

November 7

9:00–11:00	Registration
10:00–11:00	Coffee-break
11:00–12:00	Opening ceremony of the conference
12:00–13:00	Round table “Human Spaceflights: Orbit - Deep Space”
13:00–14:00	Coffee-break
14:00–14:45	Round table “The physiology of extreme states: Earth-Space-Earth”
14:45–15:30	Round table “The road to Space begins on Earth”
15:45–17:15	Concert
17:30–19:30	Gala reception in the Composers` Hall

November 8

Mussorgsky Hall

Track 1	Deep space exploration - a comprehensive assessment of human health risks. Lessons from orbital missions.	
09:00-11:00	Experience and future prospects of medical support of interplanetary missions	
	<i>Chairmen: Orlov. O. I., Kharlamov M. V.</i>	
	<i>Technical assistant: Fedyay. S.O.</i>	
	Founders of gravitational physiology and space medicine <i>Orlov O.I., Baranov V.M.</i>	
1.	Medical support of search and rescue operations during emergency landing of manned spacecraft crew% history, present and future	<i>Kotov O.V., Polyakov A.V., Polyakov M.V.</i>
2.	History and outlook of the EVA medical support	<i>Pozdnyakov S.V., Niiazov A.R., Fedyay S.O., Polyakov A.V.</i>
3.	Ways to ensure decompression safety of cosmonauts	<i>Katuntsev V.P.</i>
4.	Risk of decompression sickness incidence in the EVA space suits man-rated tests at the vacuum chamber	<i>Filipenkov S.N.</i>
5.	Prospects for the development of medical assistance in manned space flights	<i>Kirichenko V.V., Polyakov A.V., Kovachevich I.V., Repenkova L.G., Niyazov A.R., Fedyay S.O., Osetsy N. Yu., Usov V.M.</i>
6.	Diagnosis and treatment of acute diseases of ent organs on astronauts during long-term space flights	<i>Polyakov A.V., Matsnev E.I., Kovachevich I.V., Kutina I.V., Popova I.I., Repenkova L.G., Sigaleva E.E., Niiazov A.R.</i>
11:00-11:30	Coffee - break	

11:30-13:00	Gravitational physiology - lessons from the ISS experiments	
	<i>Chairmen: Larina I.M., Hargens A.R.</i>	
	<i>Technical assistant: Kashirina D.N.</i>	
1.	Neural correlates of working memory changes in cosmonauts after long duration spaceflight	<i>Wuyts F.L., Schoenmaekers C., Ulsperger A., Jillings S., Chekalina A., Rukavishnikov I., Gushin V., Tomilovskaya E.</i>
2.	Force and energy characteristics of the heart contraction under conditions of weightless	<i>Luchitskaya E.S., Funtova I.I.</i>
3.	The Gravity of Exercise for Deep-Space Missions	<i>Hargens A.R.</i>
4.	Stabilometric and joint kinematic changes after long-term space flight	<i>Shishkin N.V., Kitov V.V., Tomilovskaya E.S.</i>
5.	Experience in studying the urinary proteome during long-term space flights	<i>Pastushkova L.Kh., Goncharova A.G., Kashirina D.N., Rusanov V.B., Nosovsky A.M., Kireev K.S., Larina I.M.</i>
6.	Morphological characteristics and functional state of erythrocytes in cosmonauts after long flights to the international space station	<i>Zhuravleva O.A., Rykova M.P., Serova A.V., Labetskaya O.I., Antropova E.N., Markin A.A.</i>
13:00-14:00 Lunch. Poster Session		

EARTH – ORBIT – DEEP SPACE

14:00–15:30	Lessons from orbital missions in integrated risk assessment for interplanetary missions	
	<i>Chairmen: Orlov. O. I., Ostrovsky M.A.</i>	
	<i>Technical assistant: Zhuravleva T.V.</i>	
1.	Mechanisms of radiation and light damage to eye structures	<i>Ostrovsky M.A.</i>
2.	Prolonged exposure to weightlessness – ISS lessons for deep space exploration	<i>Fomina E.V., Senatorova N.A., Kokueva M.A., Burakova A.A., Romanov P.V., Babich D.R., Bakhtereva V.D., Ivanov D.S.</i>
3.	The stages and mechanisms of adaptation of autonomic circulatory regulation system to spaceflight	<i>Rusanov V.B., Orlov O.I.</i>
4.	Some contemporary problems and prospects for the study of the skeletal system under the effect of extreme environment	<i>Vasilieva G.Yu., Novikov V.E., Lukicheva N.A., Gordienko K.V., Servuli E.A., Gimadiev R.R., Vasilev I.M., Polyakov A.V.</i>
5.	Physical Training as a Countermeasure Against Muscle Loss During Long-term Space Flight	<i>Bachl N., Tschan H., Kozlovskaya I.B.</i>
6.	Tissue-equivalent phantoms as used to determine the ionizing space radiation dose on critical organs of crew members during manned flights	<i>Shurshakov V.A., Ivanova O.A., Inozemtsev K.O., Kartsev I.S., Kartashov D.A., Drobyshev S.G., Tolochek R.V.</i>
15:30-16:00	Coffee-break	

16:00-17:30	Session continuation	
	<i>Chairmen: Kryuchkov B.I., Fomina E.V.</i>	
	<i>Technical assistant: Bakhtereva V.D.</i>	
7.	Space-flight associated neuro-ocular syndrome (SANS) in cosmonauts on the international space station (ISS)	<i>Makarov I.A., Man'ko O.M., Danilichev S.N.</i>
8.	Changes in the protein composition of cosmonauts	<i>Larina I.M., Pastushkova L.Kh., Kashirina D.N., Smirnov Yu.I., Brzhozovsky A.G., Kononikhin A.S., Nikolaev E.N.</i>
9.	Immunological aspects of long-term space flights of Russian cosmonauts	<i>Rykova M.P., Antropova E.N., Kutko O.V., Shmarov V.A., Ponomarev S.A.</i>
10.	Characterization of the microbial communities of the RS ISS habitat using the multi-substrate testing Method	<i>Dymova A.A., Gorlenko M.V., Podubko S.V., Orlova S.V., Shef K.A., Zolotova A.D., Kostina N.V.</i>
11.	Ways to optimize the habitat of manned space vehicles in terms of crew safety when exposed to physical factors	<i>Kutina I.V., Kudryashova O.O.</i>
12.	Work and rest organization issues for interplanetary expeditions participants	<i>Stepanova S.I., Koroleva M.V., Savenko O.A., Galichij V.A., Karpova O.I.</i>

