The International Stress and Behavior Society (ISBS)
Institute of Experimental Medicine (IEM)
Institute of Translational Biomedicine, St. Petersburg State University
The Russian Society for Biopsychiatry (RSBP)

# **Program**

## 27<sup>th</sup> Multidisciplinary International Neuroscience and Biological Psychiatry Conference

## "Stress and Behavior"

JUBILEE SYMPOSIUM DEDICATED TO THE 130<sup>th</sup> ANNIVERSARY OF THE INSTITUTE OF EXPERIMENTAL MEDICINE



St. Petersburg, Russia September 16-18, 2020

# JUBILEE SYMPOSIUM DEDICATED TO THE 130<sup>th</sup> ANNIVERSARY OF THE INSTITUTE OF EXPERIMENTAL MEDICINE (IEM)





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#### Day 1. Wednesday, September 16, 2020

Venue: Oktiabrskaya Hotel,10 Ligovsky Prospect, St. Petersburg, Russia

- 11.00-11.15 OPENING AND WELCOMING ADDRESSESS
  - Prof. AV Kalueff, ISBS President and Conference Chair Prof. AV Dmitriev, Institute of Experimental Medicine Director
  - Prof. VM Klimenko, Program Committee Chair
- 11.15-11.35 EVALUATING THE PROTECTIVE EFFECTS OF DIOSGENIN ON THE AGING PROCESSES IN RATS WITH ACCELERATED SENESCENCE. TG Amstislavskaya, MA Tikhonova, Y-J Ho, Scientific Research Institute of Physiology and Basic Medicine, Novosibirsk, Russia
- 11.35-11.55 MECHANISMS OF HIPPOCAMPAL NEUROGENESIS INDUCED BY A TRAUMATIC BRAIN INJURY. TG Amstislavskaya, YL Yang, MA Tikhonova, KT Lu, Novosibirsk State University, Novosibirsk, Russia, National Chia-Yi University, Chia-Yi, Taiwan, National Taiwan Normal University, Taipei, Taiwan
- 11.55-12.15 NEURONAL FUNCTION AND PHARMACOLOGY OF TRACE AMINE-ASSOCIATED RECEPTORS (TAARS). RR Gainetdinov, Institute of Translational Biomedicine, St. Petersburg State University, St. Petersburg, Russia
- 12.15-12.35 METRIS PRESENTATION: LABORAS SYSTEM APPLICATION FOR MOTOR BEHAVIOR IN ASSESSMENT OF THE ZINC SUCCINATE TOXIC EFFECT. R Bulthuis, L Bachdasarian, G Piavchenko, Metris B.V., Hoofddorp, The Netherlands, Sechenov University, R&D Pharmaceutical CJSC "Retinoids", Moscow, Russia
- 12.35-12.50 BREAK 1
- 12.50-15.45 SYMPOSIUM 1: LAPIN SYMPOSIUM ON NEUROPSYCHOPHARMACOLOGY Chairs: AV Kalueff (China, Russia, USA) and PD Shabanov (Russia)
- 12.50-13.00 INTRODUCTION: PROFESSOR IZYASLAV LAPIN
- 13.00-13.15 NEURONAL ROLE OF TRACE AMINE-ASSOCIATED RECEPTOR 2 (TAAR2). EV Efimova, SR Kuvarzin, NV Katolikova, D Smirnova, AA Kozlova, MS Mor, RR Gainetdinov, Institute of Translational Biomedicine, St. Petersburg State University, St. Petersburg, Russia
- **13.15-13.30 EXPERIMENTAL MODELING OF DOUBLE DIAGNOSIS: ANXIETY DISORDER AND ALCOHOLISM.** AY Egorov, IV Demyanko, AE Veraksa, EV Filatova, I.M. Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, I.I. Mechnikov North-West State Medical University, St. Petersburg State University, St. Petersburg, Russia
- 13.30-13.45 EFFECT OF HORMONAL AND NON-HORMONAL CORRECTORS ON SEXUAL MOTIVATION IN RATS AFTER CHRONIC SOCIAL ISOLATION. IYu Tissen, LA Magarramova, AS Kraskova, AA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia
- 13.45-14.00 LOCOMOTOR EFFECTS OF PDE10A INHIBITORS IN DOPAMINE-DEPLETED RATS: ACUTE AND REPEATED ADMINISTRATION. A Dorotenko, A Savchenko, S Kuvarzin, RR Gainetdinov, A Bespalov, I Sukhanov, First St. Petersburg State Medical University, Valdman Institute of Pharmacology, Institute of Translational Biomedicine, St. Petersburg State University, St. Petersburg, Russia
- **THE TRACE AMINE-ASSOCIATED RECEPTORS 5 MAY INVOLVE IN LOCOMOTOR FUNCTION.** D Kalinina, A Goriainova, R Gainetdinov, P Musienko, Institute of Translational Biomedicine, St. Petersburg State University, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, Russian Research Center of Radiology and Surgical Technologies, Ministry of Healthcare, Pavlov Institute of Physiology RAS, St. Petersburg, Russia

