



INTERNATIONAL SCIENTIFIC CONFERENCE “NEUROSCIENCE, BIOINFORMATICS, MICROBIOME AND BEYOND”

Dedicated to the 150th Anniversary of the Bulgarian Academy of Sciences

Tuesday, 17th September 2019

17.00	Registration
18.15 – 18.30	Welcome Words: Rector of the South-West University Prof. Borislav Yurukov Chairperson of the Organizing Committee Prof. Reni Kalfin
18.30 – 19.15	R. Kalfin, S. Panaiotov “Anniversary Lecture on Microbiome”
19.15 – 20.00	P. Fagone, M. S. Basile, E. Cavalli, M. C. Petralia, F. Nicoletti “Macrophage Migration Inhibitory Factor (MIF): involvement in Central Nervous System disorders and therapeutic opportunities”
20.30 – 22.30	WELCOME COCKTAIL

Wednesday, 18th September 2019

Session 1. Neurobiology 1. Chairperson: F. Nicoletti	
9.30 – 10.00	L. Tancheva, T. Pajpanova, M. Lazarova, S. Dragomanova, A. Popatanasov, L. Alova, M. Stefanova, R. Kalfin “Experimental approach in treatment of Alzheimer’s disease with neurotensin analogues”
10.00 – 10.30	N. Tzvetkov “Drug candidates against Parkinson’s disease – a case study”
10.30 – 11.00	D. Pendicheva, I. Duhlenki “Pharmacogenetics of psychotropic drugs in the clinical reality of affective disorders”
11.00 – 11.30	COFFEE BREAK
Session 2. Neuroscience 1. Motor Control. Chairperson: K. Stambolieva	
11.30 – 12.00	J. Yordanova, M. Falkenstein, V. Kolev “Aging-related reduction of functional connectivity during motor response generation”
12.00 – 12.15	I. Amiridis, G. Trypidakis, E. Tsatsaki, F. Arabatzi, V. Hatzitaki, E. Samoladas, E. Kellis “Non-uniform motor unit modulation during isometric dorsi- and planterflexion”
12.15 – 12.30	N. Antoniadou, I. Hatzilazaridis, I. Amiridis, E. Samoladas, V. Hatzitaki “Investigating the vestibular origin of Adolescents’ idiopathic scoliosis (AIS)”

13.00 – 14.00 LUNCH BREAK

Session 3. Neurobiology 2. Chairperson: L. Tancheva	
15.15 – 15.30	S. A. Vardar “Heat shock protein response to exercise”
15.30 – 15.45	N. Aydogdu “The relationship between kisspeptin and kidney injury”
15.45 – 16.15	Presentation LeoMax
16.15 – 16.45	COFFEE BREAK
Session 4. Neuroscience 2. Sleep and stress. Chairperson: R. Kirov	
16.45 – 17.15	J. Yordanova, R. Kirov, V. Kolev “The role of sleep for knowledge processing and consolidation”
17.15 – 17.30	L. Öztürk “Sleep deprivation studies: pros and cons”
17.30 – 17.45	Y. Tankovski “Professional stress and coping mechanisms”
Session 5. Neuroscience 3. Sensory neurophysiology. Chairperson: L. Vitanova	
17.45 – 18.00	L. Vitanova, V. Mihaylova “Immunocytochemical study of ionotropic GABA receptors in the retina and pigment epithelium of the turtle <i>Trachemis scripta elegance</i> ”
18.00 – 18.15	A. Dimitrov “On formation of resting state in excitable cells”

18.30 – 19.30 POSTER SESSION “A”

20.00 – 23.00 GALA DINNER

Thursday, 19th September 2019

Session 6. Microbiome and neuroscience. Chairperson: R. Kalfin	
9.30 – 10.00	V. Tolchkov, S. Panaiotov “Evaluation of risk of Alzheimer’s disease in relation with infection of <i>Porphyrononas gingivalis</i> ”
10.00 – 10.30	R. Kirov, J. Yordanova “Spotlight on microbiome in psychiatry”
10.30 – 11.15	COFFEE BREAK
Session 7. Bioinformatics/Neuroinformatics. Chairperson: N. Bocheva	
11.15 – 11.45	V. Kolev, J. Yordanova “Oscillatory neurodynamics in the scope of neuroinformatics”
11.45 – 12.00	A. Arakelyan, A. Simonyan “Identification of genetic variants underlying spasmodic dysphonia using machine learning techniques”
12.00 – 12.15	M. Yilmaz, P. Pais, V. Almeida, M. Cavalleiro, J. Oliveira, P.T. Monteiro, M.C. Teixeira “New clues on the probiotic activity of <i>Saccaromyces boulardii</i> , obtained from global gene promoter analysis”

