



Postgraduate Training Network in Biotechnology of Neurosciences (BioN)

Saint-Petersburg State University





Courses, lectures and seminars in SPbU

- Noninvasive methodologies to study whole brain function
- Use of modern methods in analysing MEG and EEG data in cognitive neurobiological studies of language and speech
- Neuromarketing: Pro & Contra
- Career in Neuroscience
- Scientific Writing in English
- Cellular mechanisms of information transfer: neuronal and synaptic plasticity
- Background techniques for neurophysics: dynamical system theory, statistical physics, wavelet analysis
- Data processing in neuroscience



Courses, lectures and seminars in SPbU

- Non-linear dynamics of spike generation in neurons and its implications for neural activity
- Cognitive space and brain rhythms
- ERP and eye-tracking studies of language, attention and social development in low and high-risk infants: Audiovisual speech processing in the first year of life
- Source space connectivity analysis based on MEG data
- "Mechanisms and therapies of neonatal and pediatric seizures" and "How does inhibition work in the brain?"



Courses, lectures and seminars in SPbU

- Electrophysiological correlates of mental activity of man in the blind game of chess with the computer program. Wavelet analysis.
- In vivo microscopy applications
- Cognitive Decision Making and Neurointerfaces
- Genetic models of human diseases in experimental neuropharmacology
- Attention and human brain function



Summer school “White Nights of Computational Neuroscience: Neurotheory from cell to cognition 2012”

Two days in SPbU:

15.06.12 Lecture “Matching storage and recall: memory processing in neural circuits”.

21.06.12 Satellite Symposium “Cognitive Decision Making and Neurointerfaces”.

Mobility

a total of 45 student mobility and 51 staff mobility

Four SPbU students have a long term practice in partner countries - Sweden, Italy and Finland.





Short list of equipment

7 computers with peripheral devices

Copy-machine Xerox Phaser 6180

7 laptops

Videocamera (for web-class)

Projector

Routers, cartridges, cables etc



Co-financing

Co-financing was provided under articles:

- Staff-costs
- Mobility
- Printing

Also university classrooms and equipment were provided for the project besides the direct co-financing