- **14.15-14.30** LONG-TERM EFFECTS OF BISPHENOL A ON LIPID METABOLISM OF FEMALE RATS. NK Apraksina, NN Klyueva, IO Suchkova, TV Avaliani, NI Dergacheva, EL Patkin, SG Tsikunov, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia
- **14.30-14.45 CALPAIN ACTIVITY IN THE CNS DAT-KO RATS**. DS Traktirov, NS Pestereva, TV Tyutyunnik, VS Artemova, ZS Fisenko, MN Karpenko, VM Klimenko, Pavlov Department of Physiology, Institute of Experimental Medicine, Peter the Great St. Petersburg Polytechnic University, Institute of Translation Biomedicine, St. Petersburg State University, St. Petersburg, Russia
- 14.45-15.00 EARLY LIFE LIPOLYSACCHARIDE EXPOSURE ALTERS STRESS-INDUCED CHANGES OF THE NMDA AND AMPA RECEPTOR EXPRESSION IN THE RAT BRAIN. OE Zubareva, VA Nikitina, AN Trofimov, MV Zakharova, AA Kovalenko, GV Beznin, DU Krytskaya, AP Schwarz, SG Tsikunov, Pavlov Department of Physiology, Institute of Experimental Medicine, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia
- 15.00-15.15 GHRELIN CONCENTRATION AND KINASE ACTIVITY ARE IN THE RELATIONSHIP AFTER STRESS EXPOSURE AND DRUG ADMINISTRATION. AA Blazhenko, PP Khokhlov, ER Bychkov, AS Devyashin, AA Lebedev, SN Proshin, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia
- 15.15-15.30 DANIO RERIO AS A NEW MODEL TO STUDY HORMONAL RESPONSE TO STRESS. PP Khokhlov, EA Sekste, AA Blazhenko, ER Bychkov, AA Lebedev, LK Khnychenko, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia
- 15.30-16.00 BREAK 2
- 16.00-19.05 SYMPOSIUM 2: JUBILEE SYMPOSIUM DEDICATED TO THE 130<sup>th</sup> ANNIVERSARY OF THE INSTITUTE OF EXPERIMENTAL MEDICINE (IEM)
  Chair: VM Klimenko (Russia)
- 16.00-16.15 WELCOMING ADDRESS FROM THE INSTITUTE OF EXPERIMENTAL MECICINE
- 16.15-16.35 ABNORMAL BEHAVIOR IN THE OFFSPRING OF RATS SUBJECTED TO HYPOXIA DURING PREGNANCY IS CORRECTED BY LACTOFERRIN. VB Vasilyev, AV Sokolov, VA Kostevich, NM Dubrovskaya, NN Nalivaeva, DS Vasilev, OL Runova, ET Zakharova, IV Semak, Al Budevich, IA Zhuravin, Institute of Experimental Medicine, St. Petersburg State University, Sechenov Institute of Evolutionary Physiology and Biochemistry, St. Petersburg State Pediatric Medical University, St. Petersburg, Russia, Belarus State University, Minsk, Scientific Practical Centre of Animal Breeding, Zhodino, Belarus
- 16.35-16.50 RESTRAINT STRESS AND BEHAVIORAL CHANGES IN MICE OF DIFFERENT GENOTYPE. II Poletaeva, NA Ogienko, AD Suleimanova, OV Perepelkina, IV Koshlan, AV Revishchin, Moscow State University, Institute of Gene Biology RAS, Moscow, Joint Institute for Nuclear Research, Dubna, Moscow Region, Russia
- CONTRIBUTION 16.50-17.05 DIFFERENTIAL OF CONTEXTUAL AND DISCRETE CONDITIONAL STIMULI TO FEAR MEMORY RETRIEVAL IN RATS. BT Varga, F Kassai, AJ Ernyey, A Gáspár, I Gyertyán, Semmelweis University, Department of and Pharmacotherapy, Cognitive Translational Pharmacology Behavioral Pharmacology Group, University of Veterinary Medicine, Institute for Biology, Budapest, Hungary
- **17.05-17.20 MANGANESE-INDUCED NEUROTRANSMISSION REMODELING.** IS Ivleva, TV Tyutyunnik, VA Maystrenko, MN Karpenko, VM Klimenko, I.P. Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia
- 17.20-17.35 REVERSE BEHAVIORAL PATTERN OF DAT-KO RATS UNDER PROGRESSIVE RATIO SCHEDULE OF REINFORCEMENT. AA Savchenko, RR Gainetdinov and IM Sukhanov, Valdman Institute of Pharmacology, Pavlov First St. Petersburg State

