testing in clinical practice** *Sychev D.A. (Moscow)*
17.30 - 17.45	**Pharmacogenetic aspects of metabolic side effects of psychotropic drugs** *Ivashchenko D.V., Ivanov M.V., Taraskina A.E., Nasyrova R.F.*
17.45 - 18.00	**Endogenous role of enzymes of drug metabolism - CYP2D6 and CYP3A4 / 5** *Zagorodnikova K.A., Burbello A.T. (St. Petersburg)*
18.00 - 18.15	**New approach to using TDM as a result of advances in molecular biology** *Savelyev M.I., Riabova A.V. (Moscow)*
18.15 - 18.30	**Pharmacogenetic tests based on pyrosequencing technology** *Mironov K.O. (Moscow)*

Hall 5

15.00 - 16.30	**New technologies of diagnostics and treatment in oncology and oncohaematology** ***Chairpersons****: Joachim Fische, Zaritskiy A.Yu., Khalchitsky S.E.*
15.00 - 15.40	**New methods of diagnostics and treatment in oncology. WAVE/DHPLC - mutation detection in oncological diagnostics** *Joachim Fischer (Transgenomic Ltd., USA)*
15.40 - 16.00	**Targeted high-technology resequencing in oncological diagnostics** *Shagam L.I. (Helicon)*
16.00 - 16.20	**Molecular genetic diagnostics in oncology: solved and unsolved problems** *Zaretskiy A.R. (Eurogen Lab)*
16.20 - 16.30	**Discussion**
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**New technologies in diagnostics and treatment in oncology and hematology** ***Chairpersons:*** *Martynkevich I.S., Zarayskiy M.I.*
17.00 - 17.20	**Pyrosequencing method in oncology** *Dribnokhodova O.P. (Moscow)*
17.20 - 17.40	**Using of cell therapy in oncological patients after chemotherapy** *Smolianinov A.B., Adilov Sh.F. (St. Petersburg)*
17.40 - 18.00	**Plasmid DNA vaccines for immunotherapy of cancer** *Pushnova E.A. (Chiron Corporation (Novartis) USA, Russia)*
18.00 - 18.30	**Biological role and clinical use of microRNAs in treatment of tumors** *Zarayskiy M.I. (St. Petersburg)*

Hall 6

15.00 - 16.30	**New biomarkers and molecular techniques in practice of pediatric endocrinologists** ***Chairpersons:*** *Bashnina E.B., Velikanova L.I.*
15.00 - 15.20	**Congenital hypopituitarism. Molecular ground of therapeutic tactics selection** *Bashnina E.B., Berseneva O.S. (St. Petersburg)*
15.20 - 15.40	**Modern diagnostics of Silver-Russell and Beckwith-Wiedemann syndromes** *Vasilishina A.A., Dvoeglazova M.O., Smolianinov A.B. (St. Petersburg)*
15.40 - 16.00	**Unmanifested forms of congenital adrenal hyperplasia** *Velikanova L.I., Tataroniva M. (St. Petersburg)*
16.00 - 16.20	**Neonatal diabetes due to mutations in glucokinase gene** *Turkunova M.E., Zhelenina L.A., Suspitsin E.N., Ditkovskaya L.V. (St. Petersburg)*
16.20 - 16.30	**Hereditary syndromes with obesity. Strategy of laboratory diagnostics** *NIkitina A.P., Larionova V.I. (St. Petersburg)*
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**New methods of diabetes' diagnostics and treatment in personalised medicine** ***Chairpersons:*** *Bashnina E.B., Bystrova A.A., Ostroykhova E.N.*
17.00 - 17.20	**Modern aspects of treatment and treatment control of diabetes in adults** *Ostroykhova E.N. (St. Petersburg)*
17.20-17.40	**Type 2 diabetes, pharmacogenetic aspects of choosing drugs for patients. What's new?** *Bystrova A.A., Larionova V.I. (St. Petersburg)*

