



# Postgraduate Training Network in Biotechnology of Neurosciences (BioN)

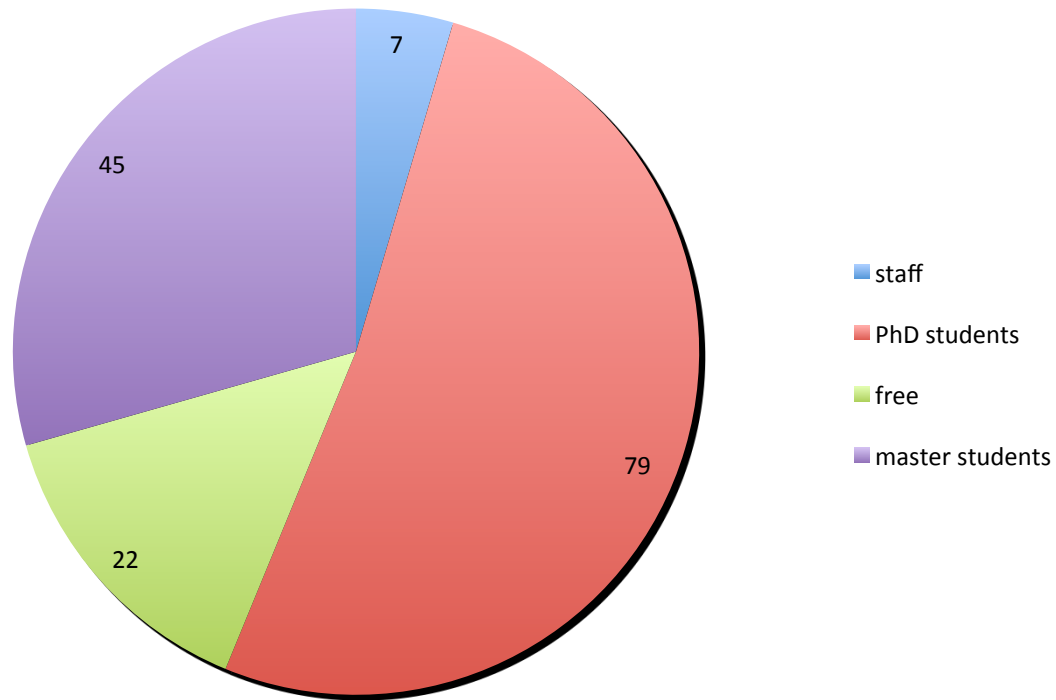
## **Progress report Nov 2012**

# Progress report

- Curriculum
- BioN Neurobiotech Centre
- BioN Webpages
- Web classes
- Library
- Advisory Board • Management
- Local administration acknowledgement of BioN and cooperation across the BioN institutions.
- 2 new partners
- More than 150 students participated in all educational events of BioN