- Medical University, Institute of Translational Biomedicine, St. Petersburg State University, St. Petersburg, Russia
- 17.35-17.50 BEHAVIORAL CHANGES IN THE DOPAMINE TRANSPORTER (DAT) HETEROZYGOTE RATS. AR Gainetdinov, ZR Khismatullin, Department of Biology, Bashkir State University, Republic of Bashkortostan, Ufa, Russia
- 17.50-18.05 INVESTIGATION OF THE PHYSIOLOGICAL FUNCTIONS OF TRACE AMINE-ASSOCIATED RECEPTOR 9 (TAAR9). RZ Murtazina, SR Kuvarzin, IS Zhukov, EV Efimova, OM Korenkova, NV Alenina, RR Gainetdinov, Institute of Translational Biomedicine, St. Petersburg State University, St. Petersburg, Russia, Max Delbrück Center for Molecular Medicine, Berlin, Germany
- **18.05-18.20 INTESTINAL MICROBIOTA AND MENTAL HEALTH. CAN PROBIOTICS HELP?** IN Abdurasulova, VM Klimenko, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia
- 18.20-18.35 KINETIC ANALYSIS OF PHASIC DOPAMINE INCREASES IN THE RAT N. ACCUMBENS CORE AND SHELL CHANGING UNDER THE ACUTE INFLUENCE OF AMYLOID B 25-35. V Mukhin, V Sizov, K Pavlov, I Borovets, VM Klimenko, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia
- 18.35-18.50 THE DE RITIS RATIO AS A MARKER OF CATABOLIC AND ANABOLIC REACTIONS IN HYPERACTIVITY AND OBESITY. SA Apryatin, MV Bolshakova, AL Manasyan, EK Turkeeva, VM Klimenko, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia
- 18.50-19.05 THE INFLUENCE OF TREADMILL SPEED ON DIFFERENT LOCOMOTOR MODES OF DECEREBRATE CAT. V Lyakhovetskii, N Merkulieva, O Gorskii, P Musienko, Pavlov Institute of Physiology RAS, Russian Scientific Center for Radiology and Surgical Technologies, St. Petersburg State University, St. Petersburg State Research Institute of Phthisiopulmonology, Ministry of Healthcare, St. Petersburg, Russia

#### Day 2. Thursday, September 17, 2020

Venue: Oktiabrskaya Hotel, 10 Ligovsky Prospect, St. Petersburg, Russia

- 10.00-11.30 SYMPOSIUM 3: CLINICAL STRESS NEUROSCIENCE Chair: D Kozic (Serbia)
- 10.00-10.15 WORK STRESS INTERVENTIONS: RESILIENCE TRAINING, SYSTEM INTERVENTIONS AND LEADERSHIP BASED CHANGE. JAK Erskine and GJ Georgiou, St George's, University of London and University of Hertfordshire, London, Hertfordshire, UK
- **10.15-10.30 SELF-STRESS MANAGEMENT IN THE WORKPLACE.** Ph Fauquet-Alekhine, B Guion de Meritens, SEBE-Lab, Department of Psychological and Behavioural Science, LSE, London, UK, Lab. for Research in Science of Energy, France, Nuclear Power Plant of Chinon, EDF-FARN (Nuclear Fast-Action Force), France
- 10.30-10.45 THE PSYCHOLOGICAL NATURE OF ALEXITHYMIA AND FUNCTIONAL CONNECTIVITY REORGANIZATION. SV Tukaiev, TV Vasheka, ON Dolgova, Research Institute, National University of Physical Education and Sports of Ukraine, Kiev, Ukraine
- 10.45-11.00 GENDER DIFFERENCES IN EMOTION INDUCTION BY MANUPULATED FEEDBACK DURING DESICION MAKING TASK. AT Kamzanova, V Pivkina, G Matthews, AM Kustubayeva, Center for Cognitive Neuroscience, al-Farabi Kazakh National University, Almaty, Kazakhstan, University of Central Florida, Orlando, USA
- 11.00-11.15 INITIALLY UNRECOGNIZED NEUROMYELITIS OPTICA SPECTRUM DISORDER WITH CONSEQUENT END-STAGE SPINAL CORD ATROPHY. I Nosek, J Boban, D