EARTH – ORBIT – DEEP SPACE

November 8

Tolstoy Hall

Track 2	Moon exploration - assessing the risks to human health. Lessons from short model experiments	
09:00-11:00	Moon exploration. Lessons from the "dry" immersion model experiment	
	<i>Chairmen: Tomilovskaya E.S., Gerasimova-Meigal L.I.</i>	
	<i>Technical assistant: Shigueva T.A.</i>	
	Contribution of I.B. Kozlovskaya and her followers to the development of gravitational physiology of motor system and prevention of negative effects of weightlessness <i>Tomilovskaya E.S, Fomina E.V., Yarmanova E.N.</i>	
1.	Monitoring of cerebral perfusion and autonomic regulation in young healthy individuals during an ultra-short session of "dry" immersion	<i>Gerasimova-Meigal L.I., Meigal A.Yu., Gerasimova M.A., Sirotnina E.V., Sklyarova A.S.</i>
2.	Changes in the mechanisms of autonomic regulation and electrophysiological characteristics of the myocardium in women under conditions of 5-day "dry" immersion	<i>Fedchuk M.V., Rusanov V.B.</i>
3.	Support afferentation and muscle disuse role in motor unit recruitment order alterations under microgravity	<i>Shigueva T.A., Kitov V.V., Tomilovskaya E.S.</i>
4.	The effect of "dry immersion" on the characteristics of joystick control when performing visual-motor tasks by men and women	<i>Miller N.V., Zobova L.N., Roshchin V.Yu., Badakva A.M.</i>
5.	The effects of retinal optokinetic stimulation on visual-manual tracking, sensory deprivation and the changes in the state of the vestibular system in immersion experiments of different duration	<i>Naumov I.A., Glukhikh D.O., Ekimovskiy G.A., Kornilova L.N.</i>
6.	Vascular state in reproductive women in 5-day "dry" immersion	<i>Efremova O.I., Vasilev I.M., Gavrilov S.G., Tomilovskaya E.S., Vasilieva G.Yu.</i>
11:00-11:30	Coffee-break	

11:30-13:00	Session continuation	
	Moon exploration. Lessons from the "dry" immersion model experiment	
7.	Significance of visual feedback in maintaining vertical posture of operator after EVA operations in Hydro environment	<i>Kukoba T.B., Kireev K.S.</i>
8.	Evaluation of the ventilation function of lungs based on the analysis of the duration of forced exhalation tracheal sounds in ground-based model experiments	<i>Stavrovskaja D.M., Puchkova A.A., Shpakov A.V.</i>
9.	Contrast sensitivity and eye microtremor as markers of changes in functional state under influence of microgravity	<i>Shoshina I.I., Kotova D.A., Lyapunov S.I., Zelenskaya I.S., Lyapunov I.S., Karpinskaya V.Yu., Tomilovskaya E.S.</i>
10.	Changes of MSC paracrine activity under interaction with immune cells from healthy volunteers during "dry" immersion	<i>Gornostaeva A.N., Buravkova L.B.</i>
11.	The neuromotor apparatus of a rat in conditions of anti-orthostatic hanging: the effect of the reaction force of the support and stimulation of the spinal cord	<i>Eremeev A.A., Fedianin A.O., Zaytceva T.N., Baltin M.E., Sabirova D.E., Baltina T.V.</i>
12.	Morphological changes in the lumbar spinal cord of rats after a week of hindlimb unloading are not compensated for a week of adaptation	<i>Tyapkina O.V., Mustakimov S.R., Nurullin L.F.</i>
13:00-14:00	Lunch. Poster session	

EARTH – ORBIT – DEEP SPACE

14:00-15:30	Ground-based model experiments: antiorthostatic and orthostatic hypokinesia	
	<i>Chairmen: Baranov V.M., Vinogradova O.L.</i>	
	<i>Technical assistant: Puchkova A.A.</i>	
1.	Evaluation of the effect of 21-day head-down bed rest on the cardiovascular system by blood protein composition, including markers SST2, NT-PRONBP and D-DIMER	<i>Kashirina D.N., Pastushkova L.Kh., Goncharova A.G., Larina I.M.</i>
2.	Assessment of lymphocyte stability and shifts in serum homeostasis during 21-day antiorthostatic hypokinesia	<i>Alchinova I.B., Puchkova A.A., Sadovnikov F.A., Shpakov A.V., Baranov V.M., Karganov M.Yu.</i>
3.	Functioning of the lymphatic system in weightlessness	<i>Demchenko G.A., Abdreshov S.N.</i>
4.	Tissue bioavailability of ceftriaxone in antiorthostatically suspended rats	<i>Baranov M.V., Lebedeva M.A., Polyakova M.V.</i>
5.	Modeling of long-range space flight factors in primates	<i>Perevezentsev A.A., Belyaeva A.G., Pikalov V.A.</i>
15:30-16:00	Coffee-break	
16:00-17:30	Session continuation	
6.	Influence of different models of anti- and orthostatic hypokinesia on biomedical characteristics of human cyclic locomotions	<i>Shpakov A.V., Voronov A.V., Primachenko G.K., Puchkova A.A., Voronova A.A., Katuntsev V.P., Stavrovskaya D.M.</i>
7.	Design and general results of the experiment with 21-day head-down bed rest	<i>Puchkova A.A., Shpakov A.V., Baranov V.M., Katuntsev V.P., Stavrovskaya D.M., Primachenko G.K., Gorbachev V.P., Tomilovskaya E.S.</i>

8.	Replaying muscle accuracy efforts in multi-joint movements under regular physical load and support unloading	<i>Primachenko G.K., Schpakov A.V., Voronov A.V., Sokolov N.N., Pushkova A.A., Stavrovskaya D.M.</i>
9.	Study of the plasma component of the hemostasis regulation system in healthy subjects in an experiment with 21-day antiorthostatic hypokinesia in the "ANOG-22" experiment	<i>Kochergin A.Yu.</i>
10.	Strength response in human muscle during 2 neuromuscular transcutaneous electrical stimulation programs	<i>Koryak Yu., Prochiy R.R., Knutova N.S.</i>

