

**Centre for Physiology and Biochemical Research (CPBR)  
The Russian Society for BioPsychiatry (RSBP)  
Ukrainian Society for Biological Psychiatry (USBP)  
Institute of Experimental Medicine (IEM RAMS)**

# **Final Program**

**12-th Multidisciplinary International  
Neuroscience and Biological Psychiatry  
Conference "Stress and Behavior"**

St-Petersburg, Russia  
May 16-20, 2009

**Day 1, May 16, 2009**  
**Morning session**

**9.30-10.00 Opening Ceremony and Welcoming Addresses**

**10.00-10.40 Plenary lecture 1. ZEBRAFISH (*DANIO RERIO*) IN NEUROBEHAVIORAL RESEARCH: NEW MODELS, NEW APPLICATIONS, NEW CHALLENGES.** A Kalueff, Pharmacology Dept., Tulane University Medical School, New Orleans, USA

**10.40-11.00 Coffee break**

**11.00-13.00 Symposium 1. Serotonin transporter and the brain. Presentations 30 min**  
**Chairs:** J Homberg (Netherlands), A Kalueff (USA)

**UNDERSTANDING SEROTON-MEDIATED NEURODEVELOPMENTAL CHANGES IN THE BRAIN'S EMOTIONAL-COGNITIVE SYSTEM USING RATS LACKING THE SEROTONIN TRANSPORTER.** J Homberg. Donders Institute for Brain, Cognition and Behavior, Centre for Neuroscience, Radboud University Nijmegen Medical Centre, Department of Cognitive Neuroscience, Molecular Neurobiology Group, Nijmegen, The Netherlands

**WISTAR-ZAGREB 5HT RATS: A RODENT MODEL WITH CONSTITUTIONAL UPREGULATION/DOWNREGULATION OF SEROTONIN TRANSPORTER.** B Jernej, L Cicin-Sain, Rudjer Boskovic Institute, Zagreb, Croatia

**RISK, RESILIENCE, AND GENE X ENVIRONMENT INTERACTIONS IN RHESUS MONKEYS.** S Suomi, Laboratory of Comparative Ethology, National Institute of Child Health and Human Development, NIH, Bethesda, MD, USA

**BRAIN-DERIVED NEUROTROPHIC FACTOR (BDNF) DEFICIENT MICE: A MODEL OF PREDISPOSITION TO DEPRESSION.** J Hensler, L Daws, W Koek, University of Texas Health Science Center, San Antonio, Texas, USA

**13.00-14.00 Lunch break**

## Afternoon session

**14.00-15.00 PLENARY LECTURE 2. THE IMPORTANCE OF THE ENERGY PARAMETER IN BEHAVIORAL PHARMACOLOGY.** L Bachdasarian, R Bulthuis, Metris B.V. Hoofddorp, The Netherlands

**15.00-16.00 PLENARY LECTURE 3. SYNERGISTIC EFFECT OF DRUG ADMINISTRATION AND BEHAVIOR TRAINING ON SOCIAL DEVELOPMENTAL DEFICIT THROUGH SENSITIVE PERIOD.** S Nakamura, D Mochizuki, T Okuya, A Senoh, K Shimizu, Y Sugiura, M Koshiba, Tokyo University of Agriculture and Technology, Tokyo, Japan

### **16.00-16.20 Coffee break**

**16.20-18.00 Symposium 2. Translational neuroscience I. Presentations 20 min**  
**Chairs:** A Kalueff (USA), M Koshiba (Japan)

**STRESS AND EXPERIMENTAL INTRACEREBRAL HEMORRHAGE: CHANGE BIOGENIC AMINES IN THE BRAIN CORTEX IN THE RATS WITH VARIOUS EMOTIONAL RESISTANCE.** E Koplik, V Krilin, N Ivannikova, Anokhin Institute of Normal Physiology RAMS; Cardiologic Science Center RAMS, Moscow, Russia

**EFFECTIVENESS OF THE HOMEOPATHIC PREPARATION NEUREXAN<sup>®</sup> COMPARED WITH COMMONLY USED VALERIAN-BASED PREPARATIONS FOR THE TREATMENT OF NERVOUSNESS/RESTLESSNESS.** R Hübner, Rvan Haselen, P Klein, Westring, Landau Germany; Biologische Heilmittel Heel GmbH, Baden-Baden, Germany; D.S.H. Statistical Services, Rohrbach, Germany

**THE INFLUENCE OF RISPOLENT (RISPERIDONE) ON THE BRAIN DOPAMINE SYSTEM IN RATS.** A Hramenkova, V Kuzik, D Makina, I Morina, E Araustakesyan, G Mazo, M Ivanov, G Oganessian, Sechenov Institute of Evolutionary Physiology and Biochemistry, Bekhterev Research Institute, St. Petersburg, Russia.

