

October 29, Tuesday (Moscow, Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, RAS)

10:00 – 10:20	OPENING CEREMONY OF THE RUSSIAN-CHINESE LIFE SCIENCES CONGRESS	Congress Hall
10:20 – 11:40	PLENARY LECTURES	Congress Hall
10:20 – 11:00	Mikhail Kovalchuk <i>National Research Center "Kurchatov Institute"</i> Nature-like technologies	
11:40 – 12:20	P00 Muming <i>Institute of Neuroscience, Center for Excellence in Brain Science and Intelligence Technology, Chinese Academy of Sciences</i> Non-human primate models for biomedical research	
12:20 – 13:00	Alexander A. Gabibov <i>Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences</i> Combinatorial approaches in physico-chemical biology	
13:00 – 13:20	Coffee Break	
13:20 – 14:30	Laboratory tour in the Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry	
14:30 – 15:30	Lunch time	
15:30	Departure for the PATRIOT Congress Center	

October 29, Tuesday (PATRIOT Congress Center)

		Hall
18:00 – 18:30	OPENING CEREMONY OF THE VI INTERNATIONAL CONFERENCE "POSTGENOME'2024" AND THE XI RUSSIAN SYMPOSIUM "PROTEINS AND PEPTIDES"	Zhukov
18:30 – 19:50	PLENARY LECTURES	Zhukov
18:30 – 19:10	Evgeny I. Imyanitov <i>Petrov National Medicine Research Center of Oncology</i> Evolution of cancer treatment in the era of molecular diagnostics	
19:10 – 19:50	ZHANG Zemin <i>Peking University</i> From understanding to modulating the tumor microenvironment	
20:00 – 22:00	WELCOME RECEPTION	

October 30, Wednesday (PATRIOT Congress Center)

Hall

Zhukov

09:00 – 11:00 PLENARY LECTURES

- 09:00 – 09:40 Olga A. Dontsova *Lomonosov Moscow State University*
Canonical and non-canonical function of telomerase components
- 09:40 – 10:20 SUI Senfang *Tsinghua University*
Cryo-EM studies of photosynthetic protein machine of marine red algae
- 10:20 – 11:00 Sergey M. Deyev *Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences; National Research Centre "Kurchatov Institute"; Research Centrum for Oncotheranostics, Tomsk Polytechnic University*
Innovative approaches to facilitate tumor treatment

11:00 – 11:20 COFFEE BREAK

11:20 – 12:40 PLENARY LECTURES

Zhukov

- 11:20 – 12:00 Sergey A. Nedospasov *Engelhardt Institute of Molecular Biology, Russian Academy of Sciences; Department of Biology, Lomonosov Moscow State University; Sirius University of Science and Technology*
Proinflammatory cytokines and a novel concept of anti-cytokine therapy
- 12:00 – 12:40 Evgeny L. Nasonov *Nasonova Research Institute of Rheumatology*
Modern concepts of autoimmunity and autoinflammation in rheumatology

12:40 – 13:55 PLENARY REPORTS

Zhukov

- 12:40 – 13:05 Petr V. Sergiev *Skolkovo Institute of Science and Technology, Center for Molecular and Cell Biology, Belozersky Institute of Physico-Chemical Biology and Institute of Functional Genomics, Lomonosov Moscow State University*
Methylation of small nuclear RNAs and its role in splicing
- 13:05 – 13:30 Alexey A. Belogurov *Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences*
Processing and presentation of antigens as basis for targeted therapy of neurodegeneration of autoimmune and traumatic etiology
- 13:30 – 13:55 Roman G. Efemov *Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences*
The technology of "Dynamic Molecular Portrait" in protein biophysics

