SYMPOSIUM
«Systems biology of DNA repair processes and programmed cell death»

20-22 August 2018
Akademgorodok, Novosibirsk, Russia

P R O G R A M M E

Monday August 20, 2018
18h00 – 18h30: Registration
19h00: Get-together party

Tuesday August 21, 2018

Part 1. Systems biology of pharmacological targeting of apoptosis
Chairpersons: Inna Lavrik, Vladimir Ivanisenko

11:00-11:30 Towards understanding of apoptosis regulation using computational biology
Inna Lavrik

11:30-12:00 Novel approach for computational design of small molecule inhibitors of protein/protein interactions in CD95/FAS pathway
Nikita Ivanisenko

12:00-12:30 Growth of interest to research in the field of medical genetics according to the analysis of scientific publications
Vladimir A. Ivanisenko

12:30-12:50 Analysis of Programmed Cell Death in Associative Gene Net-work of Glaucoma Reconstructed Using AND System
Olga V. Saik

12:50-13:10 Topological properties of graph of hydrogen bonds forming in SOD1 protein indicate critical regions in its structure
Nikolay Alemasov

🍽 **13:55-15:00 Lunch**

Part 2. Cross talk between autophagy and apoptosis and their targeting

15:00-15:45 Cross-talk between apoptosis and autophagy: the role of suppressed translation
Boris Zhivotovsky

15:45-16:15 Role of miR-126a in regulation of expression of anti-apoptotic protein BCL2
Lyudmila Gulyaeva

16:15-16:45 Novel therapeutic approaches based on lactaptin action
Olga Koval

16:45-17:05 Autophagy and lactaptin
Anastasiya Tkachenko

17:05-17:30 Tumor-Specific Peptide, Enhances Antitumor Activity of Lactaptin
A.A. Nemudraya

17:30-18:00 DNA Repair and death regulation in cells of the immune system
Bernd Kaina

Wednesday August 22, 2018

Part 3. DNA Repair
Chairpersons: Olga Lavrik, Dmitry Zharkov

11:00-11:30 Non canonical roles of BER enzymes in RNA processing: novel perspectives in cancer biology through the study of APE1 RNA- and protein-interactomes
Gianluca Tell

11:30-11:50 Molecular model of DNA glycosylase stimulation by human apurinic/apyrimidinic endonuclease 1
Nikita A. Kuznetsov

11:50-12:20 Poly(ADP-ribose) polymerase 1 in regulation of DNA repair and longevity
Olga Lavrik

12:20-12:50 Poly- and mono(ADP-ribosyl)ation of DNA strand breaks by PARP2 and PARP3 enzymes
Alexander Ishchenko

12:50-13:10 DNA Is a New Acceptor of PARP3 Protein
Ekaterina Belousova

🍽 **13:10-14:30 Lunch**

14:30-14:50 TDP 1 Inhibitors as Potential Antitumor Drugs
Alexandra Zakharenko

14:50-15:20 Targeted DNA Damage and Repair: The Cell's Multitool for Genome Regulation
Dmitry Zharkov

15:20-15:40 Biological activity of the new photoactive ruthenium nitrosyl complexes: cytotoxicity and effects on DNA repair
Inga Grin

15:40-16:00 Processivity of DNA repair enzymes
Evgenia Dyatlova

16:00-16:20 Structural and biochemical insights on new atypical FPG/NEI DNA – Glycosylases
Anna Yudkina

16:20-16:40 Coffee Break // Poster Session

16:40-17:00 Lesion recognition by bifunctional DNA-glycosylase Endo III and its catalytic mutants
Olga Kladova

17:00-17:20 Translesion DNA synthesis by DNA polymerase iota and it's variants
Evgeniy S. Shilkin

17:20-17:40 The point mutations in the fingers domain increase the fidelity of DNA synthesis on undamaged DNA and abrogate DNA translesion synthesis in Y-family of DNA polymerases
Alena V. Makarova

17:40-18:00 In vitro lesion bypass by human PrimPol
Elizaveta Boldinova

Closing ceremony