- Vlahovic, B Radovanovic, D Tihomir, D Kozic, University of Novi Sad, Faculty of Medicine, Oncology Institute of Vojvodina, Novi Sad, Serbia
- 11.15-11.30 PREDICTION OF AUTONOMIC DYSFUNCTION TO MOTOR SEVERITY IN PARKINSON'S DISEASE IN SOUTHERN CHINESE. C Cui, East Hospital, Tongji University School of Medicine, Shanghai, China
- 11.30-11.45 BREAK 1
- 11.45-12.05 NOLDUS PRESENTATION: THE STANDARDIZATION PARADOX: BETTER DATA WITH NATURALISTIC BEHAVIORAL TESTS. A Willemsen, Noldus IT, Wageningen, The Netherlands
- 12.05-12.25 BIOGEN-ANALYTICA PRESENTATION: MODERN ANIMAL CARE SYSTEMS (USA). M Chemeris, Biogen-Analytica, LLC, Moscow, Russia
- 12.25-16.20 SYMPOSIUM 4: ZUKOWSKA STRESS NEUROSCIENCE SYMPOSIUM Chairs: AV Kalueff (China, Russia, USA) and VM Klimenko (Russia)
- 12.25-12.35 INTRODUCTION: PROFESSOR ZOFIA ZUKOWSKA
- **12.35-12.50 MODERN IMAGING IN CLINICAL AND BEHAVIOURAL NEUROSCIENCE.** D Kozić, University of Novi Sad Faculty of Medicine, Novi Sad, Serbia
- 12.50-13.05 BLOOD-BASED LIPIDOMICS OF SCHIZOPHRENIA AND OTHER PSYCHIATRIC DISORDERS. D Petrova, A Tkachev, Ph Khaitovich, Skolkovo Institute of Science and Technology, Moscow, Russia
- 13.05-13.20 MATERNAL HYPERHOMOCYSTEINEMIA DISRUPTS NEUROPIL FORMATION IN RAT HIPPOCAMPUS INDUCING MEMORY DEFICIT IN ADULTHOOD. DS Vasilev, AD Shcherbitskaia, NL Tumanova, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia
- 13.20-13.35 MODULATION OF DETRUSOR MUSCLE AND EXTERNAL URETHRAL SPHINCTER ACTIVITY BY SITE-SPECIFIC ELECTRICAL STIMULATION OF RAT SPINAL CORD. Y Sysoev, E Bazhenova, V Lyakhovetskii, G Kovalev, P Shkorbatova, N Pavlova, O Gorskii, N Merkulyeva, D Shkarupa, P Musienko, Institute of Translational Biomedicine, St. Petersburg State University, Department of Pharmacology and Clinical Pharmacology, St. Petersburg State Chemical-Pharmaceutical University, Pavlov Institute of Physiology RAS, Russian Research Center of Radiology and Surgical Technologies, Ministry of Healthcare, Clinic of High Medical Technologies, St. Petersburg State University, St. Petersburg, Russia
- 13.35-13.50 ACTIVATION OF STRESS- AND NEUROPLASTICITY-RELATED GENES IN THE HIPPOCAMPUS OF RATS FOLLOWING MORRIS WATER MAZE TRAINING. PE Panchenko, HM Goss, KR Mifsud, EM Price, JMHM Reul, Neuro-Epigenetics Research Group, University of Bristol, Bristol Medical School, Bristol, UK
- 13.50-14.05

  INTEGRATING ELEVATED PLUS MAZE AND DARK/LIGHT BOX TO DETECT ANXIETY-RELATED BEHAVIOR DUE TO SYNERGISTIC EFFECT OF PSYCHOSOCIAL STRESS IN OBESE MALE MICE. C Baroni, C Spalletti, J Agrimi, V Casieri, M Caleo, V Lionetti, Sant'Anna School of Advanced Studies, Neuroscience Institute, National Research Council (CNR), Pisa, Italy
- 14.05-14.35 BREAK 2
- 14.35-14.50 MOLECULAR ALTERATIONS IN BRAIN, BONE MARROW, TESTIS AND ADRENAL GLANDS OF STRESSED MICE. MP Petrova, TS Glinin, VA Mamontova, V Shcherbinina, AB Volnova, PA Starshova, EV Daev, PE Khaitovich, CAS-MPG Partner Institute for Computational Biology, Shanghai Institutes for Biological Sciences CAS, Shanghai, China
- 14.50-15.05 ACUTE PAIN AS A POSSIBLE CAUSE OF A NEGATIVE STRESS REACTION THAT PROVOKES TACHYARRHYTHMIA IN ELDERLY PEOPLE. VP Nesterov, Al Burdygin, KB Ivanov, SA Filenko, SV Nesterov, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