12.30 – 13.30 LUNCH BREAK

Session 8. Young scientists' session. Chairperson: M. Mihaylova	
14.00 – 14.10	D. Addai, J. Zarkos, P. Hadzhibozheva, T. Georgiev, V. Nanchev. L. Pashova, J. Tsokeva, Kr. Nancheva, G. Ilieva, M. Ganeva, A. Tolekova "Vitamin D effect on renin-angiotensin system in rats with metabolic disorders, induced by high fructose diet"
14.10 – 14.20	B. Karavalchev, K. Stanchev, T. Totev, K. Racheva, E. Encheva, B. Genova, M. Stefanova, I. Hristov, S. Stefanov, N. Bocheva, S. Staykova, M. Mihaylova "Contour integration and visual noise effect in children with autism spectrum disorder"
14.20 – 14.30	S. Lilov, M. Emilov, M. Stefanova, K. Shtereva, T. Totev, M. Vidinova, K. Racheva, S. Stefanov, S. Staykova, N. Bocheva, M. Mihaylova "Effect of visual noise on reading word and pseudowords in children with autism spectrum disorder"
14.30 – 14.40	M. Tsvetkova-Gaberska, N. Pencheva "Sex differences in the knee sense of muscle force, assessed by isokinetic dynamometer"
14.40 – 15.10	A. Tonchev "ZEISS Research Solutions: Discover New Possibilities for Neuroscience", Carl Zeiss Bulgaria

15.15 – 16.15 POSTER SESSION "B"**16.15 – 16.30 CLOSING REMARKS AND YOUNG SCIENTIST AWARDS**

POSTER SESSION “A”

1. **Pavone L., Moyanova S., Mastroiacovo F., Fazi L., Busceti C., Gaglione A., Martinello K., Fucile S., Bucci D., Prioriello A., Morales P., Senesi R.** Chronic neural interfacing with cerebral cortex using single-walled carbon nanotube-polymer grids
2. **Tancheva A., Chayrov R., Stankova I.** Synthesis and biological activity of aminoadamantane analogues with nootropics
3. **Lazarova M., Tsvetanova E., Tancheva L., Alexandrova A., Chochkova M., Uzunova D., Tencheva A., Georgieva A., Kalfin R.** New memantine hybrid (HCA-MEM) with improving memory effect in dement mice
4. **Alexandar I., Kaloyanov N., Parvanova V., Girginov C., Zahariev A.** Antimicrobial activity of some Bi(III) complexes with four sulfonic acids – comparative analysis
5. **Takova K., Toneva V., Mardanova E., Ravin N., Zahmanova G.** 3D modelling of chimeric viral proteins and development of chimeric hepatitis E Virus capsid-like particles bearing the M2e epitope of Avian influenza virus
6. **Mateeva P., Todorova P., Prodanova R., Marinov M., Naydenova E., Zamfirova R.** Rapid screening of anti-inflammatory properties of newly synthesized derivatives of indomethacin
7. **Stoyanova T., Nenchevska Z., Ivanova N., Atanasova D., Tchekalarova J.** The effect of endurance training on desynchronized circadian rhythms of oxidative stress markers in an experimental model of melatonin deficit
8. **Stoyanova T., Aatanasova M., Ivanova N., Mitreva R., Tchekalarova J.** The role of aerobic exercise on changes in behavior and the circadian rhythms of melatonin and corticosterone in pinealectomized rats
9. **Atanasova D., Dimitrov N., Ivanov A., Lazarov N.** The rat carotid body as a promising stem cell niche
10. **Ivanov A., Atanasova D., Lazarov N.** Cytoarchitectonics of the trigeminal spinal nucleus in the rat
11. **Michailova S., Georgieva M., Dzimbova T., Pajpanova T.** Synthesis and biological evaluation of NT(8-13) peptides and conjugates containing modified arginine residues
12. **Slavova V., Petrova-Tacheva V., Ivanov V., Nanchev V., Nikolova G., Karamalakova Y., Georgieva D., Nancheva K., Gadjeva V., Tolekova A.** The effect of *Haberlea rodopensis* on morphometric parameters, some clinical laboratory tests and oxidative status of rats with experimentally-induced diabetes type I
13. **Karamalakova Y., Nikolova G., Ivanov V., Gadjeva V.** Neuroprotective effect of silymarin against ochratoxin-A-induced oxidative stress in brain
14. **Dragomanova S., Tancheva L., Lazarova M., Alexandrova A., Tzvetanova E., Klisurov R., Kalfin R.** Complex mechanism of neuroprotective action of Myrtenal in an experimental model of dementia