17.40 - 18.00	**An effect of genetic polymorphism rs 622342 (SLC22A1) on individual susceptibility to metformin in patients with type 2 diabetes** *Abulula M., Baranov V.L., Zagorodnikova K.A. (St. Petersburg)*
18.00 - 18.20	**Potentials of using drug screening for personalized treatment of diabetes** *Volchek I.V., Petrov A.S. (Discovery Med, St. Petersburg), Pototskaya N.A. (Minsk, Belorussia)*
18.20-18.30	**Questions, discussion**

Hall 7

15.00 - 16.30	**New instrumental and laboratory technologies in sport medicine and rehabilitation** ***Chairpersons:*** *Didur M.D., Lidov P.I.*
15.00 - 15.20	**The role of mitochondria in energetic supply of physical activity** *Sukhorukov V.S. (Moscow)*
15.20 - 15.45	**Modern technologies in assessment of mitochondrial function** *Dominik Pesta (Insbruk, Austria)*
15.45 - 16.00	**Respiratory activity and surface morphology of thymocytes under oxidative stress: γ-irradiation and peroxynitrite** *Gritsuk A.I., NIkitina I.A. (Gomel, Belorussia)*
16.00 - 16.15	**Muscle tissue as an endocrine regulator. Miokine concept. Non-pharmacological methods of correction of dyslipidemia. A role of physical activity** *Vasina A. Yu., Churilov L.P., Didur M.D. (St. Petersburg)*
16.15 - 16.30	**Potentials of ultrasound diagnostics of muscle and nerve pathology** *Imelbaev A. (St. Petersburg)*
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**New instrumental and laboratory technologies in sport medicine and rehabilitation (continuation)**
17.00 - 17.20	**Optical topography method. Potentials of DIERS system** *Vasina A.Yu., Didur M.D. (St. Petersburg)*
17.20 - 17.40	**Analysis of heteroplasmy of mitochondrial DNA by denaturing high-performance liquid chromatography (dHPLC). Prospects of application in sports medicine** *Voitovich A.N. (Optec)*
17.40 - 18.00	**A complex analysis of sports genetic testing and evaluation of functional state** *Egorov V.M. (Moscow)*
18.00 - 18.20	**Sports genetic yesterday, today, and tomorrow** *Glotov O.S. (St. Petersburg)*
18.20 - 18.30	**Discussion**

Hall 8

12.30 - 14.00	**Round table: Expertise of quality of healthcare and medical economic expertise of patients with orphan disease** ***Coordinators****: Ironosov V.E., Kozlov M.* **Discussion objectives:** ***1.*** Examination of quality under a lack of both medical economic standards (MES) and clinical statistical groups of rare diseases ***2.*** Elaboration of recommendations on compilation of MES for orphan diseases
14.00 - 15.00	**Lunch**
15.00 - 16.30	**Round table: Potentials of preinsurance screenings for qualitative underwriting in health insurance companies. Peculiar features of insurance of patients with rare diseases in the Russian Federation** ***Coordinators****: Ironosov V.E., Kozlov M.* **Discussion objectives:** 1. A role of health centers in identification of patients with orphan diseases 2. Family medicine offices' priorities in hereditary diseases screening. Family counseling 3. Legislative potentials of health insurance institutions for pre-contract screening of hereditary pathology at risk insurance facilities
16.30 - 17.00	**Coffee break**
17.00 - 18.30	**Round table: Molecular methods in practical medicine. Formation of new legislative initiatives** ***Chairperson:*** *Emanuel V.L.* **Discussion objectives:** ▪ Standartization of molecular diagnostic methods and control of their quality. Achievements and problems ▪ The need of forming new legislative initiatives contributing to implementation of molecular methods in practical medicine

Hall 9

12.30 - 14.00	**Round table: Perspectives of implementation of new drugs in the Russian Federation for treatment of rare diseases. Interaction of medical doctors communities with patients' organizations, public authorities, and businesses** ***Participants:*** *Baranov V.S., Sychev* D.A.*, Hadzhidis A.K., Zakharova E.Yu., Kharevsky A., Urmancheeva M.A, Terekhova M.D., Larionova V.I., Romanenko O.P., Khvostikova E.A.* (*St. Petersburg)* **Discussion objectives:** 1. Organization of clinical trials for patients with rare hereditary diseases 2. Interaction of patients' communities with medical community and pharma industry: a path integration for the benefit of patients 3. A role of genetic tests in drugs selection 4. A complexity of funding of rare diseases. Solutions of the problem