EARTH – ORBIT – DEEP SPACE

November 8

Chekhov Hall

Track 3	Preparing for interplanetary flights. Lessons from long-term model experiments	
09:00-11:00	Ground-based model experiments for the development of medical and psychological support for long-term autonomous expeditions	
	<i>Chairmen: Bubeev Yu.A., Bannova O.</i>	
	<i>Technical assistant: Kuznetsova P.G.</i>	
	<i>Evolution of scientific approaches to the prevention of psychophysiological risks from orbital flights to interplanetary expeditions</i> <i>Bubeev Yu.A., Ryumin O.O.</i>	
1.	Features of ensuring group interaction and team cohesion of the integrated crew of interplanetary missions	<i>Ryumin O.O.</i>
2.	EuroMoonMars Analogue simulation for research, habitats and crew performance	<i>Foing B.</i>
3.	Neurocognitive testing to assess the functional state	<i>Ivanov A.V., Kvasovets S.V., Artemova A.Y.</i>
4.	Bionomic Design for Enhancing Cognitive and Psychological Functioning and Crew Performance in Isolated and Confined Habitats	<i>Bannova O., Bishop S., Häuplik-Meusburger S.</i>
5.	Study of cognitive performance and psycho-emotional state of operators in autonomous conditions of the 66 th RAE at the station	<i>Lebedeva S.A., Kuznetsova P.G., Ivanov A.V.</i>
6.	Growth and development of leaf and leafstalk vegetables in the greenhouse at the “Vostok” Antarctic station	<i>Panova G.G., Levinskikh M.A., Teplyakov A.V., Novak A.B., Udalova O.R., Khomyakov Yu.V., Ilyin E.A., Shved D.M., Chesnokov Yu.V.</i>
7.	Advantages of applying the SOCIAL ACTION RESEARCH model for exposed professions with a focus on space crews SIRIUS-17, SIRIUS-19 and SIRIUS-21	<i>Sykorova K.B.</i>
11:00-11:30	Coffee-break	

11:30-13:00	Development of a personalised approach to the assessment and preservation of human performance during ground-based modelling of space flight factors	
	<i>Chairmen: Çotuk H.B., Ponomarev S.A.</i>	
	<i>Technical assistant: Shmarov V.A.</i>	
1.	Sleep and stress monitoring using an artificially intelligent wearable EEG & PPG device	Çevik A., Çotuk H.B.
2.	Individual approach to assess the results of prenosological monitoring in conditions of long-term isolation	Chernikova A.G., Isaeva O.N.
3.	Autonomic regulation in the morning as a predictor of daytime performance	Kovrov G.V., Chernikova A.G.
4.	Dynamics of physical performance of participants in the SIRIUS-21 experiment and in the control group	Bakhtereva V.D., Senatorova N.A., Kokueva M.A., Fomina E.V.
5.	The relationship of steroid hormones with the components of body composition and the risks of pathology development in prolonged isolation with intense physical loads combined with nutritional deficiency	Nichiporuk I.A., Chistokhodova S.A., Zhuravleva O.A.
6.	Crew functional capacity evaluation while extravehicular activity after long-term isolation experiment in the ground-based space station model	Saveko A.A., Netreba A.I., Shved D.M., Shpakov A.V., Rozanov I.A., Gushin V.I., Tomilovskaya E.S.
7.	Evaluation of the functional reserves of the cardiorespiratory system of the polar expedition crewmembers in the conditions of a year-long wintering at the antarctic station "Vostok"	Osetskiy N.Y., Manko O.M., Artamonov A.A., Ilyin E.A., Orlov O.I.
13:00-14:00	Lunch. Poster session	

EARTH – ORBIT – DEEP SPACE

14:00-15:30	Sanitary-hygienic, microbiological and nutritional aspects of staying in the artificial environment of a ground germ facility	
	<i>Chairmen: Ilyin V.K., Burlyaeva E.A.</i>	
	<i>Technical assistant: Shef K.A.</i>	
	Creation, establishment and prospects of the Department of Sanitary and Hygienic Safety of Man in Artificial Habitat in the State Research Centre of the Russian Federation - IMBP RAS	
	<i>Ilyin V.K., Poddubko S.V.</i>	
1.	Endonasal microbial implantation in modified habitats: rationale, opportunities, prospects	<i>Kiryukhina N.V., Ilyin V.K., Morozova Yu.A.</i>
2.	Correction of abnormalities in microbiota composition of human oral cavity under altered environmental conditions using <i>Streptococcus salivarius</i> -based autoprobiotic preparation	<i>Ilyin V.K., Solovyova Z.O., Rykova M.P., Nosovsky A.M., Sheblayeva A.S., Sheblayev M.V., Lovtsevich S.M., Kraeva L.A., Gisinger O.A.</i>
3.	Studies on monitoring the use of clothes, underwear and sanitary hygienic procedures in the experiments under the «SIRIUS» project	<i>Shumilina I.V.</i>
4.	A comprehensive approach to crew nutrition in interplanetary space flights (from the experience of orbital missions and ground model experiments)	<i>Agureev A.N., Belakovskiy M.S., Burlyaeva E.A.</i>
5.	Space nutrition now and for the future in outer space and in terrestrial settings	<i>Vedernikov A.Yu</i>
15:30-16:00	Coffee-break	

16:00-17:30	<p>Prospective studies in a ground-based hermetic facility to assess the physiological state and immunity of cosmonauts</p> <p><i>Chairmen: Manko O.M., Popova Yu.A., Elmoselhi A.B.</i></p> <p><i>Technical assistant: Zaripov R.N.</i></p>	
1.	Functional assessment of the SANS risk development and astronaut adaptation to the conditions of long-term space flights in ground-based research	<p><i>Neroev V.V., Kotelin V.I., Zueva M.V., Man'ko O.M., Tsapenko I.V., Aleskerov A.M., Egorova I.V., Podyanov D.A.</i></p>
2.	Effects of Isolation and Confinement on Vascular Health during Space Travel: Insights from a SIRIUS-21 Analog Mission	<p><i>Elmoselhi A.B., Shankhwar V., Qaisar R., Hamoudi R., Steuber B., Salon A., Goswami N.</i></p>
3.	The study of basic metabolic rate in healthy people in 8-months isolation in an enclosed volume with artificial gas environment	<p><i>Demin A.V., Zaripov R.N., Vasilieva G.Yu.</i></p>
4.	Blood gases and acid-base balance in healthy subjects in isolation experiments at various durations	<p><i>Popova J.A.</i></p>
5.	Reactivation of latent intracellular human infections during the 240-day isolation experiment «Sirius-2021»	<p><i>Shulgina S.M., Rykova M.P., Antropova E.N., Ponomarev S.A.</i></p>
6.	Changes in the system of the b-cell link of adaptive immunity of volunteers in an experiment with 240 days of isolation in a hermetic volume (SIRIUS 21)	<p><i>Shmarov V.A., Ponomarev S.A., Rykova M.P., Antropova E.N., Kutko O.V.</i></p>