13:55 – 14:30 LUNCH BREAK

14:30 – 16:30 SYMPOSIA

14:30 – 16:30	Genomic and multi-omix technologies. Session 1	Zhukov
14:30 – 16:30	Biological functions and mechanisms of action of peptides and proteins. Session 1	Kutuzov
14:30 – 16:30	Neurosciences. Session 1	Gallery
14:30 – 16:30	Oncology. Autoimmunity. Immunology. Session 1	Maly Donskoy
14:30 – 16:30	Medicinal products based on peptides and proteins. Session 1	Suvorov
14:30 – 16:30	Chemistry and biology of enzymes. Session 1	Potemkin
14:30 – 16:30	Physical and chemical methods for studying the structure of peptides and proteins. Structure-function relationship. Session 1	Nakhimov
14:30 – 16:30	Systems and synthetic biology. Technology, achievements and risks. Big genetic data. Session 1	Tent

16:30 – 16:50 COFFEE BREAK

16:50 – 18:50 SYMPOSIA

16:50 – 18:50	Genomic and multi-omix technologies. Session 2	Zhukov
16:50 – 18:50	Infections (Microbial communities / White spots in medical virology and microbiology / Antibiotic resistance). Session 1	Kutuzov
16:50 – 18:50	Neurosciences. Session 2	Gallery
16:50 – 18:50	Oncology. Autoimmunity. Immunology. Session 2	Maly Donskoy
16:50 – 18:50	Medicinal products based on peptides and proteins. Session 2	Suvorov
16:50 – 18:50	Chemistry and biology of enzymes. Session 2	Potemkin
16:50 – 18:50	Physical and chemical methods for studying the structure of peptides and proteins. Structure-function relationship. Session 2	Nakhimov
16:50 – 18:50	Systems and synthetic biology. Technology, achievements and risks. Big genetic data. Session 2	Tent

09:00 – 19:00 POSTER SESSION. YOUNG SCIENTISTS COMPETITION

October 31, Thursday (PATRIOT Congress Center)

	Hall	
09:00 – 11:00	PLENARY LECTURES	Zhukov
09:00 – 09:40	Sofia G. Georgieva <i>Engelhardt Institute of Molecular Biology, Russian Academy of Sciences</i> Interaction of PBAF remodeling complex with chromatin in proliferating progenitors and differentiated neurons: PHF10 protein and its functions. Role of PHF10 protein in the functioning of the chromatin remodeling complex PBAF	
09:40 – 10:20	LI Jiayang <i>Yazhouwan National Laboratory</i> Phytohormone strigolactones: Biosynthesis and signaling in higher plants	
10:20 – 11:00	Elena N. Ilina <i>Research Institute for Systems Biology and Medicine</i> The human microbiome through the prism of the metagenomics: what do we know?	
11:00 – 11:20	COFFEE BREAK	
11:20 – 12:40	PLENARY LECTURES	Zhukov
11:20 – 12:00	Konstantin V. Severinov <i>Biotech Campus, LLC</i> National Genetic Initiative “100,000+Me”	
12:00 – 12:40	Nikolai A. Kolchanov <i>Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences</i> Bioinformatics, systems computer biology and big genetic data	
12:40 – 13:30	PLENARY REPORTS	Zhukov
12:40 – 13:05	Maxim P. Nikitin <i>Moscow Institute of Physics and Technology (State University); Sirius University of Science and Technology; Abisense LLC, Sirius</i> Molecular commutation of DNA: engaging novel physical methods	
13:05 – 13:30	Evgeny N. Nikolaev <i>Skolkovo Institute of Science and Technology</i> Practice of using methods of quantitative proteomics of physiological fluids based on isotope-labeled peptide standards in the search for protein panels of biomarkers of various diseases	
13:30 – 14:00	LUNCH BREAK	
14:00 – 16:00	SYMPOSIA	
14:00 – 16:00	National Genetic Initiative “100,000+Me”. Session 1	Zhukov
14:00 – 16:00	Genomic and multi-omix technologies. Session 3	Kutuzov
14:00 – 16:00	Neuroscience. Session 3	Gallery