14.00 - 15.00	**Lunch**
15.00 - 16.30	**Metabolic and molecular bases of diseases with mental disorders** ***Chairpersons:*** *Ivanov M.V., Krupitskiy E.M., Nasyrova R.F.*
15.00 - 15.15	**Personalized evaluation of dopaminergic neurotransmission indicators for evaluation an efficacy and safety of antipsychotics** *Sosin D.N., Ivashchenko D.V., Ivanov M.V., Taraskina A.E., Krupitskiy E.M., Nasyrova R.F. (St. Petersburg)*
15.15 - 15.30	**Molecular genetic diagnostics for classification and treatment of mental disorders** *PUshnova E.A. (GeneIDs, Inc. CA, USA)*
15.30 - 15.45	**Pterin metaboism in mental disorders** *Khalchitsky S.E., Shaposhnikov A.M. (St. Petersburg)*
15.45 - 16.00	**Hereditary diseases in the practice of psychiatrist. A case of Niemann-Pick C disease identified in a psychiatric unit** *Polyakov I.Yu., Volkova I.A., Bulatnikova M.A. (St. Petersburg)*
16.00 - 16.15	**Monogenic pathology with mental disorders: tuberous sclerosis, Rett syndrome, fragile X chromosome and others** *Ledashcheva T.A. (St. Petersburg)*
16.15-16.30	**Questions, discusion**
17.00 - 18.30	**Round table: A role of professional communities and resources in additional education of medical doctors and other specialists in molecular medicine** ***Participants:*** *Silin A.V., Melnikova I.Yu., Kharchanko T.V., Larionova V.I. (St. Petersburg), Petrin A.N. (Moscow)*

March 28, 2015

Hall 1

9.15 - 11.00	**Workshop: Hereditary diseases in practice of anaesthesiologist-resuscitator** ***Chairpersons:*** *Gordeev V.I., Ironosov V.E., Larionova V.I.*
9.15 - 10.00	**Acute forms of hereditary metabolic diseases accompanied by intoxication. Classification, diagnostics, treatment** *Larionova V.I. (St. Petersburg)*
10.00 - 10.30	**Hereditary angioedema: diagnostics and treatment** *Emelyanov A.V. (St. Petersburg)*
10.30 - 10.45	**Mucopolysaccharidosis, Pompe disease in the practice of a resuscitator-anesthesiologist. Multidisciplinary approach** *Isaev K.A., Larionova V.I. (St. Petersburg)*
10.45 - 11.00	**Acute intermittent (hepatic) porphyria: clinics, diagnostics *(movie)***
11.00 - 11.30	**Coffee**
11.30 - 13.30	**Workshop: Hereditary diseases in practice of anaesthesiologist-resuscitator (continuation)** ***Chairpersons:*** *Alexandrovich Yu.S., Ironosov V.E.*
11.30 - 12.00	**Peculiar features of anesthetic management of patients with mucopolisaccaridosis** *Tretiakova A.N. (Kurgan)*
12.00 - 12.30	**Fabry disease. Risk assessment of anesthetic complications** *Ironosov V.E. (St. Petersburg)*