EARTH – ORBIT – DEEP SPACE

November 8

Pushkin Hall

Track 4	Russian Orbital Service Station (ROSS) as a platform for the development of interplanetary flight technologies	
09:00-11:00	Radiation risk: challenges of space radiation protection in near-Earth and interplanetary missions	
	<i>Chairmen: Shurshakov V.A., Belov O.V.</i>	
	<i>Technical assistant: Dobinde M.I.</i>	
	<i>Path of development of space radiation protection techniques from near-Earth to interplanetary missions</i>	
	<i>Shurshakov V.A.</i>	
1.	Capabilities of the nica accelerator complex for assessing radiation risk in deep space exploration and search for countermeasures	<i>Belov O.V.</i>
2.	The cosmic radiation measured with the Liulin-MO device on the Earth-Mars flight route and on the orbit around Mars	<i>Benghin V., Semkova J., Koleva R., Krastev K., Matviichuk Y., Tomov B., Bankov N., Maltchev S., Dachev T., Shurshakov V., Drobyshev S., Mitrofanov I., Golovin D., Kozyrev A., Litvak M., Mokrousov M., Nikiforov S., Sanin A.</i>
3.	Radiation factor during the flight of biological satellites: comparison with doses during the ISS flights	<i>Ivanova O.A., Inozemtsev K.O., Kartsev I.S., Drobyshev S.G., Tolochek R.V., Shurshakov V.A.</i>

4.	Radiation protection properties of additional shielding containing hydrogen materials installed in crew cabin of Russian segment of ISS	<i>Tolochek R., Shurshakov V., Kartashov D., Yarmanova E., Kartcev I., Nikolaev I., Kodaira S., Kitamura H., Kawashima H., Uchihori Yu., Ambrozova I.</i>
5.	Biological evaluation of the efficiency of physical protection by spacecraft structural elements under proton irradiation	<i>Nikitenko O.V., Bychkova T.M., Ivanova O.A., Shurshakov V.A., Molokanov A.G., Ivanov A.A.</i>
6.	Study of composite material for individual radiation-protective suit	<i>Skorkin V.M.</i>
7.	20 years of operation of Pille dosimeters on the ISS	<i>Bondarenko V.A., Drobyshev S.G., Lishnevskii A.E., Mitrikas V.G., Khorosheva E.G.</i>
11:00-11:30	Coffee-break	

EARTH – ORBIT – DEEP SPACE

11:30-13:00	Biological effects of space radiation in model experiments	
	<i>Chairmen: Shtemberg A.S., Foing B.</i>	
	<i>Technical assistant: Lebedeva-Georgievskaya K.B.</i>	
1.	Neurobiological effects of the combined action of radiation and gravitational factors of interplanetary flight in model experiments: mutually modifying effect	<i>Shtemberg A.S., Perevezentsev A.A., Lebedeva-Georgievskaja K.B., Kuznrtsova O.S.</i>
2.	Impaired function of the dopaminergic system as a result of exposure to heavy ions and model hypogravity	<i>Kuznetsova O.S., Kudrin V.S., Yasnetsov V.V., Shtemberg A.S.</i>
3.	Comparative analysis of behavioral reactions and morphological changes in the rat brain after exposure to ionizing radiation with different physical characteristics	<i>Severiukhin Yu.S., Utina D.M., Golikova K.N., Kolesnikova I.A., Lalkovicheva M., Pronskih E.V., Timoshenko G.N., Ivanov A.A., Gaevsky V.N., Molokanov A.G., Krasavin E.A.</i>
4.	The effect of cranial proton irradiation on the visual-motor behavior of monkeys	<i>Tereshchenko L.V., Borodachyova Yu.V., Zhiganov L.S., Shamsiev I.D., Krasavin E.A., Latanov A.V.</i>
5.	Effect of volatile organic compounds on bone marrow progenitor cells during recovery from ionizing radiation	<i>Markina E.A., Bobyleva P.I., Barantseva M.Y., Gornostaeva A.N., Erofeeva V.E., Pakhomova A.A., Buravkova L.B.</i>
6.	Study of cognitive functions of mice during chronic gamma irradiation	<i>Lebedeva-Georgievskaya K.B., Rakovskaya A.A.</i>
7.	Chlorophyllin as a possible radioprotective agent in space flights	<i>Romodina L.A.</i>
8.	Chromosomal disturbances detected after irradiation in the blood lymphocytes of <i>Macaca mulatta</i> monkeys In long-term observations	<i>Koshlan I.V., Koshlan N.A., Isakova M.D., Melnikova Yu.V., Belyaeva A.G., Stemberg A.S., Klotz I.N., Gvozdik T.E., Bugay A.N.</i>
13:00-14:00	Lunch. Poster session	

14:00-15:30	Biological Life Support Systems. Lessons from space and model experiments for the ROSS	
	<i>Chairmen Sychev V.N., Levinskikh M.A.</i>	
	<i>Technical assistant: Ionov S.V.</i>	
	Major achievements of IBMP scientists in the development of life support systems for ultra-long space flights <i>Sychev V.N</i>	
1.	«Earth – orbit – deep space»: experiments with plants	<i>Levinskikh M.A., Sychev V.N., Nefedova Ye.L., Signalova O.B., Podolskiy I.G.</i>
2.	Scientific equipment «vitacycle-t» for conducting an experiment on growing plants in a cylindrical conveyor space greenhouse under conditions of orbital flight	<i>Berkovich Yu.A., Smolyanina S.O., Belyak A.M., Shlyayev P.V., Konyukhov A.S., Dmitriev M.D., Zheleznyakov A.G., Kozlova E.Yu.</i>
3.	Evaluation of the effect of blue led directional illumination on the root growth of Arabidopsis Thaliana seedlings with slow rotation on a 2d clinostat	<i>Belyak A.M., Krivobok A.S., Nikitin V.B., Bibikova T.N.</i>
4.	Use prospects of the solutions prepared during the physical-chemical mineralization of human exometabolites for the phototrophic link of life support systems	<i>Tikhomirov A.A., Ushakova S.A., Trifonov S.V., Velichko V.V., Shikhov V.N., Chernov V.E.</i>
5.	Allelopathic interaction between plants - components of the phototrophic link of CES and their effect on human and animal cells	<i>Chernov V.E., Sokolova M.O., Slizhov P.A., Buntovskaya A.S., Ivanova A.K., Pendinen G.I.</i>
6.	Prospects for the use of invertebrates for biotransformation of organic waste in biological life support systems	<i>Levinskikh M.A., Gurieva T.S., Golokhvast K.S., Volkov A.V., Mironova O.Ju.</i>
7.	Studies of fish, possible components of the heterotrophic link of the biological life support system, in space flight conditions	<i>Sychev V.N., Guryeva T.S., Gusev O.A., Grushina O.A., Levinskikh M.A.</i>