- 15.05-15.20 NOREPINEPHRINE AND SEROTONIN IN THE DIFFERENT REGIONS OF THE CENTRAL NERVOUS SYSTEM OF DAT -/- RATS. NS Pestereva, DS Traktirov, AZ Marshak, VS Artemova, ZS Fisenko, MN Karpenko, VM Klimenko, Pavlov Department of Physiology, Institute of Experimental Medicine, Peter the Great St. Petersburg Polytechnic University, Institute of Translation Biomedicine, St. Petersburg State University, St. Petersburg, Russia
- **15.20-15.35 EMOTIONAL OVEREATING INDUCED BY BRAIN STIMULATON REWARD IN FREE-FED RATS.** NS Efimov, AA Lebedev, YuN Bessolova, ER Bychkov, VA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia
- 15.35-15.50 ANTICONVULSANT PROPERTIES OF THE NEW GLUTAMATE NMDA-RECEPTOR COMPLEX ANTAGONISTS 1,2-SUBSTITUTED IMIDAZOL-4,5-DICARBOXYLIC ACIDS. EE Jakovleva, SP Foksha, MA Brusina, LG Kubarskaja, LB Piotrovskij, ER Bychkov, PD Shabanov, Institute of Experimental Medicine, St. Petersburg, Russia
- 15.50-16.05 ROLE OF THE GRELIN SYSTEM IN ANXIETY AND STABILITY OF THE PERIPHERAL BLOOD GENOME AFTER VITAL STRESS. GP Kosyakova, AG Pshenichnaya, KE Gramota, IV Kazurov, VA Lebedev, Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg State University of Chemical Pharmaceuticals, St. Petersburg, Russia
- 16.05-16.20 DYNAMICS OF GLUTAMATE METABOTROPIC RECEPTOR GENES EXPRESSION IN THE RAT BRAIN IN THE MODEL OF TEMPORAL LOBE EPILEPSY. AA Kovalenko, MV Zakharova, AP Schwarz, OE Zubareva, AV Dyomina, AV Zaitsev, Sechenov Institute of Evolutionary Physiology and Biochemistry, St. Petersburg, Russia
- 16.20-17.20 SYMPOSIUM 5: ZNRC ZEBRAFISH NEUROSCIENCE SYMPOSIUM Chair: AV Kalueff (Russia, USA, China)
- **16.20-16.35 METHODS FOR MODELING PTSD IN ZEBRAFISH: A PILOT STUDY.** AV Zhdanov, SL Khatsko, KN Zabegalov, AV Kalueff, Ural Federal University, Yekaterinburg, Russia
- 16.35-16.50

  NON-PHARMACOLOGICAL AND PHARMACOLOGICAL APPROACHES FOR PSYCHIATRIC DISORDERS FROM ZEBRAFISH MODELS. MS de Abreu, ACVV Giacomini, R Genario, N Rech, J Carboni, AM Lakstygal, TG Amstislavskaya, KA Demin, BE Leonard, M Vlok, BH Harvey, A Piato, LJG Barcellos and AV Kalueff, Bioscience Institute, Postgraduate Program in Environmental Sciences, University of Passo Fundo, Passo Fundo, Brazil, Institute of Translational Biomedicine, St. Petersburg State University, Institute of Experimental Medicine, Almazov National Medical Research Center, St. Petersburg, Institute of Physiology and Basic Medicine, Novosibirsk, Russia, University College Galway, Pharmacology Department, Galway, Ireland, Center of Excellence for Pharmaceutical Sciences, School of Pharmacy, North-West University, Potchefstroom, South Africa, Postgraduate Program in Neurosciences, Federal University of Rio Grande do Sul, Porto Alegre, Postgraduate Program in Pharmacology, Federal University of Santa Maria, Santa Maria, Brazil, School of Pharmacy, Southwest University, Chongqing, China
- 16.50-17.05 MODELING ANTIDEPRESSANT DISCONTINUATION SYNDROME (ADS) VIA REPEATED WITHDRAWAL FROM PAROXETINE TREATMENT IN ZEBRAFISH. KN Zabegalov, AV Zhdanov, SL Khatsko, and AV Kalueff, Ural Federal University, Ekaterinburg, Russia, School of Pharmacy, Southwest University, Chongqing, China
- 17.05-17.20 DEEP LEARNING-BASED APPLICATION FOR PREDICTION OF DRUG-INDUCED BEHAVIOR IN ZEBRAFISH. DV Bozhko, GK Galumov, Al Polovjan, SM Kolchanova, VO Myrov, VA Stelmakh and AV Kalueff, ZebraML, St. Petersburg, Russia, School of Biological Sciences, University of Queensland, Queensland, Australia, Neuroscience Center, Helsinki Institute of Life Science, University of Helsinki, Helsinki, Finland, Department of Neuroscience and Biomedical Engineering, Aalto University, Helsinki, Finland, Skolkovo Institute of Science and Technology, Center of Life Sciences, Moscow, Russia, School of Pharmacy, Southwest University, Chongqing, China