12.30 - 12.50	**Integrated assessment methods of hemostasis in emergency pediatric practice** *Soloviev O.N. (Novosibirsk)*
12.50 - 13.20	**Genetic diseases with increased risk of complications during sedation/anesthesia. Modern diagnostics** *Kanivets I.S. (Genomed, Moscow)*
13.20 - 13.30	**Discussion**
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Analytical and molecular techniques in diagnostics, selection of treatment and treatment control** ***Chairpersons:*** *Vokhmianina N.V., Lapin S.V., Koroleva E.M.*
14.30 - 14.50	**New technologies in neonatal screening** *Vokhmianina N.V. (St. Petersburg)*
14.50 - 15.10	**Practical aspects of diagnostic of amino acid spectrum in patients** *Koroleva E.M. (St. Petersburg)*
15.10 - 15.30	**Electrophoresis in diagnostics of hereditary diseases (thalassemia, mucopolysaccharidoses, metabolic apoproteins disease glycosylation)** *Lapin S.V. (St. Petersburg)*
15.30 - 15.50	**Shimadzu analytical equipment for molecular biological diagnostics** *Isupova Y.Yu. (St. Petersburg)*
15.50 - 16.00	**Discussion**
16.00 - 16.30	**Coffee break**
16.30 - 18.00	**Analytical and molecular techniques in the diagnostics, selection of treatment and treatment control** ***Chairpersons:*** *Larionova V.I., Koroleva E.M., Shatilina L.V.*
16.30 - 16.50	**Fast and precise mutation screening in the gene of cystic fibrosis transmembrane regulator (CFTR). Benefits for genetic counselling** *Voitovich A.N. (Optec)*
16.50 - 17.10	**Targeted selection of NimbleGen SeqCap genes for next-generation sequencing in medicine** *Gracheva M.A. (Roche Diagnostics Rus)*
17.10 - 17.30	**Molecular diagnostics of hereditary diseases in practice of commercial companies. Way of integration with federal agencies and pharmaceutical companies** *Markov A.V. (HELIX)*
17.30 - 17.45	**A value of testing for large deletions and duplications in genetic diagnostics** *Moskalenko M. (Centogene AG, Germany)*
17.45 - 18.00	**Molecular diagnostics of hereditary diseases as a necessary step of selecting drugs for treatment of hereditary diseases. What's new?** *Larionova V.I. (St. Petersburg)*

Hall 2

9.15 - 11.00	**Workshop 1: Multidisciplinary aspects of clinical and laboratory diagnostics of inherited metabolic diseases. Modern methods of treatment and prevention (continued)** ***Chairpersons:*** *Kadurina T.I., Volgina S.J.*
9.15 - 9.50	**Mucopolysaccharidoses. Multidisciplinary approach. Clinical cases** *Shorina A.R. (Novosibirsk)*

9.50- 10.30	**Mucolipidosis. Molecular genetic ground. Diagnostic algorithms. Management treatment** *Kadurina T.I. (St. Petersburg)*
10.30 - 11.00	**Homocystinuria. Diagnostics. Treatment.** *Larionova V.I. (St. Petersburg)*
11.00 - 11.30	**Coffee**
11.30 - 13.30	**Workshop 1: Multidisciplinary aspects of clinical and laboratory diagnostics of inherited metabolic diseases. Modern methods of treatment and prevention (continued)** ***Chairpersons:*** *Nazarenko L.P., Larionova V.I., Liazina L.V.*
11.30 - 12.00	**Fabry disease. Multidisciplinary aspects of the pathology** *Larionova V.I. (St. Petersburg)*
12.00 - 12.30	**Pompe disease. Clinical and laboratory diagnostics. Treatment** *Nazarenko L.P. (Tomsk)*
12.30 - 13.00	**Acute intermittent (hepatic) porphyria. Clinic, diagnostics *(movie)***
13.00 - 13.30	**Hypophosphatasia in pediatric practice. Diagnostics. Treatment** *Larionova V.I. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Workshop 1: Multidisciplinary aspects of clinical and laboratory diagnostics of inherited metabolic diseases. Modern methods of treatment and prevention (continued)** ***Chairpersons:*** *Volgina S.J., Kharit S.M.*
14.30 - 15.00	**Mechanism of effect of vaccines. Vaccination of children with metabolic disorders** *Kharit S.M. (St. Petersburg)*
15.00 - 15.30	**Opportunities of rehabilitation of preschool children with disabilities in St. Petersburg** *Lazebnik T.A., Gryzlova L.N. (St. Petersburg)*
15.30 - 16.00	**Control testing of the participants of Workshop 1**
16.00 - 16.30	**Coffee break**
16.30 - 18.00	**Master class: NGS-sequencing in practice: interpretation the results of genetic testing** *Shagam L.I. (Helicon)*
18.00 - 18.30	**Granting participants of the Workshop l with certificate (basing on the test's results)**