EARTH – ORBIT – DEEP SPACE

15:30-16:00	Coffee-break	
16:00-17:30	Habitat and Life Support Systems. Lessons from space and model experiments for the ROSS	
	<i>Chairmen: Sychev V.N., Mukhamedieva L.N.</i>	
	<i>Technical assistant: Ionov S.V.</i>	
1.	Water supply regenerayion system of russian segment on ISS: current status and prospects	<i>Bobe L.S., Arakcheev D.V., Pavlov A.V., Rukavitsin S.N., Rykhlov N.V., Salnikov N.A., Zheleznyakov A.G., Zapryagailo E.D., Shamshina N.A.</i>
2.	Hygiene water supply on promising space stations	<i>Bobe L.S., Salnikov N.A., Arakcheev D.V., Pavlov A.V., Rukavitsin S.N., Zheleznyakov A.G., Shamshina N.A.</i>
3.	Electron-VM oxygen generation system aboard the International Space Station: processing unit lifetime	<i>Proshkin V.Yu.</i>
4.	Individual monitoring of CO ₂ in the air of the International Space Station	<i>Pakhomova A.A., Popov D.A., Savenko O.A., Khorosheva E.G., Lysova N.Yu.</i>
5.	Analytical space toxicology. theoretical and applied research	<i>Mukhamedieva L.N., Ozerov D.S., Lashukov P.V.</i>
6.	Hygienic characteristics of the resistance to ionizing radiation of advanced polymeric composite materials	<i>Lashukov P.V., Barantseva M.Yu., Ozerov D.S., Pakhomova A.A.</i>

November 9

Mussorgsky Hall

Track 5	Multidisciplinary research for space biology and medicine	
09:00–11:00	Molecular and cellular changes in space flight and ground-based model experiments	
	<i>Chairmen: Buravkova L.B., Balaban P.M.</i>	
	<i>Technical assistant: Ezdakova M.I.</i>	
1.	Mechanisms of changes in nervous system activity in space flights and model experiments	<i>Balaban P.M., Aseev N.A.</i>
2.	Regulatory phenotype of mast cells in the organ-specific tissue microenvironment under microgravity conditions	<i>Atiakshin D.A., Shishkina V.V., Samoilenko T.V., Buravlyova A.M., Volodkin A.V., Ignatyuk M.A.</i>
3.	Cell gravireception: from cytoskeleton reorganization to matrisome modification	<i>Buravkova L.B.</i>
4.	Alterations in the phenotypic profile of human peripheral blood neutrophilic granulocytes after a short-term and long-term space flight	<i>Zhirova E.A., Rykova M.P., Ponomarev S.A.</i>
5.	Analysis of caspase-3 content in thoracic spinal neurons after space flight and ground-based simulation of hypokinesia	<i>Porseva V.V., Preobrazhensky N.D., Maslyukov P.M.</i>
6.	Influence of the effects of simulated microgravity on the state of structural and contractile proteins of the myocardium	<i>Popov M.A., Sokolovskaya A.A., Setdikova G.R., Kupriyanova A.G., Metelkin A.A., Sergeeva E.A.</i>
7.	Interaction of mesenchymal stromal and hematopoietic progenitors under 14-day simulation of microgravity	<i>Tyrina E.A., Buravkova L.B.</i>
8.	The biological activity of pro- and anti-inflammatory cytokines in the remodeling of lung tissue under the combined exposure to the inhalation of chemicals and antiorthostatic suspension	<i>Barantseva M.Yu., Ozerov D.S., Nosovsky A.M., Pakhomova A.A., Lashukov P.V.</i>
11:00-11:30	Coffee-break	

11:30-13:00	Astrobiology, Planetary Defense and Space Biology	
	<i>Chairmen: Ilyin V.K., Atyakshin D.A.</i>	
	<i>Technical assistant: Lashukov P.V.</i>	
1.	DNA-protective tardigrade Dsup protein: from activity in model organisms to the molecular mechanism of multiple-stress resistance	<i>Zarubin M.P., Kravchenko E.V., Murugova T.N., Azorskaya T.O., Ivankov O.I., Ryzhykau Y.L., Okhrimenko I.S., Zagryadskaya Y.A., Kuldoshina O.A., Mitrofanov S.V., Alekseev S.I.</i>
2.	Survivability of microorganisms in a two-year exposure in open space close to the ISS	<i>Deshevaya E.A., Fialkina S.V., Shubralova E.V., Vasiliak L.M., Pecherkin V.Ya., Scherbakova V.A., Nosovsky A.M., Orlov O.I.</i>
3.	Integrity of <i>Bacillus velesensis</i> genome after two-year exposure in open space	<i>Fialkina S.V., Deshevaya E.A., Orlov O.I.</i>
4.	Thermophiles in the subglacial antarctic lake Vostok as a proxy for searching life on icy moons of Jupiter and Saturn	<i>Bulat S., Doronin M., Shvetsov A., Petit J-R.</i>
5.	Venus as astrobiology target: basic issues and perspectives	<i>Kotsyurbenko O.R., Skladnev D.A.</i>
6.	Changes in the locomotion control system in weightlessness	<i>Nagibov A., Kulchitsky V.</i>
13:00-14:00	Lunch. Poster session	

14:00-15:30	History of IBMP Research. 60 Years of Serving Space	
	<i>Chairmen: Baranov V.M., Buravkova L.B.</i>	
	<i>Technical assistant: Tyrina E.A.</i>	
	Grigoriev A.I. – Doctor, Scientist, Teacher	
	<i>Orlov O.I., Buravkova L.B.</i>	
1.	Development of proteomics at the Institute of biomedical problems – strategic planning of A.I. Grigoriev	<i>Larina I.M., Pastushkova L.Kh., Kashirina D.N., Goncharova A.G.</i>
2.	A.I. Grigoriev (1943–2023) pedagogical activity at Moscow university	<i>Loginov V.A.</i>
3.	Vladimir Ivanovich Yazdovskiy (on his 110th birthday)	<i>Matyushev T.V., Rybina A.S., Malyshev A.D., Maximova I.D., Dvornikov M.V.</i>
4.	Productive collaboration between IBMP and the National Space Biomedical Research Institute	<i>Sutton J.P.</i>
5.	Biomedical ethics in space biology research, aerospace medicine, and extreme impact medicine	<i>Ilyin E.A., Smirnova T.A., Kasatkina T.B.</i>
6.	History of the rehabilitation of cosmonauts after space flights. Sport fees	<i>Potapov M.G., Skedina M.A., Kovaleva A.A.</i>
15:30-16:00	Coffee-break	
16:00-17:30	Section continuation	
7.	Development of I.B. Kozlovskaya's ideas in the molecular physiology of skeletal muscles	<i>Shenkman B.S.</i>
8.	Glorious achievements of Russian cosmonautics – the time of firsters!	<i>Kuzmina A.Yu.</i>