### Day 3. Friday, September 18, 2020

Venue: Oktiabrskaya Hotel, 10 Ligovsky Prospect, St. Petersburg, Russia

10.00-13.00 CONFERENCE POSTER SESSION

FIGHT, FLIGHT OR FREEZE? MECP2 INVOLVEMENT IN CHOOSING THE STRATEGY TO COPE WITH STRESS. L Cosentino, F Zidda, S Witt, L Di Crescenzo, H Flor, B De Filippis, Center for Behavioral Sciences and Mental Health, Istituto Superiore di Sanità, PhD Program in Behavioral Neuroscience, Sapienza University of Roma, Italy, Department of Cognitive and Clinical Neuroscience, Central Institute of Mental Health, Department of Genetic Epidemiology in Psychiatry, Central Institute of Mental Health, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany

MORPHOLOGICAL ANALYSIS OF THE HUMAN STRIATAL NEURONS FOLLOWED BY A REVIEW OF THEIR ROLE IN MEDIATING BEHAVIOR. B Krstonošić, NT Milošević, R Perić, University of Novi Sad, Faculty of Medicine, Department of Anatomy, Novi Sad, Serbia

**MODELING WITHDRAWAL FROM CHRONIC PAROXETINE TREATMENT IN ZEBRAFISH.** KN Zabegalov, SL Khatsko, MV Bytov, I Yushchenko, and AV Kalueff, Ural Federal University, Ekaterinburg, Russia, School of Pharmacy, Southwest University, Chongqing, China

**NEUROCHEMISTRY OF THE ZEBRAFISH TAIL IMMOBILIZATION EXPOSURE.** NA Krotova, KA Demin, AV Kalueff, Institute of Translational Biomedicine, St. Petersburg State University, Institute of Experimental Medicine, Almazov National Medical Research Centre, Ministry of Healthcare, St. Petersburg, Russia

**DOSE-DEPENDENT EFFECTS OF SERTRALINE EXPOSURE IN ZTI ASSESSED USING AUTOMATED BEHAVIORAL VIDEO-TRACKING.** NA Levchenko, AS Taranov, NP Ilyin, KA Demin, AV Kalueff, Institute of Translational Biomedicine, St. Petersburg State University, Institute of Experimental Medicine, Almazov National Medical Research Centre, Ministry of Healthcare, St. Petersburg, Russia

BIDIRECTIONAL EFFECTS OF RESERPINE ON DESPAIR-LIKE BEHAVIOR IN THE ZEBRAFISH TAIL IMMOBILIZATION TEST. M Seredinskaya, KA Demin, AV Kalueff, Institute of Translational Biomedicine, St. Petersburg State University, Institute of Experimental Medicine, Almazov National Medical Research Centre, Ministry of Healthcare, St. Petersburg, Russia

IL-1RA THERAPY PARTIALLY PREVENTED EPILEPTOGENESIS AND BEHAVIORAL DYSFUNCTION IN RATS IN THE LITHIUM-PILOCARPINE MODEL OF TEMPORAL LOBE EPILEPSY. AV Dyomina, OE Zubareva, IV Smolensky, AA Karepanov, AM Ishchenko, AV Zaitsev, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, Research Institute of Highly Pure Biopreparations, Federal Medical-Biological Agency, St. Petersburg, Russia

**INVESTIGATION THE DOPAMINERGIC CONTROL OF POSTURAL FUNCTION.** D Kalinina, O Gorsky, V Lyakhovetskii, N Pavlova, R Gainetdinov, P Musienko, Institute of Translational Biomedicine, St. Petersburg State University, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, Russian Research Center of Radiology and Surgical Technologies, Ministry of Healthcare, Pavlov Institute of Physiology RAS, St. Petersburg, Russia

**THE INFLUENCE OF SOBER OR DRINKING RAT CAGE MATES ON ALCOHOL PREFERENCE.** EV Filatova, IV Demynko, SV Afanasyev, AA Orlov, AY Egorov, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

BEHAVIORAL CHANGES CAUSED BY BISPHENOL A IN RESPONSE TO AN AVERSIVE STIMULUS IN FEMALE RATS. NK Apraksina, IO Suchkova, TV Avaliani, NI Dergacheva, EL Patkin, SG Tsikunov, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia

THE EFFECT OF VITAL STRESS ON ANXIETY AND BRAIN GENOME WIDE DNA METHYLATION OF MALE RATS. NK Apraksina, TV Avaliani, IO Suchkova, NI Dergacheva, EL Patkin, SG Tsikunov, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia

**BLOOD CATALASE CONTENT IN CHILDREN WITH VARIOUS FORMS OF AUTISM SPECTRUM DISORDERS.** EM Malsagova, IS Ivleva, VA Maistrenko, SG Belokoskova, and SG Tsikunov, Pavlov Department of Physiology, Institute of Experimental Medicine, St. Petersburg, Russia

**SERUM CYTOKINES LEVELS IN PATIENTS WITH PARKINSON'S DISEASE AND ESSENTIAL TREMOR.** ZM Muruzheva, DO Sholokhova, DS Traktirov, IS Ivleva, VA Maystrenko, MN Karpenko, VM Klimenko, Pavlov Department of Physiology, Institute of Experimental Medicine, Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia

THE EFFECTS OF GLIBENCLAMIDE ADMINISTRATION ON CNS CELLS IN NORMAL CONDITIONS AND UNDER ENDOTOXEMIA. AS Zubov, AG Karaev, TV Tiutiunnik, MN Karpenko, VM Klimenko, Institute of Experimental Medicine, St. Petersburg Chemical Pharmaceutical University, Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia

LINGERING EFFECT OF CHRONIC SLEEP RESTRICTION ON LONG-TERM MEMORY IN RATS. MA Guzeev, NC Kurmazov, VV Simonova, YuF Pastukhov, IV Ekimova, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

INVESTIGATION OF CHRONIC SLEEP RESTRICTION EFFECT ON EMOTIONAL BEHAVIOUR IN RATS. MB Pazi, KV Lapshina, DV Belan, MV Chernishev, IV Ekimova, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

EFFECTS OF MELANOCORTIN MC4 RECEPTOR ANTAGONIST ML00253764 ON THE EMOTIONAL BEHAVIOR AND CONDITIONED PLACE PREFERENCE OF ETHANOL IN RATS. ME Abrosimov, EA Vetlugin, AR Moskalev, AG Pshenichnaya, IYu Tissen, KB Abasova, PP Khokhlov, ER Bychkov, AA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

#### 11.45-12.00 BREAK

THE ALCOHOL WITHDRAWAL CHANGES EXPRESSION OF GENES OF TOLL-LIKE RECEPTORS IN THE STRUCTURES OF THE RAT BRAIN. MI Airapetov, SO Eresko, ER Bychkov, AA Lebedev, PD Shabanov, Institute of Experimental Medicine, St. Petersburg State Pediatric Medical University, National Research ITMO University, St. Petersburg, Russia

THE EXPRESSION OF POSTSYNAPTIC DENSITY PROTEIN-95 IN THE STRIATUM IN RAT MODEL OF PARKINSON'S DISEASE AND LEVODOPA-INDUCED DYSKINESIA. ER Bychkov, EV Gurevich, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia, Vanderbildt University, Nashvile, USA

**EFFECTS OF CHRONIC TREATMENT WITH DOPAMINERGIC DRUGS ON ERK SIGNALING IN PARKINSONIAN RATS.** ER Bychkov, EV Gurevich, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

ASSESSMENT OF DOSE-DEPENDENT EFFECTS OF ANXIOLYTIC DIAZEPAM IN DANIO RERIO. AS Devyashin, AA Blazhenko, VA Lebedev, AA Lebedev, ER Bychkov, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

**FEATURES OF THE INVOLVEMENT OF THE DOPAMINE AND SEROTONIN BRAIN SYSTEMS IN POSITIVE AND NEGATIVE EMOTIONAL STATES IN RATS.** NS Efimov, ER Bychkov, AA Lebedev, IV Karpova, AE Kryukov, SS Pyurveev, NS Pavlov, BB Daliev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

**EFFECTS OF NEW COUMARIN COMPOUNDS ON BEHAVIOR IN RATS.** AO Kashirin, AG Pshenichnaya, ER Bychkov, VA Lebedev, AA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

ROLE OF OREXIN IN THE KARIOTYPIC STABILITY OF PERIPHERAL BLOOD MONONUCLEARS AND OBSESSIVE-COMPULSIVE BEHAVIOR IN ALCOHOLIZED RATS. GP Kosyakova, IYu Tissen, PV Shalyapin, VA Lebedev, Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg State University of Chemical Pharmaceuticals, St. Petersburg, Russia

ACTIVATION OF MITOCHONDRIAL KATP CHANNEL WITH URIDINE CAN LIMIT THE MYOCARDIAL STRESS CAUSED BY POSTISCHEMIC REPERFUSION. IB Krylova, EN Selina, VV Bul'on, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