Hall 3

9.15 - 11.00	**Molecular neurology** ***Chairpersons:*** *Rudenko D.I., Chukhlovina M.L., Ledashcheva T.A.*
9.15 - 9.35	**Genetic aspects of stroke** *Chukhlovina M.L. (St. Petersburg)*
9.35 - 9.55	**Acute intermittent (hepatic) porphyria in practice of neurologist** *Chukhlovina M.L. (St. Petersburg)*
9.55 - 10.15	**Integrated approach to assessment of genetic risk of ischemic stroke** *Mironov K.O., Platonov A.E., Shipulin G.A. (Moscow)*

10.15-10.30	**Study on biomolecular mechanisms of compensatory reinnervation in patients with spinal muscular atrophy type 2** *Sokolova M.G., Alexeeva T.M., Penniyanen V.A. (St. Petersburg)*
10.30 - 10.45	**Dravet syndrome. Differential diagnosis and molecular genetic diagnostics** *Zaytsev D.E. (St. Petersburg)*
10.45 -11.00	**Leukodystrophy cases with primary hypomyelination (Pelizaeus-Merzbacher and leukodystrophy with hypomyelination and hypodontia)** *Bulatnikova M.A., Rohina N.A., Larionova V.I. (St. Petersburg), Zakharova E.Yu. (Moscow)*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Molecular neurology** ***Chairpersons:*** *Illarioshkin S.N., Guzeva V.I., Rudenko D.I.*
11.30 - 12.00	**Modern technologies of cellular reprogramming in molecular neurology** *Illarioshkin S.N. (Moscow)*
12.00 - 12.15	**Mutations in lysosomal storage diseases genes - a high-risk factor of Parkinson's disease: possible molecular mechanisms** *Pchelina S.N. (St. Petersburg)*
12.15 -12.45	**Myofibrillar myopathy** *Rudenko D.I. (St. Petersburg)*
12.45-13.00	**Potentials of ultrasound diagnostics of muscle and nerve pathology** *Imelbaev A. (St. Petersburg)*
13.00 - 13.15	**Using exome sequencing for diagnostics of neuromuscular diseases** *Ilyinskiy V.V. (Genotek, Moscow)*
13.15 - 13.30	**Regenerative stem cell therapy of neurodegenerative diseases** *Smolianiniv A.B., Novitsky M.V. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Neurometabolic Workshop** ***Chairpersons:*** *Lazebnik T.A., Volgina S.Ya., Shchugareva L.M., Ledashcheva T.A.*
14.30-14.40	**Opening of the Workshop** **Greetings:** *Lazebnik T.A. (St. Petersburg)*
14.40 - 15.00	**Diagnostics and treatment of biotinidase deficiency in the practice of a neurologist** *Karakulova Yu.N. (St. Petersburg)*
15.00 - 15.20	**Clinical observation of propionic acidemia** *Basneva E.V., Vokhmianina N.V. (St. Petersburg)*
15.20 - 15.40	**Clinical observation of Pompe disease** *Shchugareva L.M. (St. Petersburg)*
15.40 - 16.00	**Fabry disease. Clinical case** *Volgina S.J. (Kazan)*
16.00 - 16.30	**Coffee break**
16.30 - 18.00	**Neurometabolic Workshop** ***Chairpersons:*** *Lazebnik T.A., Shchugareva L.M., Ledashcheva T.A.*
16.30 - 16.45	**Neurological aspects of megaloblastic anemia in children** *Shchugareva L.M., Dumov E.L. (St. Petersburg)*
16.45 - 17.00	**Transporter GLUT1 deficiency syndrome** *Gumenik E.V. (St. Petersburg)*

17.00 - 17.20	**L-Dopa - dependent dystonia, classification, clinical and laboratory diagnostics. Presentation of clinical cases** *Smolianiniv A.B., Bulatnikova M.A., Kuznetsova O.A., Efet E.A., Larionova V.I. (St. Petersburg)*
17.20 - 17.40	**Nonketotic hyperglycinemia. Clinical observation** *Mamaeva T.V. (St. Petersburg)*
17.40 - 18.00	**Methods of ray diagnostics of neurometabolic diseases** *Shchugareva L.M. (St. Petersburg)*