9.	Adaptation of vertebrates to the spaceflight conditions: 36 years of the Institute of human morphology - Institute of biomedical problems collaborate works	<i>Gulimova V.I., Proshchina A.E., Barabanov V.M., Kharlamova A.S., Krivova Y.S., Besova N.V., Junemann O.A., Otlyga D.A., Savelieva E.S., Berdiev R.K., Buzmakov A.V., Krivonosov Y.S., Bukreeva I.N., Soldatov P.E., Asadchikov V.E., Saveliev S.</i>
10.	30 Years of SOCIOMAPPING in Space Research	<i>Bahbouh R.</i>
11.	Experience of 65 years of research in space radiobiology. New concepts about the hazard of cosmic radiations, total lifetime risk for cosmonauts after of long-term orbital and interplanetary flights and after the completion of a career	<i>Shafirkin A.V.</i>

November 9

Tolstoy Hall

Track 2	Moon exploration - assessing the risks to human health. Lessons from short model experiments	
09:00-11:00	Gravitational physiology of skeletal muscle and bone tissue in animal and human experiments	
	<i>Chairmen: Shenkman B.S., Reggiani C.</i>	
	<i>Technical assistant: Bokov R.O.</i>	
1.	Effects of long-term disuse on human skeletal muscle transcriptome and proteome	<i>Kurochkina N.S., Orlova M.A., Vigovskiy M.A., Vepkhvadze T.F., Makhnovskii P.A., Grigorieva O.A., Lednev E.M., Efimenko A.Yu., Popov D.V.</i>
2.	Effects of 20-day bedrest on the expression of highly abundant proteins in <i>m. vastus lateralis</i> and <i>m. soleus</i>	<i>Orlova M.A., Vavilov N.E., Zhedyayev R.Y., Vepkhvadze T.F., Lednev E.M., Zgoda V.G., Shpakov A.V., Popov D.V.</i>
3.	Neuromuscular Junction Instability as an early determinant of contractile force loss during disuse-induced muscle atrophy	<i>Reggiani C.</i>
4.	The triggering role of ATP-dependent signaling mechanisms during transition of postural muscle from activity to disuse	<i>Shenkman B.S., Nemirovskaya T.L., Sharlo K.A., Mirzoev T.M.</i>
5.	Mechanisms of regulation of anabolic signaling pathways in mammalian postural muscle under conditions of simulated gravitational unloading	<i>Mirzoev T.M.</i>
6.	Can GSK3 inhibition improve muscle and brain health during spaceflight?	<i>Fajardo V.A., Mac Pherson R.E.K.</i>
7.	Functional and structural characteristics of myosin and native thin filament of rat soleus muscle myosin during hindlimb suspension	<i>Gerzen O.P., Potoskueva Yu.K., Tzybina A.E., Spiridonova N.A., Mova E.S., Tyganov S.A., Sergeeva K.V., Shenkman B.S., Nikitina L.V.</i>

11:00-11:30	Coffee-break	
11:30-13:00	Section continuation	
	<i>Chairmen: Vasilieva G.Yu., Bryndina I.G., Fajardo V.A.</i>	
	<i>Technical assistant: Bokov R.O.</i>	
8.	Sphingolipid-dependent mechanisms may be involved in the rearrangements of the skeletal muscle myosin phenotype caused by functional unloading	<i>Bryndina I.G., Protopopov V.A., Sekunov A.V., Skurygin V.V., Mugizov A.M., Omelyukhina D.V., Ivanov M.V.</i>
9.	Genetic influence of mechano-regulated protein tyrosine kinase 2 on muscle power and hybrid muscle fiber size	<i>Flück M.</i>
10.	Influence of SERCA activity on contractility characteristics, fatigue and signaling of rat's m. soleus during 7-day of hindlimb suspension	<i>Sharlo K.A., Lvova I.D., Tyganov S.A., Zaripova K.A., Belova S.P., Nemirovskaya T.L.</i>
11.	Differentiation of myoblasts isolated from the rat soleus after hindlimb suspension is accompanied by dephosphorylation of AMPK and increased apoptosis	<i>Vilchinskaya N.A., Turtikova O.V., Mirzoev T.M., Shenkman B.S.</i>
12.	Changes in the state of the hind limb bones during disuse: an analysis in rats with spinal cord injury	<i>Ahmetzyanova A.I., Baltin M.E., Sabirova D.E., Eremeev A.A., Sachenkov O.A., Baltina T.V.</i>
13.	The contribution of biomechanical components to the preservation of bone tissue using various experimental models of unloading in rats	<i>Sabirova D.E., Eremeev A.A., Sachenkov O.A., Akhmetzyanova A.I., Baltina T.V.</i>
14.	An additional function of bone densitometers: to study the body composition in experiments with 3 and 5-day «dry» immersion	<i>Novikov V.Ye., Gordienko K.V., Servuli E.A., Lukicheva N.A., Tomilovskaya E.S., Vasilieva G.Yu.</i>
13:00-14:00	Lunch. Poster session	

14:00-15:30	Hypomagnetic environment: risk assessment and countermeasures	
	<i>Chairmen: Orlov O.I., Rusanov V.B.</i>	
	<i>Technical assistant: Luchitskaya E.S.</i>	
1.	Hypomagnetic conditions. The effect on the human's body. Where to go next?	<i>Zaripov R.N., Vasin A.L.</i>
2.	Dynamics of human neurophysiological reactions under the influence of hypomagnetic environment	<i>Schastlivtseva D.V., Bubeev Yu.A., Kotrovskaya T.I., Ivanov A.V.</i>
3.	The influence of modelled hypomagnetic conditions on the expression of NOD-like receptors associated genes of human innate immunity	<i>Vlasova D.D., Germanov N.S., Galina V.S., Sadova A.A., Rykova M.P., Antropova E.N., Ponomarev S.A.</i>
4.	Behavior of male and female mice after a 1-month exposure in hypomagnetic environment	<i>Andreev-Andrievskiy A.A., Mashkin M.A., Belous A.O., Sokolova I.A., Popov D.V., Orlov O.I.</i>
5.	The effect of hypomagnetic conditions on the gene expression profile in the mouse brain	<i>Borzykh A.A., Andreev-Andrievskiy A.A., Kurochkina N.S., Vepkhvadze T.F., Makhnovskii P.A., Popov D.V., Orlov O.I..</i>
6.	Investigation of the effect of the 1000 times weakened Earth's magnetic field on the state of the circulatory system in the embryogenesis of the japanese quail (<i>Coturnix japonica</i>)	<i>Ionov S.V., Guryeva T.S., Melnikova E.I., Litvin E.D., Jalilova D.S.</i>
7.	The influence of hypomagnetic conditions on germination and chromosomal aberration in lettuce seedlings after seed exposure onboard the International space station	<i>Platova N.G., Lebedev V.M., Spassky A.V., Tolochek R.V., Inozemtsev K.O., Shurshakov V.A.</i>
15:30-16:00	Coffee-break	

