June 27 (Friday)

e	Small Hall	Time	Exhibition Centre	Time	Music hall
09:00 – 12:35	**BGRS-2014. Proteomics, metabolomics and computational pharmacology** *Chairpersons: Prof. E. Nikolaev, Institute for Biomedical Problems of RAS, Moscow, Russia Prof. I. Larina, Institute for Biomedical Problems of RAS, Moscow, Russia*	09:00 – 12:15	**MM-HPC-2014. Pharmacokinetics and immunology** *Chairpersons: Prof. A.I. Ilyin, O.I. Krivorotko Institute of Computational Mathematics and Mathematical Geophysics SB RAS, Novosibirsk, Russia*	09:00 – 13:00	**School SBB-2014. Presentations by young scientists**
09:00-09:45	**I.M. Larina**, V.A. Ivanisenko, E.N. Nikolaev Institute for Biomedical Problems of RAS, Moscow, Russia **Proteomics extreme impacts as a tool for systems biology** **KEYNOTE TALK**	09:00-09:30	A.I. Ilyin, S.I. Kabanikhin, **D.A. Voronov** Institute of Computational Mathematics and Mathematical Geophysics SB RAS **Numerical solutions of inverse problem of pharmacokinetics. Identifiability of compartmental models** **KEYNOTE TALK**	09:00-09:20	**V.V. Lavrekha**, N.A. Omelyanchuk, V.V. Mironova Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia **Modeling of cell dynamics in the root apical meristem with dynamical grammar**
		09:30-09:50	A.I. Ilyin, S.I. Kabanikhin, **O.I. Krivorotko** Institute of Computational Mathematics and Mathematical Geophysics SB RAS **The identification and refinement of parameters of mathematical models in immunology**	09:20-09:40	**S. Maltseva**, A.P. Chupakhin, A.A. Cherevko, A.K. Khe, E.U. Derevtsov, A.E. Akulov Institute of Mathematics SB RAS, Novosibirsk, Russia **Reconstrucrion of the mouse brain vasculature according to the data of high-field MRI scanner**
09:45-10:10	**T. Duzhak**, Yu.P. Tsentalovich International Tomography Center SB RAS, Novosibirsk, Russia **Lens cataract: effects of crystallins modification**	09:50-10:10	**M.A. Shishlenin** Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia **Continuation of the acoustic field in tomography**	09:40-10:00	**N. Nikitina**, E.E. Ivashko, Y. Gupta, R. Lüdwig, S. Möller. Institute of Applied Mathematical Research Karelian Research Center RAS, Petrozavodsk, Russia **Boinc-based desktop GRID infrastructure for virtual drug screening**
10:10-10:35	M.A. Karpova, D.A. Karpov, M.V. Ivanov, V.G. Zgoda, M.V. Gorshkov, **S.A. Moshkovskii** Orekhovich Institute of Biomedical Chemistry RAMS, Moscow, Russia **Cancer cell line recognition by shotgun**	10:10-10:30	**A.A. Vitvitsky** ICM&MG SB RAS, Novosibirsk, Russia **Computer simulation of self-organization in the bacterial MINCDE system**	10:00-10:20	V. Mironova, **D. Novikova** Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia **Auxin-induced changes of transcriptome in *Arabidopsis thaliana* l. roots.**