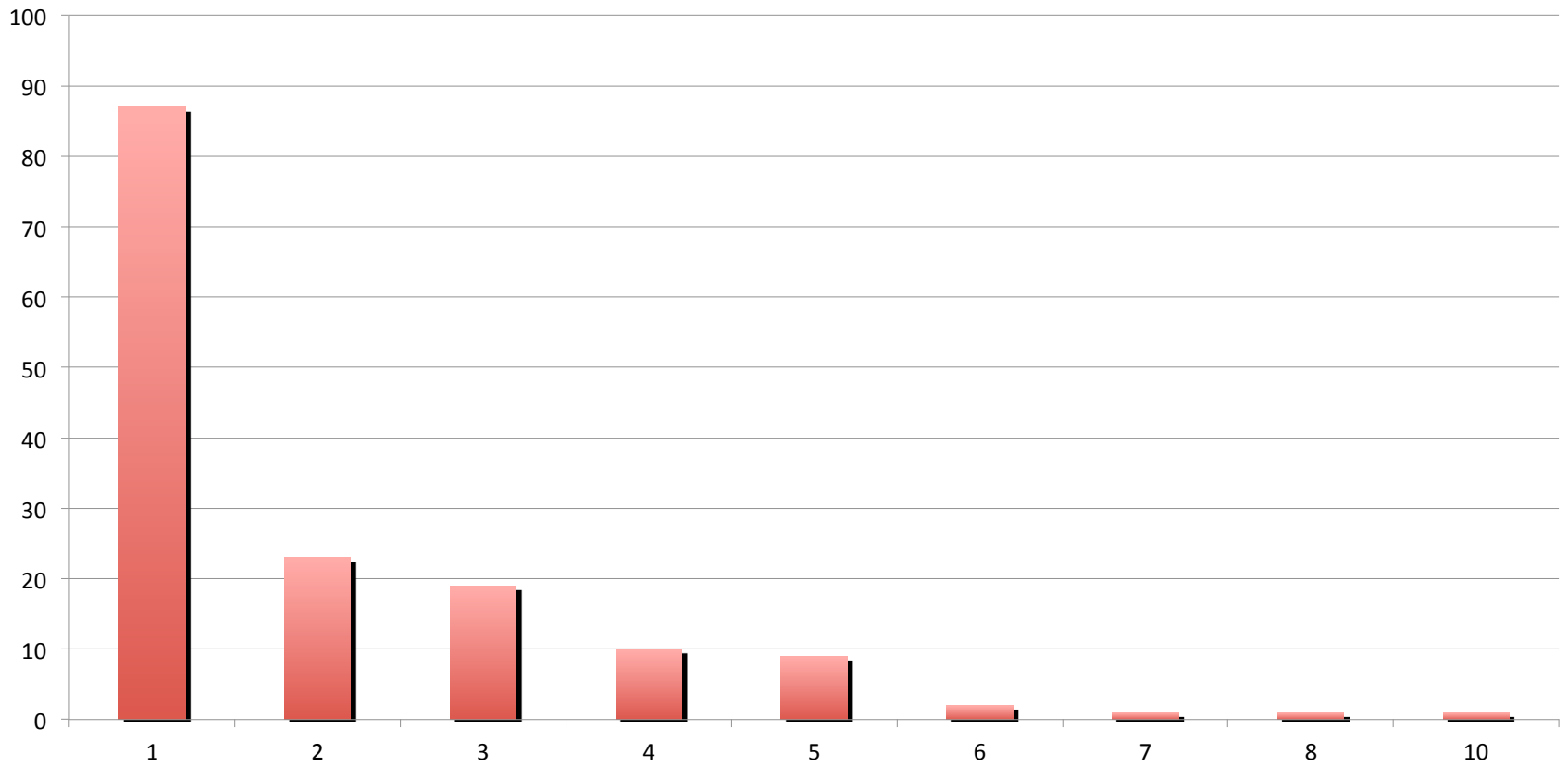
# BioN students

Audience=153

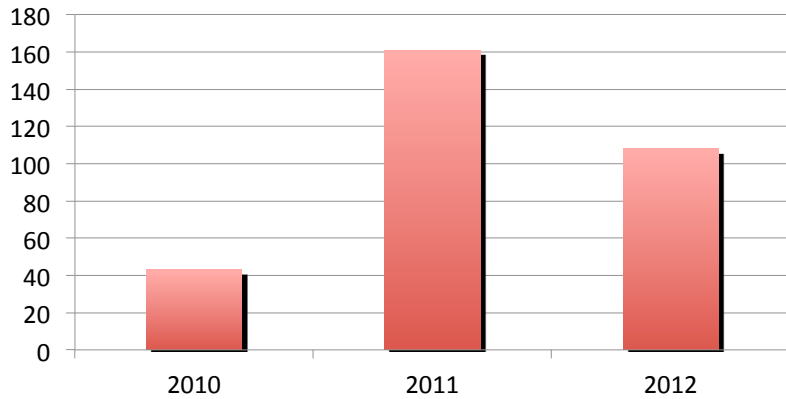


# Statistics

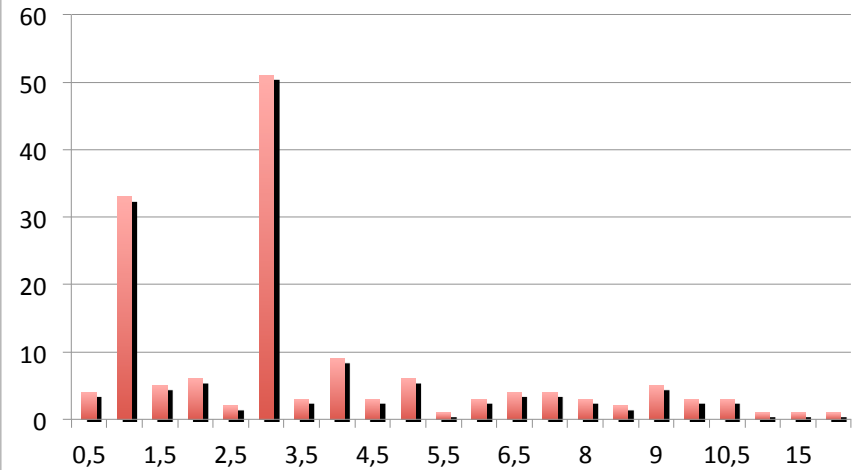
How many times students participated in the courses



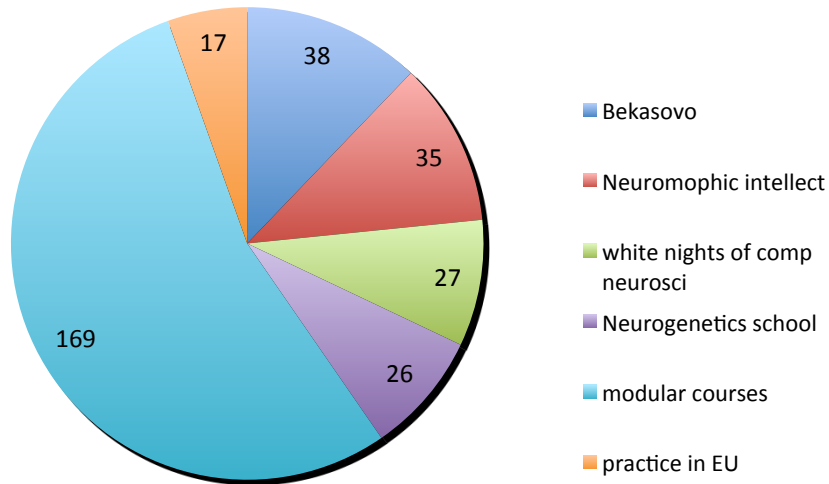
## Attendance per year



## ECTS distribution



## Attendance per activity



# Curriculum: courses

- 14 new courses developed for PhD level
- 15 modular courses conducted in PC universities
- Modular courses are served as a pilot presentation of new PhD curriculum with ECTS adaptation, teaching in English, e-learning in RF education

# List of courses:

Psycho-neuro -physiology of conscience. Visual perception.	SFU, MSU	2	0,5
Neurogenetics & Modern methods of behavior registration	MSU	4	2,0
Neuroeconomics	MSU, SPU	3	1,0
Genetic constructing in neurobiology	UNN	3	1,0
Cellular mechanisms of information transfer: neuronal and synaptic plasticity	SPU, Ioffe PTI	3	1,0
Neurophysiological mechanisms of perception	SFU, Kogan' Research Institute of Neurocybernetics	3	1,0
Scientific Writing in English	Helsinki University, Lomonosov MSU	2	0,5
Modern methods of higher mental functions studies in human by using of psychophysiological methods. Brain-computer interfaces.	Lomonosov Moscow State University	3	1,0
Background techniques for neurophysics: dynamical system theory, statistical physics, wavelet analysis	Ioffe' PTI, SPbU	4	1,0
Noninvasive methodologies to study whole brain function (includes MEG, TMS, OI, fMRI)	Anna Shestakova, Alex Ossadtchi, Olga Martynova	4	1,0
Synaptic Functions of Cell Adhesion and Extracellular Matrix Molecules	UNN, IIT	3	1,0
Cellular neuroscience and optical methods of registration of neuronal activity	IHNA and MSU	3	1,0
Scientific Writing in English II	Helsinki University, Saint Petersburg University	2	0,5
Sleep and sleep disorders	SFU, SSC RAS	3	1,0