16:00-17:30	Methodological and technological support of research in space medicine and biology	
	<i>Chairmen: Perevedentsev O.V., Nosovsky A.M.</i>	
	<i>Technical assistant: Chernogorov R.V.</i>	
1.	Virtual environment for bionic agent modeling	<i>Vanskov P.S., Ivanova A.D., Moskalev Ya.I., Baltin M.E., Baltina T.V., Sachenkov O.A.</i>
2.	Hardware equipment for targeted works (space experiments, SE) in biotechnology	<i>Kuznetsov E.P.</i>
3.	Development of methodological support for assessing the effectiveness of the system of automatic pressure control in the pressurized cabin of the aircraft	<i>Matyushev T.V., Dvornikov M.V., Maximova I.D., Rybina A.S., Malyshev A.D.</i>
4.	Optimization of cognitive performances (Hi-Cognition), multisensorial data & experimental immersive/osmotic cockpit systems in extreme distress conditions (complex emotions, panic, anger, pain) for long stay in microgravity conditions and deep space missions. Hypothesis and theoretical models	<i>Toscano R., Toscano A.</i>
5.	On lunar dust simulants suitable for conducting biomedical research	<i>Kaspranskiy R.R., Barinov V.A., Barinov V.V.</i>

November 9

Chekhov hall

Track 3	Preparing for interplanetary flights. Lessons from long-term model experiments	
09:00-11:00	Special session Problems of stress caused by prolonged isolation and motor unloading	
	Chairmen: Tomilovskaya E.S., Rybnikova E.A.	
	Technical assistant: Saveko A.A.	
1.	In search of stress: analysis of antiorthostatic unloading and social isolation effects on stress markers in mice	<i>Glazova M.V., Naumova A.A.</i>
2.	Effect of electromyostimulation on changes in gene expression in m. vastus lateralis and m. soleus during 6-day «dry» immersion	<i>Popov D.V., Borzykh A.A., Vepkhvadze T.F., Lednev E.M., Makhnovskii P.A., Orlov O.I., Tomilovskaya E.S.</i>
3.	Computer games on board a spacecraft as a means of psychological relief and stimulation in conditions of prolonged isolation during interplanetary flight	<i>Filippov O.A.</i>
4.	Dynamics of the crew's motor and communication activity and adaptation to the conditions of short-term isolation simulating a flight to the Moon	<i>Savinkina A.O., Gushin V.I.</i>
5.	Prospects for the development of a software and hardware complex of psychological support based on virtual reality technologies	<i>Rozanov I.A., Tomilovskaya E.S., Shved D.M., Gushchin V.I.</i>
6.	Verbal perceptual set during 7-day «dry» immersion accompanied by myostimulation	<i>Lyakhovetskii V.A., Karpinskaya V.Yu., Zelenskaya I.S.</i>
11:00-11:30	Coffee-break	

11:30-13:00	Changes in the reproductive system as a limiting factor in deep space colonization	
	<i>Chairmen: Ogneva I.V., Komissarova D.V.</i>	
	<i>Technical assistant: Gogichaeva K.K.</i>	
1.	Female reproductive system after 5-day «dry» immersion: hormonal status and ultrasound data	<i>Gorbacheva E.Yu., Toniyan K.A., Biriukova Y.A., Lukicheva N.A., Orlov O.I., Boyarintsev V.V., Ogneva I.V.</i>
2.	Promising countermeasures of preventing dysbiosis of the vaginal microflora in women participating in ground-based model experiments	<i>Komissarova D.V., Ilyin V.K.</i>
3.	<i>Drosophila melanogaster</i> gametes after spaceflight	<i>Ogneva I.V., Sedletskiy V.S., Kotov O.V.</i>
4.	The structure of the oocyte cytoskeleton and the development potential of mouse embryos up to the 3-cell stage under conditions reproducing the effects of weightlessness	<i>Sventitskaya M.A., Ogneva I.V.</i>
5.	Influence of simulated weightlessness conditions on changes in the content of regulators of stem cell differentiation and cytoskeleton in ovaries: <i>Drosophila melanogaster</i> model	<i>Golubkova M.A., Ogneva I.V.</i>
6.	Simulated weightlessness disrupts cholesterol metabolism in <i>Drosophila melanogaster</i> oocytes	<i>Gogichaeva K.K., Ogneva I.V.</i>
13:00-14:00 Lunch. Poster session		

14:00-15:30	Space technologies for deep space exploration and for health care on Earth	
	<i>Chairmen: Anikeev D.A., Belakovsky M.S.</i>	
	<i>Technical assistant: Zhuravleva T.V.</i>	
1.	The motor and cognitive functions in subjects with Parkinson's disease under the course of «dry» immersion	<i>Meigal A.Yu., Tretjakova O.G., Gerasimova-Meigal L.I., Saenko I.V.</i>
2.	Verification of visual-motor deficit in Parkinson's disease using the hardware-software complex «OculoStim»: experience in the use of space technologies for Earth' medicine	<i>Chigaleychik L.A., Poleschuk V.V., Illarioshkin S.N., Naumov I.A.</i>
3.	Breathing mixture containing an inert gas argon before noise exposure using for the purpose of otoprotection	<i>Sigaleva E.E., Pasekova O.B., Matsnev E.I., Popov M.A., Marchenko L.Yu.</i>
4.	«Non-auditory effects» of broadband noise exposure in volunteers	<i>Sigaleva E.E., Pasekova O.B., Degterenkova N.V., Matsnev E.I., Marchenko L.Yu.</i>
5.	Effect of inert gas mixtures on the early postoperative period in patients after myocardial revascularization	<i>Popov M.A., Shumakov D.V., Sigaleva E.E., Agafonov E.G., Pronina V.P., Zybin D.I., Marchenko L.Yu., Dontsov V.V., Maslennikov R.A.</i>
6.	Analysis of the morbidity of personnel exposed to excess noise during round-the-clock maintenance of aviation flights	<i>Shalamov A.S., Soldatov S.K., Musaeva R.N., Blinov M.V.</i>
15:30-16:00	Coffee-break	
16:00-17:30	Section continuation	
7.	Creating standardized texts as optotypes for evaluating reading parameters	<i>Kulikov A.N., Koskin S.A., Stepanets I.R.</i>
8.	Information ecosystems for psychological support: from the far north to deep space	<i>Rozanov I.A., Ryumin O.O., Karpova O.I.</i>

