



PROGRAM

of the 7th International Young Scientists School "Systems Biology and Bioinformatics", SBB'2015

22-25 June 2015, Novosibirsk, Akademgorodok



22 June, Monday

- 09:00-10:30 Registration / *morning coffee*
- 10:30-10:45 Opening ceremony. **Prof. Kolchanov N.A.**, *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*
- 10:45-11:45 «Variable Order Bayesian Networks» **Prof. Grosse I.**, *Martin Luther University of Halle-Wittenberg, Germany*
- 11:45-12:45 «Systems biology of programmed cell death» **Prof. Lavrik I.N.**, *Otto von Guericke University Magdeburg Department of Translational Inflammation Research (Magdeburg), Germany*
- 12:45-14:00 *Lunch*
- 14:00-15:00 «Breaking bad: modelling of fragmentation biases for NGS library preparations» **Prof. R. te Boekhorst**, *University of Hertfordshire, Hatfield, UK*
- 15:00-16:00 Poster session / *Coffee break*
- 16:00-18:00 Practical projects presentation, team formation
- 18:00 *Welcome party*

23 June, Tuesday

- 09:00-10:00 «Methods for estimating population divergence based on NGS (next generation sequencing) results and its' application to studying microevolution (processes) in Baikal endemics» **Shcherbakov D.Yu.**, *Limnological Institute, Irkutsk, Russia*
- 10:00-11:00 «Seeing triple: transcriptional coordination in the polyploid bread wheat genome» **Mayer K.**, *Helmholtz Zentrum Muenchen, Neuherberg, Germany*
- 11:00-11:20 *Coffee break*
- 11:20-12:20 «System-biology approach to the study of yeast» **Zakhartsev M.**, *Hohenheim University, Institute of Plant Physiology and Biotechnology, Germany*
- 12:20-13:30 *Lunch*
- 13:30-13:40 Seminar «Systems biology of programmed cell death» opening.
- 13:40-14:00 Small molecules as modulators of life/death decisions at target proteins of the DISC, **I. Hillert**, *Otto von Guericke University Magdeburg Department of Translational Inflammation Research (Magdeburg), Germany*
- 14:00-14:20 The role of c-FLIP in NF- κ B activation, **M. Bollmann**, *Otto von Guericke University Magdeburg Department of Translational Inflammation Research (Magdeburg), Germany*
- 14:20-14:40 Activation of procaspase-8 at the DISC, **Dr. K. Bettermann**, *Otto von Guericke University Magdeburg Department of Translational Inflammation Research (Magdeburg), Germany*
- 14:40-15:00 Virtual screening of chemical compounds regulating cell death, **Ivanisenko N.V.**, *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*
- 15:00-15:20 Automatic scientific literature mining in the field of cell death, **Dr. Ivanisenko V.A.**, *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*
- 15:20-15:40 Mosaic gene networks: modeling of interactions between biological processes, **Popik O.V.**, *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*
- 15:40-16:00 *Coffee break*
- 16:00-18:00 Practical workshops

24 June, Wednesday

- 09:00-10:00 «Analysis of functional importance of binding sites in the drosophila gap gene network model» **Dr. Kozlov K.N.**
- 10:00-11:00 «Old and new statistical biases for Illumina NGS technology» **Dr. Abnizova I.**, *Wellcome Trust Sanger Institute, UK*
- 11:00-11:20 *Coffee break*
- 11:20-12:20 «Extracting biological insights from complex multiplexed datasets» **Prof. Baranova A.V.**, *George Mason University, USA*
- 12:20-13:00 *Lunch*
- 13:00-14:00 *Excursion: Geological museum*
- 14:30-15:30 Practical workshops
- 15:30-16:00 *Coffee break*
- 16:00-17:00 Practical workshops
- 17:00-18:00 Preparation of presentation of practical workshops results

25 June, Thursday

- 09:00-10:00 «Mass spectrometric analysis of the proteome and its application in Systems Biology» **Prof. Zakhartsev M.**, *Hohenheim University, Institute of Plant Physiology and Biotechnology, Germany*
- 10:00-11:00 «Metagenomics: high-throughput sequencing in the study of microbial communities» **Kurilshikov A., Tsepilov Y.** *Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*
- 11:00-11:20 *Coffee break*
- 11:20-15:30 Young scientists' presentations
- 11:20-12:35 **E.I. Bondar** «ASSEMBLY AND ANNOTATION OF SIBERIAN LARCH CHLOROPLAST GENOME AND THE SEARCH FOR SINGLE NUCLEOTIDE POLYMORPHISMS»
- 12:35-12:50 **R.F. Gubaev** «THE ABSCISIC ACID EFFECT ON THE PECTOBACTERIUM ATROSEPTICUM TRANSCRIPTOME PROFILE»
- 12:50-13:05 **E.V. Kulakova** «COMPUTER ANALYSIS OF GENE LOCATION RELATIVE TO CHROMOSOME CONTACTS REVEALED BY CHIA-PET AND HI-C»
- 13:05-13:20 **A.V. Markov** «EXPRESSION ANALYSIS OF SOLOXOLONE METHYL EFFECTS ON CANCER CELLS»
- 12:20-13:30 *Lunch*
- 13:30-13:45 **A.M. Spitsina** «GENE EXPRESSION DATA PROCESSING USING MICROARRAYS AND RNA-PROFILING IN LABORATORY ANIMALS»
- 13:45-14:00 **A. Brzhozovsky** «APPLYING BIOINFORMATICS METHODS FOR REVEALING MARKER PROTEINS SPECIFIC FOR ENDOTHELIAL DYSFUNCTION USING LC-MS/MS»
- 14:00-14:15 **N.V. Annenkova** «CASE OF PROTIST RECENT DIVERGENCE RESOLVED USING PHYLOGENOMIC APPROACH»
- 14:15-14:30 **P.V. Kuzmitskaya** «GENOME FRAGMENTS OF THREE APPLE VIRUSES ARE UNDER STRONG PURIFYING SELECTION»
- 14:30-14:45 **D.E. Romanov** «MSCANNER - A GENOME-WIDE MOTIF FINDING TOOL»
- 14:45-15:00 **A.D. Chekantsev** «A MODULE FOR INTEGRATING SBML-WRITTEN MATHEMATICAL MODELS INTO THE SOFTWARE PACKAGE «HAPLOID EVOLUTIONARY CONSTRUCTOR»
- 15:00-15:15 **E.S. Kashkak** «MICROBIAL DIVERSITY IN ZHOIGAN HOT SPRING (EASTERN SAYAN, RUSSIA)»
- 15:15-15:30 **O.Yu. Kupova** «RECONSTRUCTION OF THE GENETIC STRUCTURE OF THE PROPOSED ANCESTRAL POPULATION OF TURKIC AND SOUTH SIBERIAN POPULATIONS»
- 15:30-16:00 *Coffee break*
- 16:00-17:30 Presentation of practical workshops results

17:30-18:00 Closing of the School. Farewell