**ZEBRAFISH MODELS OF ANXIETY AND DEPRESSION AND ANTIDEPRESSANT ACTION.** R Egan, C Bergner, J Cachat, P Canavello, P Hart, H Amri, E Glasgow, Z Zukowska, A Kalueff. Department of Physiology and Biophysics, Georgetown University Medical Center, Washington, DC; Pharmacology Department, Tulane University Medical School, New Orleans LA, USA

**CONCLUDING REMARKS AND DISCUSSION**

**Day 2, May 17, 2009**  
**Morning session**

**9.00-9.40 PLENARY LECTURE 4. IMAGING STUDIES OF SEROTONIN SYNTHESIS WITH LABELLED A-METHYL-L-TRYPTOPHAN IN RAT MODELS OF DEPRESSION AND HUMANS SUFFERING FROM AFFECTIVE DISORDERS.** M Diksic. Department of Neurology and Neurosurgery, McGill University, Montreal, QC, Canada; Faculty of Medicine, J.J. Strossmayer University, Osijek, Croatia

**9.40-10.40 PLENARY LECTURE 5. NOLDUS TOOLS FOR STRESS BEHAVIORAL RESEARCH.** RF Roelofs. Noldus Information Technology, Wageningen, The Netherlands

**10.40-11.00 Coffee break**

**11.00-13.00 Symposium 4. Cocaine and reward. Presentations 30 min**  
**Chair:** R Gainetdinov (Italy)

**THE ROLE OF GPCR REGULATORY MACHINERY IN COCAINE ACTIONS.** R Gainetdinov, Department of Neuroscience and Brain Technologies, Italian Institute of Technology, Genova, Italy; Department of Cell Biology, Duke University, Durham, NC, USA

**ACCUMBAL DOPAMINE CHANGES CORRELATED WITH COCAINE- AND STRESS-INDUCED BEHAVIORS.** E Budygin, Wake Forest University School of Medicine, Winston-Salem, NC, USA

**DOPAMINE TRANSIENTS IN THE NUCLEUS ACCUMBENS DURING COCAINE SELF ADMINISTRATION.** R Wightman, Department of Chemistry and Neuroscience Center, University of North Carolina, Chapel Hill, NC, USA

**STRESS AND COCAINE INTERACT TO MODULATE BRAIN DERIVED NEUROTROPHIC FACTOR EXPRESSION AND SIGNALING.** F Fumagalli, Center of Neuropharmacology, Department of Pharmacological Sciences, University of Milan, Italy

**13.00-14.00 Lunch break**

## Afternoon session

**14.00-14.40 PLENARY LECTURE 6. FACTORS OF REPRODUCIBILITY OF ANHEDONIA INDUCTION IN A CHRONIC STRESS DEPRESSION MODEL IN MICE.** T Strekalova, HW Steinbusch, Department of Neuroscience, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, The Netherlands

**14.40-18.00 Symposium 5. Translational neuroscience II. Presentations 20 min**

**Chairs:** T Strekalova (Netherlands), D Avgustinovich (Russia)

**A NEW QUANTITATIVE TRANSLATION SYSTEM OF PSYCHIATRIC CONDITION BASED ON BEHAVIOR MARKER ANALYSIS FROM SOCIAL DEVELOPMENT MODEL**

M Koshiba, K Mimura, T Okuya, A Senoh, K Shimizu, Y Sugiura, D Mochizuki, Y Shirakawa, S Fukasawa, T Ogino, I Aoki, I Kanno, S Nakamura, Tokyo University of Agriculture and Technology, Tokyo; National Institute of Radiological Sciences, Chiba, Japan

**INVOLVEMENT OF SUPERIOR COLLICULUS IN SELECTING BEHAVIORAL RESPONSES IN RATS WHILE IN A CONFLICTING AND STRESSFUL CONTEXT.** E Comoli, P Mercez, University of São Paulo, São Paulo, Brazil

**FEMALES ARE MORE SENSITIVE TO STRESS THAN MALES.** D Avgustinovich, I Kovalenko, Institute of Cytology and Genetics SD RAS, Novosibirsk, Russia.