# Curriculum: Schools

- 1<sup>st</sup> Intensive school in Cognitive Neurotechnologies 24-29 September 2010  
<http://school.neurobiotech.ru/en>
- Intensive school in Computational Neurotechnologies 3-7 October 2011  
<http://www.school2.neurobiotech.ru/en>
- Intensive school in Cellular and Genetic Neurotechnologies 20-25 August 2012  
<http://school4.neurobiotech.ru>



# Training in Computational Neurotechnologies

- **Summer school “White Nights of Computational Neuroscience: Neurotheory from cell to cognition 2012” 4-17.06.2012 in Saint Petersburg**

Organizers: ENS, SPbU, IPTI and AU

<http://school3.neurobiotech.ru/en>

2 satellite symposiums 19<sup>th</sup> and 21<sup>st</sup> of June 2012

# As co-organizer

**School "Neurobiology and new approaches to artificial intelligence and brain"**

- seminar for academic staff **"Modern Teaching Methodology"**

- workshop **"Innovational management in neurobiology. Neuroeconomics and Neuromarketing"**

# Seminars “Neurotechnology “as a part of the NeuroBioTech Centre

35 seminars with on-line web translation

<http://www.neurobiotech.ru/en/seminars>

IHNA	2
Lomonosov MSU	9
MSUPE	2
SPbU	14
SFU	5
UNN	3

# Hands-on placements

- IIT accepted 3 PhD student from SPbU, MSU and UNN
- ENS de Paris 2 PhD students from MSU, 1 from IPTI
- UmU- 4 PhD students from MSU, IHNA, SPU and IPTI
- Courses in HU Electrophysiological applications in neurophysiology – 2 students from IPTI and MSU
- HU – 2 PhD student from SPbU, 2 from IHNA and MSU
- Teachers from MSU and SPbU participated in 2 schools in fMRI at Aalto University (FGSN)

# Web, Equipment and library

- 4 web-classes in SPbU, MSU, UNN and SFU were created for on-line seminars and courses of BioN curriculum
- 79 books were purchased and available on sites of PC universities: <http://www.neurobiotech.ru/en/lib>
- Website aimed for communication and dissemination is fully functioning from the beginning of BioN project

[www.neurobiotech.ru](http://www.neurobiotech.ru)

# Evaluation and quality assessment

- Annual Student meetings & evaluation meeting:

1<sup>st</sup> on 29.09.2010 in Becasovo school

2<sup>nd</sup> on 7.10.2011 in NN school

3<sup>d</sup> on 25.08.2012 in Zvebigorod

- Annual project evaluations:

1<sup>st</sup> –Jan 2012

2<sup>nd</sup> – summing up by PM meeting on 20.12.2011

- Courses and school evaluations – regularly

**All evaluation reviews are available at the website:**

**[http://www.neurobiotech.ru/en/ev\\_survey](http://www.neurobiotech.ru/en/ev_survey)**

# Scheduled upcoming events

- Course **Neuroeconomics 2013** in Moscow  
14.02.2013
- Regular Seminars in Biotechnology - Web-lectures
- Peer-review of BioN Tempus project
- BioN – final presentation
- PMM in Spring 2013
- Evaluation and
- **FINAL REPORT**

# Sustainability

- Approval of the BioN curriculum as new PhD programme in Neuroscience across Partner Universities
- Cooperation with industry – biotechnological companies
- Fundraising strategy:
  - ASI
  - Next Tempus
  - Skolkovo