



**XI East European Conference of  
the International Society for  
Invertebrate Neurobiology  
“Simpler Nervous Systems”**

# Program

**15, May, 16.00** – Departure from Institute of Higher Nervous Activity (Moscow, Butlerova str. 5a) on the bus to the biological station of M.V. Lomonosov Moscow State University (Moscow area, *latitude* 55°41'13"N (55.687064), *longitude* 36°44'54"E (36.748466), nearest town Zvenigorod).

## 16, May

9.30-12.30

### Opening of the Conference

Comparative neurophysiology of memory. **Balaban P.M.** (Moscow, Russia).

From neurons to behaviour: complex neuronal changes of *Lymnaea* to exposure of progestogens pharmaceuticals, **Zsolt Pirger** (Balaton Limnological Institute, TIHANY, Hungary)

Nervous system miniaturization in smallest insects. **A.A. Polilov**, (Lomonosov Moscow State University, Biological faculty)

13.30-14.30 *Lunch*

14.30-16.30 *Poster session (posters A-K)*

16.30-17.00 *Tea time*

17.00- 19.00

From peripheral sensory cells to the integrative nerve centers: phylogenetic and ontogenetic

morphodynamics of sensory cells. **Zaitseva O.V., Voronezhskaya E.E.** (St.Petersbourg, Moscow, Russia).

Serotonin and neuropeptide FMRFa in the nervous system of flatworms **Kreshchenko N.D.**<sup>(1)</sup>, **Terenina N. B.**<sup>(2)</sup>, **Zaripova F.F.**<sup>(3)</sup> <sup>(1)</sup>Institute of Cell Biophysics of Russian Academy of Sciences, Pushchino, Moscow Region, <sup>(2)</sup> Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Center of Parasitology, Moscow, <sup>(3)</sup>Private Educational Institution of Higher Professional Education “St. Petersburg Medico-Social Institute”,

Innervation of the lophophore in ctenostome ectoprocts uncovers the bryozoan bauplan. **Temereva E.N., Kosevich I.A.** (Russia, Moscow, Moscow State University, Biological Faculty, Dept. Invertebrate Zoology)

## 17 May

9.30-12.30

Philosophy, vegetables and nicknames of Pavlov’s dogs: How the names of *Drosophila* mutations tell us the story of understanding learning and memory. **Savvateeva-Popova E.** (St.Petersbourg, Russia).

New thermogenetic and biosensory technologies in neurobiology. **Belousov V.** (Moscow, Russia).

Organization of senso-efferent systems in the pond snail (*Lymnaea stagnalis*) **Réka Horváth, Izabella Battonyai, Károly Elekes** (Department of Experimental Zoology, Balaton Limnological Institute, MTA Centre for Ecological Research, Tihany, Hungary)

13.30-14.30 *Lunch*

14.30-16.30 *Poster session (posters L-R)*

16.30-17.00 *Tea time*

17.00- 19.00

Encoding of High Frequencies by Snail and Rat Neurons:

Correlation with an Action Potential Initiation Dynamics. **Malyshev A.** (Moscow, Russia).

Does fear exist in insects? **Kamyshev N.G., Goncharova A.A.** (St.Petersbourg, Russia).

Coding of sound frequency in the mosquito auditory system. **Vorontsov D.D.**<sup>(1)</sup>, **Lapshin D.N.**<sup>(2)</sup>,  
<sup>(1)</sup>Koltzov Institute of Developmental Biology Russian Academy of Sciences, Moscow, Laboratory of neurobiology of development; <sup>(2)</sup>Institute for Information Transmission Problems of the Russian Academy of Sciences (Kharkevich Institute), Moscow, Laboratory of Sensory Information Processing;

## 18 May

9.30-12.30

Electrical properties of identified neuron (RPed1) after operant conditioning of aerial respiration in Lymnaea. **Sidorov A.** (Minsk University, Belorussia).

Serotonin and dopamine are both active during the pre-nervous embryonic development of vertebrates.

**Nikishin D.A.**<sup>(1,2)</sup>, **Khramova Yu.V.**<sup>(2)</sup>, **Bagaeva T.S.**<sup>(2)</sup>, **Kremnyov S.V.**<sup>(2)</sup>, **Shmukler Yu.B.**<sup>(1)</sup>.

<sup>(1)</sup>Koltzov Institute of Developmental Biology of Russian Academy of Sciences, Moscow, Laboratory of Problems of Regeneration; <sup>(2)</sup>Lomonosov Moscow State University, Moscow, Biology Faculty, Department of Embryology.

UV-light-induced freezing in cockroach *Periplaneta Americana*: sleep or passive avoidance? **Novikova E.S., Zhukovskaya M.I.** (Sechenov Institute of

Evolutionary Physiology and Biochemistry, Russian Academy of Sciences, Saint-Petersburg)

13.30-14.30 *Lunch*

14.30-16.30 *Poster session (posters S-Z)*

16.30-17.00 *Tea time*

17.00- 19.00

The earliest Bilaterian nervous systems in

Nemertodermatida (Xenacoelomorpha): an example of plasticity **Raikova O.I.**<sup>(1,2)</sup>, **Meyer-Wachsmuth I.**<sup>(3,4)</sup>, **Jondelius U.**<sup>(3)</sup> <sup>(1)</sup>Zoological Institute of the Russian Academy of Sciences, St.-Petersburg; <sup>(2)</sup>Saint-Petersburg State University, Chair of invertebrate zoology; <sup>(3)</sup>Swedish Museum of Natural History, Stockholm, Sweden; E- <sup>(4)</sup>Institute of Parasitology, Biology Centre of the Czech Academy of Sciences, České Budějovice, Czech Republic;

Detection of the newly synthesized RNA in nervous system of the terrestrial snail *Helix*. **Ierusalimsky V.N.** (Institute of Higher Nervous Activity and Neurophysiology Russian Academy of Sciences, Moscow)

Behavioral patterns and patterns of neurospecific gene expression in embryonic and postembryonic development in snails. **Zakharov I.**<sup>(1)</sup>, **Boguslavsky D.**<sup>(1)</sup>, **Balaban P.**<sup>(2)</sup>. <sup>(1)</sup>Koltzov Institute of Developmental Biology of Russian Academy of Sciences, Moscow, Laboratory of neurobiology of development; <sup>(2)</sup>Institute of High Nervous Activity of Russian Academy of Sciences, Moscow, Laboratory of cellular neurobiology of learning

## 19 May

8.00 **Breakfast**

9.00- *Departure to Moscow*