## 15.40-16.00 Coffee break

**ACUTE AND LONG-TERM EFFECTS OF CHRONIC SOCIAL STRESS AND AGING ON COGNITION: INVOLVEMENT OF NOVEL SYNAPTIC CELL ADHESION MOLECULES.** M Wolf, X Wang, S Scharf, C Liebl, F Holsboer, M Müller, M Schmidt, Max Planck Institute of Psychiatry, Munich, Germany

**VASOPRESSIN PREVENTS THE DEVELOPMENT OF MOTOR AND EMOTIONAL DISORDERS IN POSTERITY OF FEMALE RATS WITH PSYCHOGENIC TRAUMA.** S Tsikunov, T Avaliani, N Apraksina, O Fedotova, Institute for Experimental Medicine RAMS, St. Petersburg, Russia

**MANGANESE-ENHANCED MRI REVEALS THE ALTERED ACTIVITY OF HYPOTHALAMIC NUCLEI AND HIPPOCAMPUS OF MOUSE IN RESPONSE TO FORMALIN AND KETAMINE ADMINISTRATION.** B Lei, J Chen, H Yin, Department of Anatomy and Cell Biology, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan, ROC

**ACTIVITY OF CALPAIN SYSTEM IN NERVOUS AND IMMUNE CELLS IN MODEL OF MULTIPLE SCLEROSIS.** M Karpenko, I Abdurasulova, V Klimenko, Institute for Experimental Medicine RAMS, St. Petersburg, Russia

**AMPLITUDE OF HEART RATE MODULATION WITH THE PERIOD OF 3 CARDIOCYCLES DEPENDS ON THE PHYSIOLOGICAL AROUSAL OF BRAIN.** V Mukhin, Institute of Experimental Medicine, St. Petersburg, Russia

**CONCLUDING REMARKS AND DISCUSSION**

**Day 3, May 18, 2009**  
**Morning session**

**10.00-10.40 PLENARY LECTURE 7. ACTIVATION OF IMMUNE SYSTEM IN EARLY ONTOGENESIS IMPAIRS THE FORMATION OF COGNITIVE FUNCTIONS.** V Klimenko, O Zubareva, Institute for Experimental Medicine RAMS, St. Petersburg, Russia

**10.40-11.00 Coffee break**

**11.00-13.00 Symposium 6. Alcoholism. Lecture 30 min, Presentations 20 min**  
**Chair:** A Egorov (Russia)

**11.00-11.40 PLENARY LECTURE 8. CURRENT ASPECTS OF EARLY ALCOHOLISM IN RUSSIA.** A Egorov, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg State University, St. Petersburg, Russia

**THE INFLUENCE OF SOCIAL INTERACTIONS ON THE DEVELOPMENT OF ALCOHOLISM IN RATS.** A Egorov, T Filatova, T Shnitko, A Afanas'ev, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg State University, St. Petersburg, Russia

**EXPERIMENTAL STUDY OF ALCOHOL INFLUENCE ON BIOLOGICAL EFFECTS OF ANTIDEPRESSANTS.** E Kutcher, M Shevchuk, A Petrov, Department of Psychiatry and Addictions, Medical Faculty, St. Petersburg State University; Institute of Evolutionary Physiology and Biochemistry RAS; FSRF Institute of Toxicology FMBAR, St. Petersburg, Russia

**CONCLUDING REMARKS AND DISCUSSION**

**13.00-14.00 Lunch break**

## Afternoon session

**14.00-18.00 Symposium 7. Genetic factors in biological psychiatry. Presentations 20 min**  
**Chair:** S. Nakamura (Japan)