CONSEQUENCES OF HYPOXIC-ISCHEMIC DAMAGE IN THE BRAIN OF INFANT RATS. NN Kuznetsova, Institute of Experimental Medicine, St. Petersburg, Russia

**EFFECTS OF KRAMIZOLE ON THE EXPRESSION OF APO A-I, ApoC2, and SR-B1 GENES IN THE RAT'S HYPERCHOLESTEROL DYSLIPIDEMIA MODEL.** AV Lizunov, IV Okunevich, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of the Experimental Medicine, St. Petersburg, Russia

THE EFFECTS OF KRAMIZOLE AND PHENOFIBRATE DRUGS ON TRYGLICERIDES IN RATS, TREATED WITH CHOLESTEROL DIET. AV Lizunov, IV Okunevich, GP Kosyakova, LB Piotrovskiy, PD Shabanov, Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

MECHANISMS OF NEUROADAPTATION TO ACUTE STRESS INFLUENCE: UNEXPECTED EXPERIMENTAL DATA. AV Lyubimov, IYu Thyssen, PP Khokhlov, AA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

PHARMACOLOGICAL ANALYSIS OF THE EFFECT OF THE Y1R ANTAGONIST NEUROPEPTIDE Y BMS 193885 ON THE EMOTIONAL, INTRASPECIFIC BEHAVIOR AND REINFORCING PROPERTIES OF ETHANOL IN RATS. AR Moskalev, ME Abrosimov, EA Vetlugin, AG Pshenichnaya, IYu Tissen, AS Ivankov, ER Bychkov, NR Evdokimova, AA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

PROTECTIVE ACTION OF TAUREPAR, URIDINE AND ITS NUCLEOTIDES UNDER FORCED SWIMMING AND COLD EXPOSURE. AF Safonova, OM Rodionova, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

LOPERAMIDE AND LACTITOL INTENSIFY THE PHYSICAL ENDURANCE OF RATS DURING EMOTIONAL-PHYSICAL STRESS. AF Safonova, IB Krylova, KA Shemerovsky, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

ANXIOLYTIC AND ANTIADDICTIVE EFFECTS OF MELANIN CONCENTRATING HORMONE ANTAGONIST 1R SNAP 94847 IN RATS. EA Vetlugin, ME Abrosimov, AR Moskalev, AG Pshenichnaya, IYu Tissen, KG Konkova, PP Khokhlov, ER Bychkov, AA Lebedev, PD Shabanov, S.V. Anichkov Department of Neuropharmacology, Institute of Experimental Medicine, St. Petersburg, Russia

**DISTRIBUTION OF LAYER-SPECIFIC MARKERS IN HUMAN NEOCORTEX DURING THE SECOND HALF OF GESTATION.** EA Kozubenko, NA Sidorova, LA Tkachenko, PA Zykin, El Krasnoshekova, St. Petersburg State University, Russia, St. Petersburg State Pediatric Medical University, St. Petersburg, Russia

**DETERMINATION OF THE OPTIMAL CONCENTRATION OF THE PROTEIN-ANTIGEN COMPLEX FOR THE DETECTION OF CORTISOL BY IMMUNOCHROMATOGRAPHY.** EV Panfilova, Institute of Biochemistry and Physiology of Plants and Microorganisms RAS, Saratov, Russia

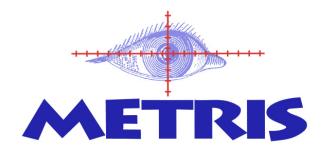
ACUTE BEHAVIORAL EFFECTS OF ASPIRIN (ACETYLSALICYLIC ACID) IN ADULT ZEBRAFISH. DS Galstyan, KA Demin, TO Kolesnikova, AV Kalueff, Institute of Translational Biomedicine, St. Petersburg State University, Institute of Experimental Medicine, Almazov National Medical Research Centre, Ministry of Healthcare of Russian Federation, St. Petersburg, Ural Federal University, Ekaterinburg, Russia, School of Pharmacy, Southwest University, Chongqing, China

**SCHIZOPHRENIA - MINOR PHYSICAL ANOMALIES OF HANDS AND FEET.** S Zigic, B Srdic Galic, SS Babovic, S Lovrencic, DJ Siladji Mladenovic, Z Gajic, University of Novi Sad, Faculty of Medicine, Serbia

**DELAYED EFFECT OF ACUTE HYPOBARIC HYPOXIA ON ABSENCE EPILEPSY.** KR Abbasova, EA Volkova. Department of Human and Animal Physiology, School of Biology, Lomonosov Moscow State University, Moscow, Russia

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