15. **Dimitrov R., Panaiotov S., Kalfin R.** Metagenomic bioinformatics analysis of taxonomic OTU groups of fungal microorganisms based on NGS target sequencing of ITS2 from blood samples of healthy individuals
16. **Nikolov R., Koleva K., Hristov M., Yakimova K.** Hyperthermia in experimental models of the serotonin syndrome: influence of vigabatrin
17. **Staykov H., Nikolov R., Yakimova K., Tancheva L.** Infectious microorganisms and Alzheimer's disease

POSTER SESSION "B"

1. **Hristov I., Stefanov S., Bocheva N., Stefanova M., Emilov M., Karavalchev B., Staykova S., Mihaylova M.** Sensitivity to motion direction in children and adolescents with autism spectrum disorder and typical development
2. **Tankovski Y., Lyamova L., Yordanova J., Brand S., Kirov R., Kolev V.** Burnout and depression: the mediating role of resilience?
3. **Lyuckanova M., Lyamova L., Nanova P., Kirov R., Kolev V., Yordanova J.** Consolidation and transfer of implicit knowledge in children with normal and impaired language functions
4. **Lyamova L., Nanova P., Kolev V., Yordanova J.** Neurophysiological correlates of proactive control
5. **Nanova P., Kolev V., Yordanova J.** Developmental changes of selective attention: an ERP study
6. **Bocheva N., Racheva K., Natchev E., Genova B., Stefanova M., Stefanov S.** Visual spatial and temporal integration in hypothyroidism before treatment
7. **Racheva K., Zlatkova M., Totev T., Mihaylova M., Hristov I., Bocheva N., Natchev E., Beirne R., Anderson R.** Colour vision deficits in patients with hypothyroidism
8. **Stefanova M., Bocheva N., Genova B., Stefanov S.** Age effects on task-related eye movements
9. **Genova B., Bocheva N.** Decision making in motion direction classification tasks with probabilistic rules
10. **Dimitrov V.** What can differently affect the initial and final phases of the M-wave?
11. **Kirilova K., Stambolieva K., Gatev P.** Standing balance of healthy school-age children during quiet stance and sensory conflict
12. **Irikeva M., Kirilova K., Petrova D., Stambolieva K.** Effects of diabetic neuropathy on the postural stability
13. **Ganeva M., Kirov G., Pencheva N.** Isometric knee joint torque-angle relationship and strength asymmetry in kicking and support leg in football players

14. **Angelkova P., Tsvetkova-Gaberska M., Pencheva N.** Age-related changes in peak torque of the knee extensors and flexors in healthy females
15. **Tashev R., Doncheva D., Velikova M.** Nociceptive effect of subchronic administration of Rimonabant in rat's model of depression
16. **Doncheva D., Velikova M., Tashev R.** Intracerebroventricular injection of cannabinoid CB1 receptor ligands modulates exploratory activity of olfactory bulbectomized rats
17. **Stanchev K., Karavalchev B., Totev T., Racheva K., Encheva E., Genova B., Stefanova M., Hristov I., Stefanov S., Bocheva N., Staykova S., Mihaylova M.** Effect of visual noise on contour integration in children with attention deficit hyperactivity disorder
18. **Emilov M., Lilov S., Stefanova M., Shtereva K., Totev T., Vidinova M., Racheva K., Stefanov S., Staykova S., Bocheva N., Mihaylova M.** Reading in visual noise: a comparison between children with ADHD and control children with typical development