**ASSOCIATION BETWEEN eNOS 4a/b POLYMORPHISM AND NITRIC OXIDE LEVELS IN TYPE 2 DIABETIC POLYNEUROPATHY.** M Aydin, E Ozkok, C Kucukali, F Salman, I Kara, Istanbul University, Institute for Experimental Medicine, Department of Neuroscience, Department of Immunology; Istanbul Erenkoy Psychiatric and Neurological Disorders Hospital, Istanbul, Turkey

**DISC1 AND GABAERGIC EXPRESSION IN HIPPOCAMPUS OF NEUREGULIN1 MUTANT MOUSE.** H Yin, P Chen, C Liu, H Hwu, W Fu, Departments of Anatomy and Cell Biology, Psychiatry, and Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan, ROC

**EXAMINING THE RELATIONSHIP BETWEEN MnSOD AND NFkB POLYMORPHISMS IN PARKINSON'S DISEASE.** E Ozkok, M Aydin, C Kucukali, Y Cetinkaya, M Gencer, I Kara, Istanbul University, Institute for Experimental Medicine, Department of Neuroscience; Istanbul Erenkoy Psychiatric and Neurological Disorders Hospital; Clinic of Neurology, Haydarpasa Numune Education and Research Hospital, Istanbul, Turkey

**THE ROLE OF INFERIOR COLLICULUS IN AUDIOGENIC SEIZURES IN OUTBRED KRUSHINSKII-MOLODKINA RATS.** K Khudik, Institute of Evolutionary Physiology and Biochemistry RAS, St.-Petersburg, Russia

**MATERNAL/CHILD GENETIC POLYMORPHISM AS A SCHIZOPHRENIA RISK FACTOR.** I Halayenka, V Objedkov, O Levdansky, E Aksyonova, M Siniauskaya, N Danilenko, Laboratory of Cytoplasmic Inheritance, Institute of Genetics and Cytology, Minsk, Belarus

## 15.40-16.00 Coffee break

**16.00-17.00 PLENARY LECTURE 9. PRESENTATION: TSE SYSTEMS: SOPHISTICATED LIFE SCIENCE RESEARCH INSTRUMENTATION.**

**17.00-18.00 Symposium 8. Molecular Physiology of Stress. Presentations 20 min**  
**Chair:** Yu.F. Pastuhov (Russia)

**EFFECTS OF INDUCIBLE AND CONSTITUTIVE ISOFORMS OF HEAT SHOCK PROTEIN 70 ON THERMOREGULATORY CHARACTERISTICS IN PIGEONS.** K Lapshina, K Khudik, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

**THE ROLE OF THE HSP70 IN THE REGULATION OF MOTOR SEIZURES.** A Yakimchuk, L Nitsinskaya, I Ekimova, I Guzhova, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

**THE EFFECTS OF INTRACEREBROVENTRICULAR ADMINISTRATION OF MYRISTICA FRAGRANS SEED EXTRACT ON FEAR BEHAVIOR IN ADULT MALE RATS.** G Vaezi, K Keramati, M Dadellahi. Biology Department, Islamic Azad University, Garmsar, Damghan, Semnan, Iran

**Day 4, May 19, 2009**  
**Morning session**

**9.00-10.00 PLENARY LECTURE 10. COMPLEX, NATURAL, AND STEREOTYPIC BEHAVIORS, BEHAVIOR REGOGNITION AND TRANSLATIONAL RESEARCH.** Y Liang, Clever Sys., Inc., Reston, VA, USA

**10.00-10.20 Coffee break**

**10.20-13.00 Symposium 9. Neuroimmunophysiology. Presentations 20 min**  
**Chair:** V Klimenko (Russia)

**INTERLEUKIN-1 $\beta$  IN SYSTEM MECHANISMS OF THE STRESS RESPONSE IN RATS.** S Pertsov, Anokhin Institute of Normal Physiology RAMS, Moscow, Russia

**AROMATASE IMMUNORECTIVITY IN THE YOUNG PACIFIC SALMON BRAIN ONCORHYNCHUS MASU: IMMUNOLOCALISATION AND COREGIONALIZATION WITH NADPH-DIAPHORASE AND TYROSINE HYDROXYLASE.** E Pushchina, D Obukhov. Zhirmunsky Institute of Marine Biology FAR RAS, Vladivostok; Department Cytology and Histology, St. Petersburg State University, St. Petersburg, Russia