Hall 4

9.30 - 11.00	**Topical issues of clinical microbiology** ***Chairpersons:*** *Dmitriev A.V., Suvorov A.N.*
9.30 - 9.50	**Molecular genetic methods in diagnostics and optimization of chemotherapy of tuberculosis** *Zhuravlev V.Yu., Solovieva N.S., Dogonadze M.Z. (St. Petersburg)*
9.50 - 10.10	**Whole-genome sequencing of *M. tuberculosis* aimed to study genome associations and molecular epidemiology of the causative agent of the disease** *Cherniaeva E.N., Zhuravlev V.Yu., Orlov A.I., O'Brien S.J. (St. Petersburg)*
10.10 - 10.35	**Intestinal infections. Epidemiological characteristics and problems of laboratory diagnostics** *Kaftyreva L.A., Makarova M.A. (St. Petersburg)*
10.35 - 11.00	**Screening of antibacterial and immune preparations for personalized treatment of the infections** *Volchek I.V., Petrov A.S. (DiscoveryMed, St. Petersburg)*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Topical issues of clinical microbiology (continued)** ***Chairpersons:*** *Dmitriev A.V., Suvorov A.N.*
11.30 - 11.55	**Microbiota and human health** *Suvorov A.N (St. Petersburg)*
11.55 - 12.20	**Molecular mechanisms of regulation of expression of pathogenicity factors of Streptococcus** *Dmitriev A.V. (St. Petersburg)*
12.20 - 12.45	**Distribution of bacteria causing pediatric blood stream infection** *Gang Liu, Yonghong Yang, Fang Dong, Kaihu Yao* *Beijing Children's Hospital affiliated to Capital University of Medical Sciences*
12.45 - 13.05	**Molecular evolution and epidemiology of *Acinetobacter baumannii* and epidemiology of diseases caused by it** *GoncharovA.E., Masharsky A.E., Zueva L.P. (St. Petersburg)*
13.05 - 13.30	**Technology MALDI-ToF MS in clinical microbiology and molecular biology** *Kostin P.A. (Helena Rus)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Stem cells in pathogenesis of diseases and cell replacement therapy (Part 1)** ***Chairpersons:*** *Smolianinov A.B., Yurkevich Yu.V.*
14.30 - 14.50	**Observation of stem cells in models of disease pathogenesis** *Strukova L.A. (Qvadros-Bio)*

14.50 - 15.10	**Methods of research of stem cells in regenerative medicine** *Bliznetsov K. (Alamed)*
15.10 - 15.30	**Biological features of MSCs derived from human umbilical cord and their use in regenerative medicine** *Smolianinov A.B., Aizenstadt A.A., Adylov Sh.F. (St. Petersburg)*
15.30 - 15.45	**Prospects of employment of cultured allofibroblasts in treatment of postoperative bronchial fistulas** *Egorov V.I., Yurkevich Yu.V. Smolianinov A.B., Besedina N.K., Ionov P.M., Akopov A.L. (St. Petersburg)*
15.45 - 16.00	**Pokrovsky bank of stem cells: practice of obtaining biomaterials for regenerative medicine** *Smolianinov A.B., Ivolgin D.A.*
15.50 - 16.00	**Questions, discussion**
16.00 - 16.30	**Coffee break**
16.30 - 18.00	**Stem cells in pathogenesis of diseases and cell replacement therapy (Part 2)** ***Chairpersons:*** *Smolianinov A.B., Yurkevich Yu.V.*
16.30 - 17.00	**Perinatal stem cells in regenerative medicine: worldwide experience** *Smolianinov A.B., Ivolgin D. A. (St. Petersburg)*
17.00 - 17.40	**Actions of MCK under reactions of hypersensitivity** *Smolianinov A.B., Aizenstadt A.A., Bagaeva V.V., Zolina T.L., Alexandrova L.V. (St. Petersburg)*
17.40 - 18.00	**Directed differentiation of MSCs into chondrocytes. Preparing of chondrograft for transplantation** *Smolianinov A.B., Aizenstadt A.A., Bagaeva V.V., Zolina T.L., Alexandrova L.V. (St. Petersburg)*