	proteomics using cancer exome data	10:30-10:50	**A.A. Polshchitsin**, V.M. Nekrasov, A.V. Chernyshev, V.P Maltsev Institute of chemical kinetics and combustion; Novosibirsk State University, Novosibirsk, Russia. **Solution of inverse immunoagglutination kinetics problem for patchy particles with a small number of binding sites**	10:20-10:40	**I. Protsyuk** UniPro (Новосибирск), Россия **Shared bioinformatics databases within Unipro UGENE**
10:35-11:00	I.A. Mescheryakova, E.V. Demidova, E.A. Demidov, T.N. Goryachkovskaya, V.M. Popik, A.I. Semenov, G.N. Kulipanov, N.A. Kolchanov, **S.E. Peltek** Institute of Cytology and genetics SB RAS, Novosibirsk, Russia **Genomic proteomics profiling**			10:40-11:00	**O. Perfilyeva** ICG SB RAS, Novosibirsk, Russia **Mathematical modeling of peptidoglycan precursor biosynthesis in the cytoplasm of Esherichia coli cell**
11:00-11:20 **Coffee break**					
11:20-11:45	**L.H. Pastushkova**, A.S. Kononihin, E.S. Tiys, O.A. Obraztsova, I.V. Dobrohotov, K.S. Kireev, V.A. Ivanisenko, E.N. Nikolaev, I. M. Larina Russian Federation State Scientific Center - Institute for Biomedical Problems of RAS; Moscow, Russia **Identifying overrepresented biological processes in cosmonauts on the first day**	11:15-11:35	**A. Levichev**, A. Palyanov Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia **On a modification of the theoretical basis of the Penrose-Hameroff model of consciousness**	11:20-11:40	**I. Pinskyi**, A. Ivashchenko Al-Farabi Kazakh National University, Almaty, Kazakhstan **miRNAs binding to mRNAs of rice Myb genes**
		11:35-11:55	**A. Yu. Pyrkova**, A.T. Ivashchenko, O.A. Berillo Al-Farabi Kazakh National University, Almaty, Kazakhstan **Modelling of the problem of multiple alignment of the nucleotide sequences and dendrogram construction**	11:40-12:00	**N.V. Sviridova**, K. Sakai Computing Center FEB RAS, Khabarovsk, Russia **Application of nonlinear time series analysis for hemodynamic model validation on the base of photoplethysmogram signal**
11:45-12:10	**P.S. Sherin**, E.A. Zelentsova, E.D. Sormacheva, T.G. Duzhak, Yu.P. Tsentalovich International Tomography Center SB RAS, Novosibirsk, Russia **UVA-induced modifications of lens Alpha-crystallin**	11:55-12:15	**A.A. Bedelbayev** Institute of Mathematics and Mechanics KazNU, Almaty, Kazakhstan **Computer mathematical and biochemical modeling and simulation of the life processes in human organs**	12:00-12:20	**N. Safronova**, Y.L. Orlov ICG SB RAS, Novosibirsk, Russia **Computer analysis of human SNP containing sites by methods of text complexity estimations**
				12:20-12:40	**A. Sergeev** Institute of Mathematical Problems of Biology RAS, Puschino, Russia **Graph database for molecular biology- advantages of the graph representation of data**
13:00-14:00 **Lunch**					