14:00 – 16:00	Modern methods of drug development (Teranostics / Targeted delivery / Large and small molecules). Session 1	Maly Donskoy
14:00 – 16:00	Structural biology. Session 1	Suvorov
14:00 – 16:00	Bioengineering of proteins and peptides. Session 1	Potemkin
14:00 – 16:00	Infections (Microbial communities / White spots in medical virology and microbiology / Antibiotic resistance). Session 2	Nakhimov
14:00 – 16:00	Systems and synthetic biology. Technology, achievements and risks. Big genetic data. Session 3	Tent
16:00 – 16:20	COFFEE BREAK	
16:20 – 18:20	SYMPOSIA	
16:20 – 18:20	National Genetic Initiative “100,000+Me”. Session 2	Zhukov
16:20 – 18:20	Genomic and multi-omix technologies. Session 4	Kutuzov
16:20 – 18:20	Biological functions and mechanisms of action of peptides and proteins. Session 2	Gallery
16:20 – 18:20	Modern methods of drug development (Teranostics / Targeted delivery / Large and small molecules). Session 2	Maly Donskoy
16:20 – 18:20	Structural biology. Session 2	Suvorov
16:20 – 18:20	Bioengineering of proteins and peptides. Session 2	Potemkin
16:20 – 18:20	Infections (Microbial communities / White spots in medical virology and microbiology / Antibiotic resistance). Session 3	Nakhimov
16:20 – 18:20	Systems and synthetic biology. Technology, achievements and risks. Big genetic data. Session 4	Tent
09:00 – 19:00	POSTER SESSION	
18:30 – 19:30	POSTGENOME SPECIAL EVENT	Zhukov
	Valentin V. Vlassov <i>Institute of Chemical Biology and Fundamental Medicine, Siberian Branch of the Russian Academy of Sciences</i>	
	Therapeutic nucleic acids: from "targeted reagents" to genetic editing	

November 1, Friday (PATRIOT Congress Center)

Hall

Zhukov

09:00 – 11:00 PLENARY Reports

- 09:00 – 09:25 Olga N. Tkacheva *Russian Research and Clinical Center for Gerontology, Pirogov Russian National Research Medical University*
Translational approaches to the management of aging processes
- 09:250 – 09:50 Elena A. Troshina *Endocrinology Research Center*
The function of the thyroid gland. Focus on key physiological conditions (puberty, pregnancy, breastfeeding, healthy aging)
- 09:50 – 10:15 Vladimir V. Poroikov *Orekhovich Institute of Biomedical Chemistry*
AI/ML approaches to assessment of biological activity of pharmaceutical agents *in silico*. From basic research to applications
- 10:15 – 10:40 Alexey N. Tomilin *Institute of Cytology, Russian Academy of Sciences*
New players involved in the acquisition, maintenance, and exit from the state cellular pluripotency

10:40 – 11:00 COFFEE BREAK

11:00 – 13:40 PLENARY LECTURES

Zhukov

- 11:00 – 11:40 Ilya V. Yampolsky *Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences*
Luminescence of living organisms: from basic mechanisms to synthetic biology
- 11:40 – 12:20 LI Jinsong *Shanghai Institute of Biochemistry and Cell Biology, Center for Excellence in Molecular Cell Science*
Sperm-like stem cell-mediated semi-cloning technology
- 12:20 – 13:00 Sergey V. Razin *Institute of Gene Biology, Russian Academy of Sciences*
3D genome of lower eukaryotes
- 13:00 – 13:40 Dmitry M. Chudakov *Institute of Translation Medicine, N.I. Pirogov Russian National Research Medical University*
TBA