Hall 5

9.30 - 11.00	**Young scientists contest: Hereditary diseases in clinical examples and in research** ***Coordinators of the project:*** *Khramtsova E.G., Larionova V.I, Ledashcheva T.A.*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Workshop: Hereditary diseases in practice of stomatologist** ***Chairpersons:*** *Silin A.V., Petrin A.N. Gorbatova L.N.*
11.30 - 12.00	**New technologies and hereditary diseases in stomatology** *Petrin A.N. (Moscow)*
12.00 - 12.30	**Genetic markers of primary adentia** *Chuykin O.S. (Ufa)*
12.30 - 13.00	**Genetic predisposition factors of cleft lip and/or cleft palate** *Meshcheryakova T.I. (Moscow)*
13.00 - 13.30	**Prediction on severity of clinical course of maxillofacial region's acute inflammatory diseases in children using genetic markers** *Viktorov S.V. (Ufa)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**New technologies and hereditary diseases in dentistry (continued)** ***Chairpersons:*** *Kiselnikova L.P., Petrin A.N.*
14.30 - 15.00	**Hypophosphatasia as viewed by stomatologists** *Kiselnikova L.P. (Moscow)*

15.00 - 15.30	**Search for genetic polymorphisms predisposing to development of dental disease in patients with connective tissue dysplasia** *Statovskaya E.E., Kadurina T.I. (St. Petersburg)*
15.30 - 15.50	**Stomatitis and glossitis as a manifestation of hereditary metabolic diseases. Age aspects of the pathology** *Badmaeva A., Larionova V.I. (St. Petersburg)*
15.50 - 16.00	**Questions, discussion**
16.00 - 16.30	**Coffee break**

Hall 6

9.30 - 11. 00	**Multidisciplinary aspects of obesity in pediatrics** ***Chairpersons:*** *Maliavskaya C.I., Shcherbakova M.Yu., Novikova V.P., Bashnina E.B.*
9.30 - 9.50	**Obesity and microbiota. New treatment options** *Shcherbakova M.Yu. (Moscow)*
9.50 - 10.10	**Disorders of digestive system in children's obesity** *Novikova V.P. (St. Petersburg)*
10.10 - 10.30	**Endothelial dysfunction in children's obesity and metabolic syndrome** *Kuprienko N.B., Smirnova N.N. (St. Petersburg)*
10.30 - 10.45	**Vitamin D in children's obesity and metabolic syndrome** *Nikitina I.L. (St. Petersburg)*
10.45 - 11.00	**Obesity in childhood. Complex issues, unresolved problems** *Maliavskaya S.I. (Arkhangelsk)*
11.00 - 11.30	**Coffee break**
11.30 - 13.30	**Radiological diagnostics of hereditary and congenital diseases** ***Chairpersons:*** *Trofimova T.N., Shchugareva L.M.*
11.30 - 11.50	**Potentials of nuclear medicine technologies in diagnostics of neurodegenerative brain diseases** *Stanzhevky A.A. (St. Petersburg)*
11.50 - 12.10	**MRI diagnostics of fetal brain's malformations** *Khalikov A.D. (St. Petersburg)*
12.10 - 12.30	**Prenatal ray diagnostics of holoprosencephaly and pregnancy outcomes** *Gavran N.A., Ledashcheva T.A., Voronin D.V. (St. Petersburg)*
12.30 - 12.45	**Ray diagnostics of Zhubert syndrome: case report** *Trofimova T.N. (St. Petersburg)*
12.45 - 13.00	**Radiodiagnostics of phacomatoses** *Ледащева Т.А., к.м.н(St. Petersburg)*
13.00 - 13.15	**Ray diagnostics of cystic fibrosis** *Lukina O.V. (St. Petersburg)*
13.15 - 13.30	**Ray diagnostics of urinary organs abnormalities** *Mishchenko A.V. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Metabolic and molecular ground of cardiovascular diseases. Age aspects of the pathology** ***Chairpersons:*** *Kotlukova N.P., Kostareva A.A., Fomicheva E.V., Berkovich O.A.*
14.30 - 15.00	**Pompe disease in practice of cardiologist** *Kotlukova N.P. (Moscow)*

