



Postgraduate Training Network in Biotechnology of Neurosciences (BioN)

Progress report

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BioN

Progress report

- Activities • Their fulfillment • BioN schools • Curriculum
- BioN Neurobiotech Centre
- Booklet • PR
- BioN Webpages – the means of dissemination
- Readiness to the Interim report Purchases of equipment etc.!
- Advisory Board • Management
- Local administration acknowledgement of BioN and cooperation across the BioN institutions.
- Wish List • New partners • Future plans



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Calendar of BioN events

- BioN symposium in Kaluga on 23.09.2010
- 1st BioN Tempus School, Bekasovo 24-29.09.2010
- Course of prof. Shulgovsky in SFU 17-18.11.2010
- Modular course on Neurogenetics Moscow, 2-5.02. 2011
- Modulare course on Neuroeconomics 24-26.02. 2011
- Seminar "Career in Neurosciences" 17.03. 2011 SPBU
- "Cellular mechanisms of information transfer: neuronal and synaptic plasticity" SPbU, 07-09.04.2011
- fMRI school at Aalto University 4-6.04.2011

www.neurobiotech.ru



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Calendar of management events

- ✓ Regular weekly skypes on Tuesday evening (and whenever is needed)
- ✓ Presentations of the 1st meeting of BioN Tempus Program 19.02.2010
- ✓ Meeting at University of Nizhny Novgorod, 2010
- ✓ Meeting in the Southern Federal University, Rostov on Don, 03/06/2010
- ✓ **Tempus monitoring meeting** in St Petersburg 28.01.2011

Hands-on placements

- IIT, autumn 2010, 1 PhD student from SPBU
- Practical placement at ENS de Paris, 2 PhD students from MSU 23.10.2010-20.01.2011
- University of Umeo 03-04.2011 1 PhD student from MSU
- Courses in HU Electrophysiological applications in neurophysiology Plans for 2011 (e.g. Cambridge, 1 student from SPbU)

Modular courses

- Date Title Organizers Days Credits
- to be anounced Neuroimaging (MEG, TMS, OI, FMRI, PET) **SPU, HU** 3 1,0
- to be anounced Brain Extracellular Matrix **UNN, IIT** 1,0
- 17.11.2010 Psycho-neuro -physiology of conscience. Visual perception. SFU, MSU 2
0,5
- 02.02.2011 Neurogenetics & Modern methods of behavior registration MSU 4 2,0
- 24.02.2011 Neuroeconomics **MSU, SPU** 3 1,0
- 21.03.2011 Genetic constructing in neurobiology **UNN** 3 1,0
- 07.04.2011 Cellular mechanisms of information transfer: neuronal and synaptic plasticity
SPU, Ioffe PTI 3 1,0
- 10.05.2011 Neurophysiological mechanisms of perception **SFU**, Kogan' Research Institute
of Neurocybernetics 3 1,0
- 14.06.2011 Scientific Writing in English Helsinki University, Lomonosov **MSU** 2 0,5
- 16.06.2011 Modern methods of higher mental functions studies in human by using of
psychophysiological methods. Brain-computer interfaces. **MSU** 3 1,0
- 15.09.2011 Introduction into neuromodeling. Dynamical system theory and statistical
physics **Ioffe' PTI, SFU** 3 1,0
- 26.11.2011 Optical methods of registration of neuronal activity **IHNA and MSU** 3
- 01.02.2012 Cellular imaging 3
- 01.03.2012 Neuromodeling: Neuroanimatic systems **UNN** 3 1,0



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Seminars “Neurotechnology as a part of the NeuroBioTech Centre

- Date Title Speaker Host Institution
- 21.10.2010 Genetic models of dopamine dysfunction Raul Gainetdinov (Italian Institute of Technology) Lomonosov' Moscow State University
- 01.12.2010 Current achievements and problems in the study of the brain extracellular matrix Alexander Dityatev (IIT) Nizhnij Novgorod University
- 17.12.2010 Use of modern methods in analysing MEG and EEG data in cognitive neurobiological studies of language and speech Yury Shtyrov (MRC-CBU) Saint-Petersburg State University
- 29.12.2010 Neuromarketing: Pro & Contra Vasily Klucharev (Erasmus Rotterdam University) Saint-Petersburg State University
- 17.03.2011 Career in Neuroscience Yury Shtyrov, (MRC-CBU, Cambridge, UK) и Vasily Klucharev (Erasmus Rotterdam University). SPbSU
- 17.05.2011 Neurointerface technologies: yesterday, today and tomorrow. Alexander Kaplan (MSU) UNN

Local courses and seminars at BioN partners' institutions

- Date Title Speaker Host Institution
- 17.11.2010 Psycho-neurophysiology of consciousness. Visual perception V.V. Shulgovsky
SFU
- 22.03.2011 Confocal microscopy in biology and medicine Olympus LTD **SFU**
- 10.10.2011 Neural network and machine learning methods for EEG-based Brain-Computer Interfaces Shepelev I **SFU**
- 12.10.2011 Physiology of neurons and glia Uzdensky A.B. **SFU**
- 21.01.2012 Physiological basis of speech perception D. Kisliuk & N. Slusar **SPU**
- 16.02.2012 Seminars "Psychophysiology of creativity" N Shemyakina **SPU**
- 24.09.2012 Different models of epileptiform activity in rats Gulyaeva N.V **MSU & IHNA**
- 25.09.2012 Plasticity mechanisms in hippocampal neuronal networks Korshunov V.A.
MSU & IHNA
- 26.09.2012 Studies of animal behaviour in neurophysiological research Merzhanova G.C
MSU & IHNA
- 22.11.2012 Review of proteomics & proteome analysis techniques Kolosov V.

Upcoming events

- Modern methods of higher mental functions studies in human by using of psychophysiological methods. Brain-computer interfaces. **MSU** 10.05.2011
- Scientific Writing in English:«Problems in writing up research: How to overcome them?» **MSU**, 14-15.06.2011
- Neurophysiological mechanisms of perception **SFU**, may, 2011
- Many more can be found at www.neurobiotech.ru

Extracurriculum events

- Review of dissertations
- Leading scientist grant for Dr. A. Dityatev to establish a new Laboratory for “Brain extracellular matrix research” in the University of Nizhny Novgorod



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- Many thanks to BioN coordinators Drs. Katri Wegelius and Olga Martynova for their super work on the BioN progress
- Thanks to every one here for attention and let us continue to further discuss our progress today and tomorrow