13:40 – 14:10 LUNCH BREAK

14:10 – 16:10 SYMPOSIA

14:10 – 16:10	Genomic and multi-omix technologies. Session 5	Zhukov
14:10 – 16:10	Oncology. Autoimmunity. Session 3	Kutuzov
14:10 – 16:10	Technologies for maintaining optimal health. Norm, biohacking and accelerated aging. Session 1	Gallery
14:10 – 16:10	Plant Biology. Session 1	Maly Donskoy
14:10 – 15:10	HELIKON master class Digital PCR—a highly sensitive method for pathogen analysis	Suvorov
15:10 – 16:10	HELIKON master class Locus Seqtot 1616: Application of Russian capillary electrophoresis in epidemiological studies	Suvorov
14:10 – 16:10	Digital technologies in biomedicine. Bioinformatics, molecular modeling, artificial intelligence, machine learning. Session 1	Potemkin
14:10 – 16:10	Search, isolation and synthesis of new natural peptides and proteins/ Sesion 1	Nakhimov
14:10 – 16:10	Biological functions and mechanisms of action of peptides and proteins. Session 3	Tent

16:10 – 16:30 COFFEE BREAK

16:30 – 18:30	Genomic and multi-omix technologies. Session 6	Zhukov
16:30 – 18:30	Oncology. Autoimmunity. Session 4	Kutuzov
16:30 – 18:30	Technologies for maintaining optimal health. Norm, biohacking and accelerated aging. Session 2	Gallery
16:30 – 18:30	Plant Biology. Session 2	Maly Donskoy
16:30 – 18:30	Stem Cells. Session 1	Suvorov
16:30 – 18:30	Digital technologies in biomedicine. Bioinformatics, molecular modeling, artificial intelligence, machine learning. Session 2	Potemkin
16:30 – 18:30	Search, isolation and synthesis of new natural peptides and proteins. Session 2	Nakhimov
16:30 – 18:30	Biological functions and mechanisms of action of peptides and proteins. Session 4	Tent

18:40 – 19:40 POSTGENOME SPECIAL EVENT

Alexander I. Archakov *V.N. Orekhovich Institute of Biomedical Chemistry*

Analysis of single macromolecules and viruses: myth or reality?

Zhukov

09:00 – 19:00 POSTER SESSION

November 2, Saturday (PATRIOT Congress Center)

		Hall
09:00 – 11:00	Systems and synthetic biology. Technology, achievements and risks. Big genetic data. Session 5	Zhukov
09:00 – 11:00	Genomic and multi-omix technologies. Session 7	Kutuzov
09:00 – 11:00	Technologies for maintaining optimal health. Norm, biohacking and accelerated aging. Session 3	Gallery
09:00 – 11:00	Modern methods of drug development (Teranostics / Targeted delivery / Large and small molecules). Session 3	Maly Donskoy
09:00 – 11:00	Stem cells. Session 2	Suvorov
09:00 – 11:00	TBA	Potemkin
09:00 – 11:00	Infections (Microbial communities / White spots in medical virology and microbiology / Antibiotic resistance). Session 4	Nakhimov
11:00 – 11:20	COFFEE BREAK	
11:20 – 12:10	PLENARY REPORTS	Zhukov
11:20 – 11:45	Vladimir P. Chekhonin <i>Russian Academy of Sciences</i> TBA	
11:45 – 12:10	Vladimir V. Kutyrev <i>Russian Research Anti-Plague Institute "Microbe"</i> Epidemiology in the era of post-genome technologies	
12:10 – 12:35	Alexey A. Moskalev <i>Russian Research Gerontology Center</i> Healthy longevity medicine	
12:35 – 13:15	PLENARY LECTURE	Zhukov
12:35 – 13:15	Alexander G. Rumyantsev <i>Dmitry Rogachev National Research Center of Pediatric Hematology, Oncology and Immunology</i> Aging of immune system	
13:15 – 13:40	SUMMING UP THE RESULTS OF THE MIPT CASE CHAMPIONSHIP	Zhukov
13:40 – 14:00	HANDLING OF AWARDS TO THE WINNERS OF THE YOUNG SCIENTISTS COMPETITION. CLOSING OF THE CONGRESS	Zhukov