15.00 - 15.20	**Organization of selective screening for patients with Fabry disease. View of cardiologists** *Poliakova A.A. (St. Petersburg)*
15.20 - 15.40	**DNA-diagnostics for risk assesement of sudden infant death syndrome** *Fomicheva E.V. (USA, Russia)*
15.40 - 16.00	**Hyperhomocysteinemia and hypohomoarginemia as metabolic manifestations preceding progression of the diseases with circulatory disorders** *Zhloba A.A. (St. Petersburg)*
16.00 - 16.30	**Coffee break**
16.30 - 18.00	**Metabolic and molecular bases of cardiovascular diseases. Age aspects of the pathology** ***Chairpersons:*** *Berkovich O.A., Kostareva A.A., Fomicheva E.V.*
16.30 - 16.50	**Amino acid plasma profile in cardiovascular diseases** *Subbotina T.F. (St. Petersburg)*
15.50 - 17.05	**Genetic control of cholesterol metabolism in intra-abdominal adipose tissue** *Miroshnikova V.V. (St. Petersburg)*
17.05 - 17.25	**Mutations of transthyretin gene in patients with myocardial disorders in St. Petersburg** *Shavlovsky M.M. ,Gudkova A.Ya. (St. Petersburg)*
	Questions, discussion

Hall 7

11.30 - 13.30	**Workshop for orthopedists and traumatologists. New technologies for diagnostics and treatment of diseases with defects of musculoskeletal system** ***Chairpersons:*** *Baindurashvili A.G., Vissarionov S.V., Larionova V.I.*
11.30 - 12.00	**Hypophosphatasia as a problem of orthopedics. Differential diagnosis. Surgical and medical treatment** *Vissarionov S.V. (St. Petersburg)*
12.00 - 12.30	**Osteogenesis imperfecta. Experience of drug therapy. Achievements, challenges, and prospects** *Belova N.A. (Moscow)*
12.30 - 13.00	**Surgical aspects of reatment of osteogenesis imperfecta. Discussion on federal guidelines** *Buklaev D.S. (St. Petersburg)*
13.00 - 13.30	**Mucopolysaccharidosis as viewed by orthopedists. Early symptoms of disturbance of musculoskeletal system. Clinical variability and problems of early diagnostics. Orthopedic and medical treatment** *Kenis V.M. (St. Petersburg)*
13.30 - 14.30	**Lunch**
14.30 - 16.00	**Workshop for orthopedists and traumatologists New technologies for diagnostics and treatment of diseases with defects of musculoskeletal system (continued)** ***Chairpersons:*** *Riabykh S.O., Kenis V.M., Kadurina T.I.*
14.30 - 15.00	**Surgical aspects of mucopolisaccharidosis treatment** *Ochirova P.V., Riabykh S.O. (Kurgan)*

15.00 - 15.30	**Orthopedic manifestations of some aminoatsidopathy (tyrosinemia type 1, homocystinuria)** *Larionova V.I., Khmyrova A.P. (St. Petersburg)*
15.00 - 15.30	**Molecular techniques in diagnosis of hereditary diseases with system skeletal disorders** *Kanivets I.S. (Genomed, Moscow)*
15.30 - 16.00	**Molecular profiling of tumors of bone and cartilage system: prospects of individualized treatment** *Zaretsky A.R. (EuroGen Lab)*
16.00 - 16.30	**Cofee break**
16.30 - 18.00	**Workshop for orthopedists and traumatologists. New technologies for diagnostics and treatment of diseases with defects of musculoskeletal system (continued)** ***Chairpersons:*** *Bissarionov C.V., Larionova V.I., Sukhorukov V.S. (St. Petersburg)*
16.50 - 17.00	**Diagnosis of osteopenia and osteoporosis as a problem in children's orthopedic surgery. Instrumental methods. Age aspects. Treatment. The role of vitamin K** *Larionova V.I., Костик М., (St. Petersburg), Shchepliagina L.A. (Moscow)*
17.00 - 17.20	**Bone markers for assessing ffectiveness of treatment of osteoporosis** *Berestovskaya V.S. (St. Petersburg)*
17.20 - 17.40	**Cell technology in optimizing processes of regeneration of bone, cartilage and tendon tissue in orthopedist and traumatologists practice** *Savintsev A. M., Smolianiniv A.B., Bagaeva V.V., Aizenstsdt A.A.,* *(St. Petersburg)*
17.40 - 18.00	**Questions, discussion**