**NEUROIMMUNOLOGY SHOWING NEONATAL HYPOXIC ENCEPHALOPHY AND NEURO-BEHAVIORAL OUTCOME.** V Garayev, V Klimenko, N Shabalov, Institute for Experimental Medicine RAMS; Kirov Military Medical Academy, St. Petersburg, Russia

**MOLECULAR MECHANISM OF SYNUCLEOPATHIES: A HYPOTHESIS.** Y Pastukhov, A Chesnokova, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

**CALPAIN INHIBITORS AS A NEW APPROACH TO MULTIPLE SCLEROSIS THERAPY.** P Afanasyev, M Karpenko, I Abdurasulova, V Klimenko, Institute for Experimental Medicine RAMS, St. Petersburg, Russia

**ANXIOLYTIC EFFECTS OF THERMAL PRECONDITIONING AND THE CONCENTRATION OF INDUCIBLE HSP70 IN THE BRAIN OF KRUSHINSKY-MOLODKINA RATS.** M Chernyshev, K Khudik, O Sapach, Y Pastukhov, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

**CENTRAL MECHANISMS OF THE HEAT SHOCK PROTEIN 70 KDA HYPNOSEDATIVE EFFECT: ROLE OF PROSTAGLANDIN D<sub>2</sub> AND GABA SYSTEM.** I Ekimova, N Frolova, Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia

**13.00-14.00 Lunch break**

## **Afternoon session**

**14.00-16.20 Symposium 10. Clinical problems in biological psychiatry. Presentations 20 min**

**Chairs:** A.V. Kalueff (USA), S Khandewal (India)

**BIOPSYCHOSOCIAL ASPECTS OF BEHAVIOR AND MOOD IN ANTARCTICA.** S Khandelwal, Dept. of Psychiatry, All India Institute of Medical Sciences, New Delhi, India

**MR SPECTROSCOPY OF INTRACRANIAL TUMORS.** D Kozić, J Ostojić, N Boškov, K Koprivšek, Institute of Oncology, Diagnostic Imaging Center, Sremska Kamenica; General Hospital, Zrenjanin, Serbia

**DAILY SERUM AND SALIVA BDNF LEVELS CORRELATE WITH MORNING–EVENING PERSONALITY TYPE IN WOMEN AND ARE AFFECTED BY LIGHT THERAPY.** P Tirassa, M Mazza, F Sornelli, A Iannitelli, G Bersani, F Pacitti, Institute of Neurobiology and Molecular Medicine-CNR, Rome; Dept. of Psychiatric Sciences and Psychological Medicine, Sapienza University of Rome, Polo Pontino; Dept. of Science of Health, University of L'Aquila, L'Aquila, Italy

**DO LATERAL PREFERENCES INFLUENCE THE BODY SCHEMA PERCEPTION?** M Mikheev, A Zartor, S Afanasiev. Sechenov Institute of Evolutionary Physiology and Biochemistry, St. Petersburg, Russia

**ACTIVE COPING STYLE AS A PREDICTOR OF REACTIVE DEPRESSION.** D Zhukov, K Vinogradova, Pavlov Institute of Physiology RAS, Biological Faculty, St. Petersburg State University, St. Petersburg, Russia

**STRESS-PHASE ORIENTED CONCEPT OF BORDERLINE DISORDERS.** A Tadevosyan, S Harutyunyan, National Institute of Health, Department of Stressology, Yerevan, Armenia

### **CONCLUDING REMARKS AND DISCUSSION**


**16.20-16.40 Coffee break**

**16.40-17.00 Official Closing Ceremony. Announcing 2010 ISBS Conference and Summer School**

**Day 5, May 20, 2009**

10.00-11.00 Meetings of RSBS, USBP and ISBS

11.00-16.00 Visit to Pavlov Department of Physiology of the Institute of Experimental Medicine



**International 2010 Stress and Behavior  
Conference & Summer School**

May 16 - 20th  
St. Petersburg, Russia

August 5 - 12th  
Barcelona, Spain

[www.stress-and-behavior.com](http://www.stress-and-behavior.com)

The banner features a central text area flanked by two stylized brain diagrams with neural connections. The text is centered and includes the event title, dates, and locations for two sessions, along with the website URL.