9.	Portable toilet for women in simulated microgravity and clinical practice	<i>Lebedeva S.A.</i>
10.	Perspectives for the development of diets and specialized products – for individuals staying in extreme environmental conditions	<i>Sinyavskiy Yu.A.</i>
11.	Justification of the use of autoprobiotics as means of correction of human microflora under hermoisolation and dry immersion	<i>Usanova N.A.</i>

November 9

Pushkin Hall

Track 4	Russian Orbital Service Station (ROSS) as a platform for the development of interplanetary flight technologies	
09:00-11:00	Prospective research in the interests of Russian orbital station	
	<i>Chairmen: Akulov V.A., Koloteva M.I.</i>	
	<i>Technical assistant: Lobanov K.A.</i>	
	<i>The works of A.R. Kotovskaya and her followers on the development of a promising method of countermeasure for interplanetary flights – artificial gravity</i>	
	<i>Kolotova M.I., Fomina G.A.</i>	
1.	Development of new effective methods of prevention of reduction of orthostatic stability of astronauts when creating artificial gravity with the help of SRC	<i>Koloteva M.I., Glebova T.M., Salnikov A.V., Fomina G.A., Lobanov K.A.</i>
2.	Centrifuge with built-in doctor's office as a laboratory for space physiology	<i>Akulov V.A.</i>
3.	Reaction of human peripheral hemodynamics during rotation on a short-radius centrifuge (according to Doppler flowmetry)	<i>Salnikov A.V., Fomina G.A., Kolotova M.I., Glebova T.M.</i>
4.	Pain sensitivity as a factor effecting the improvement of the medical support system in space flights	<i>Niiazov A.R., Fedyay S.O., Pozdnyakov S.V., Polyakov A.V.</i>
5.	The role of repeated spaceflight experience in predicting operator success	<i>Romanov P.V., Ganicheva A.A., Fomina E.V.</i>
6.	Implementation of the concept of medical support for deep space flights – from telemedicine to artificial intelligence	<i>Chernogorov R.V., Perevedentsev O.V.</i>
11:00-11:30	Coffee-break	

11:30-13:00	Section continuation	
	<i>Chairmen: Gubkin S.V., Fomina E.V.</i>	
	<i>Technical assistant: Kokueva M.A.</i>	
	<i>The concept of the role of the circulatory system as an indicator of adaptive processes in the human body – the school of R.M. Bayevsky</i> <i>Rusanov V.B., Funtova I.I.</i>	
7.	Possibilities of cosmonauts' cardiac monitoring during preparation for flight and in orbit	<i>Goubkin S.V., Lemeshko Y.V., Fomina E.V.,</i>
8.	New methods for assessing physical performance of cosmonauts	<i>Kokueva M.A., Minkin A.S., Kislitsin A.A., Bakhtereva V.D., Romanov P.V., Senatorova N.A., Fomina E.V.</i>
9.	Physical fitness of cosmonauts of different somatotypes	<i>Nazin V.G., Kireev K.S., Kukoba T.B.</i>
10.	Study of human skin microcirculatory and tissue systems adaptation mechanisms in conditions of orbital flight on the International space station	<i>Loktionova Y.I., Zharkikh E.V., Fedorovich A.A., Sidorov V.V., Vasin A.V., Dunaev A.V.</i>
11.	Psycho-physiological studies to assess the performance capability and efficiency of an operator wearing a semi-rigid spacesuit	<i>Pyatnitsa A.S., Smotrin D.K., Filipenkov S.N.</i>
12.	To the problem of medical support of space flights	<i>Tikhonova G.A., Markin A.A.</i>
13:00-14:00	Lunch. Poster session	

14:00-15:30	Section continuation	
	<i>Chairmen: Polyakov A.V., Grishin A.P.</i>	
	<i>Technical assistant: Niyazov A.R.</i>	
13.	Features of lipid metabolism in cosmonauts of different age groups in the post-flight period	<i>Markin A.A., Zhuravleva O.A., Kuzichkin D.S., Markina E.A., Zabolotskaya I.V., Vostrikova L.V., Polyakov A.V., Smirnova T.A.</i>
14.	Activation of hemocoagulation and fibrinolysis in cosmonauts after long-term space flights	<i>Kuzichkin D.S., Zhuravleva O.A.</i>
15.	The state of eye hydrodynamics during the activity of the Gauer – Henry cardiorenal reflex in simulated microgravity	<i>Manko O.M., Vasilyeva G.Y., Gimadiev R.R., Nosovsky A.M.</i>
16.	The microgravity factors effect on the condition of the optic nerve sheath in an experiment with 21-day «dry» immersion. Ways of venous blood outflow from the cranial cavity	<i>Moreva T.I., Kriushev E.S.</i>
17.	Cosmonauts' communication styles in the board – Earth circuit in a prolonged space flight	<i>Supolkina N.S., Yusupova A.K., Shved D.M., Gushin V.I., Ryumin O.O., Savenko O.A.</i>
18.	Some promising directions for the use of human lactoferrin biosimilar in space flight conditions	<i>Ilyin V.K., Budevich A.I., Ermolitsky V.N., Petrushko E.V., Semashko T.V., Golovneva N.A.</i>
15:30-16:00	Coffee-break	

16:00-17:30	Deep space exploration: experience and prospects	
	<i>Chairmen: Bubeev Yu.A., Dubinin V.I.</i>	
	<i>Technical assistant: Schastlivtseva D.V.</i>	
1.	Investigation of creating artificial hibernation through induction of altered state of consciousness	<i>Bubeev Yu.A., Ivanov A.V.</i>
2.	Lunar dust: medical risks	<i>Baranov V.M., Barantseva M.Yu., Katuntsev V.P., Mukhamedieva L.N., Ozerov D.S.</i>
3.	Peculiarities of microbial community formation when modeling the impact of certain specific factors inherent in the external environment of the Moon	<i>Poddubko S.V., Orlova S.V., Dymova A.A., Shef K.A., Osipova P.D.</i>
4.	Conceptual approaches to the use of robotic assistants to improve the medical support of interplanetary space flights	<i>Perevedentsev O.V., Chernogorov R.V.</i>
5.	On the application of intelligent integrated virtual reality technologies in the interests of manned space flights	<i>Agarkova Yu.S., Dikarev V.A., Kikina A.Yu., Simbaev A.N., Chebotarev Yu.S.</i>
18:00-18:30 Closing of the conference. Summarizing the results of the poster competition		