14:00-17:50	**BGRS-2014. Proteomics, metabolomics and computational pharmacology** *Chairpersons: Prof. E. Nikolaev, Institute for Biomedical Problems of RAS, Moscow, Russia Prof. I. Larina, Institute for Biomedical Problems of RAS, Moscow, Russia*	14:00-17:55	**MM-HPC-2014. Gene networks** *Chairpersons: Prof. V.P. Golubyatnikov, Dr. N.B. Ayupova, Institute of Computational Mathematics and Mathematical Geophysics SB RAS, Novosibirsk, Russia*	14:00-17:00	**School SBB-2014.** **Presentations by young scientists.** **Nomination of best presentations**
14:00-14:25	**S.F. Chekmarev** Institute of Themophysics SB RAS; Novosibirsk State University, Novosibirsk, Russia **Driving force for protein folding: the two-component potential**	14:00-14:30	N.B.Ayupova, **V.P. Golubyatnikov** Sobolev Institute of Mathematics SB RAS; Novosibirsk State University, Novosibirsk, Russia **On geometry of phase portraits of some low-dimensional gene network models KEYNOTE TALK**	14:00-14:20	**V. Sokolov**, U.G. Matushkin ICG SB RAS, Novosibirsk, Russia **Analysis of bacteria and archaea genomes available in GenBank database by "Eloe" program**
14:25-14:50	**A.O. Chugunov**, P.E. Volynsky, R.G. Efremov Shemyakin-Ovchinnikov Institute of Bio-organic Chemistry RAS, Moscow, Russia **High-performance computing provides insight into the innermost organization of procaryotic membranes**	14:30-14:50	**F.V. Kazantsev**, I.R. Akberdin, N.L. Podkolodnyy, V.A. Likhoshvai Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia **Gene networks modeling: specification language**	14:20-14:40	**A. Spitsina**, V.M. Efimov, V.N. Babenko, Y.L. Orlov ICG SB RAS, Novosibirsk, Russia **Computer analysis of human gene expression data using BioGPS database of Affymetrix microarrays**
				14:40-15:00	**T.S. Troeglazova**, D.Ja. Baishibaev, A.V. Penenko, S.V. Nikolaev, U. Zubairova Novosibirsk State University, Russia **On a parallel algorithm for morpho-gene diffusion-reaction processes simulation on a 2D cell ensemble**
14:50-15:15	**A.Y. Nyporko** Taras Shevchenko National University of Kyiv, Kyiv, Ukraine **Features 8-oxo-DGTP behavior in active site of human DNA polymerase**	14:50-15:10	**S.V. Lenskiy**, T.I. Lenskaya Ural Federal University, Ekaterinburg, Russia **Power law for rank distribution of gene density in human genome projects**	15:00-15:20	**V. Chernova,** A. Doroshkov, V. Mironova, N. Omelyanchuk ICG SB RAS, Novosibirsk, Russia **PIN-transporters in the root meristem of Arabidopsis thaliana l- image analysis of expression patterns**
15:15-15:40	**K.E. Medvedev**, D.A. Afonnikov Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia **Computational investigation of high pressure and temperature influence**	15:10-15:30	A.A. Akinshin, T.A. Bukharina, D.P. Furman, **V.P. Golubyatnikov** Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia **Modeling of two cells complex in morphogenesis of D. Melanogaste mechanoreceptors**	15:20-15:40	DISCUSSION

15:40-16:05	**E.A. Aksianov**, A.V. Alexeevsky Belozersky Institute of Physico-Chemical Biology, MSU, Moscow, Russia **Alignment of "unalignable" protein structures**	15:30-15:50	**V.Yu. Salamatova** Moscow Institute of Physics and Technology, Moscow, Russia **Modelling of soft tissues deformation. Alternative approaches.**	15:40-16:00	AWARD FOR THE BEST YOUNG SCIENTISTS REPORTS

16:05-16:25   **Coffee Break**

16:25-16:50	**A.A. Anashkina**, N.G. Esipova, E.N. Kuznetsov, V.G. Tumanyan Engelhardt Institute of Molecular Biology RASs, Moscow, Russia **Native proteins and decoys: subtle structure differences**	16:15-16:35	**B. Karacaören** Department of Animal Science, Akdeniz University, Antalya, Turkey **Dynamic association mapping based on random walk model using simulated QTLMAS data set**		
16:50-17:15	A.M. Andrianov, I.A. Kashyn, **A.V. Tuzikov** United Institute of Informatics Problems NAS Belarus, Minsk, Belarus **Computational prediction of novel anti-HIV-1 agents based on potent and broad neutralizing antibody VRC01**	16:35-16:55	**L.A. Krasnobaeva**, L.V. Yakushevich Siberian State Medical University; Tomsk State University, Tomsk, Russia **Rotational dynamics of bases in the gene coding Interferon alpha 17 (IFNA17)**		
		16:55-17:15	**E.S. Fomin** ICG SB RAS, Novosibirsk, Russia **Reconstruction cyclic sequences from their circular distances multiset**		
		17:15-18:00	Auditorium near Conference hall in the Exhibition Centre SB RAS POSTER SESSION		

18:30 - 20:30   The closing ceremony of the Multi-Conference.   Venue: Technopark of Novosibirsk Akademgorodok (Nikolaeva str, 11, 13th floor). Departure to the ceremony will be from the House of Scientists (left wing) at 18:00. Entrance to the ceremony by badges.

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18:30 – 20:30   Церемония закрытия Мульти-конференции. Технопарк Академгородка (ул. Николаева, 11, 13-ый этаж). Отъезд участников на церемонию – в 18:00 от Дома Ученых (левое крыло). Вход по бейджам.