



UIIP NAS Belarus: EU Cooperation Success Story

Dr. Alexei BELOTSEKOVSKY,
HoD, United Institute of Informatics Problems, NASB

10 years of EU cooperation

- 12 project:
 - 2 as target supported organization
 - 2 associated partnerships
 - 8 beneficiary partnerships
- more than 100 partners from

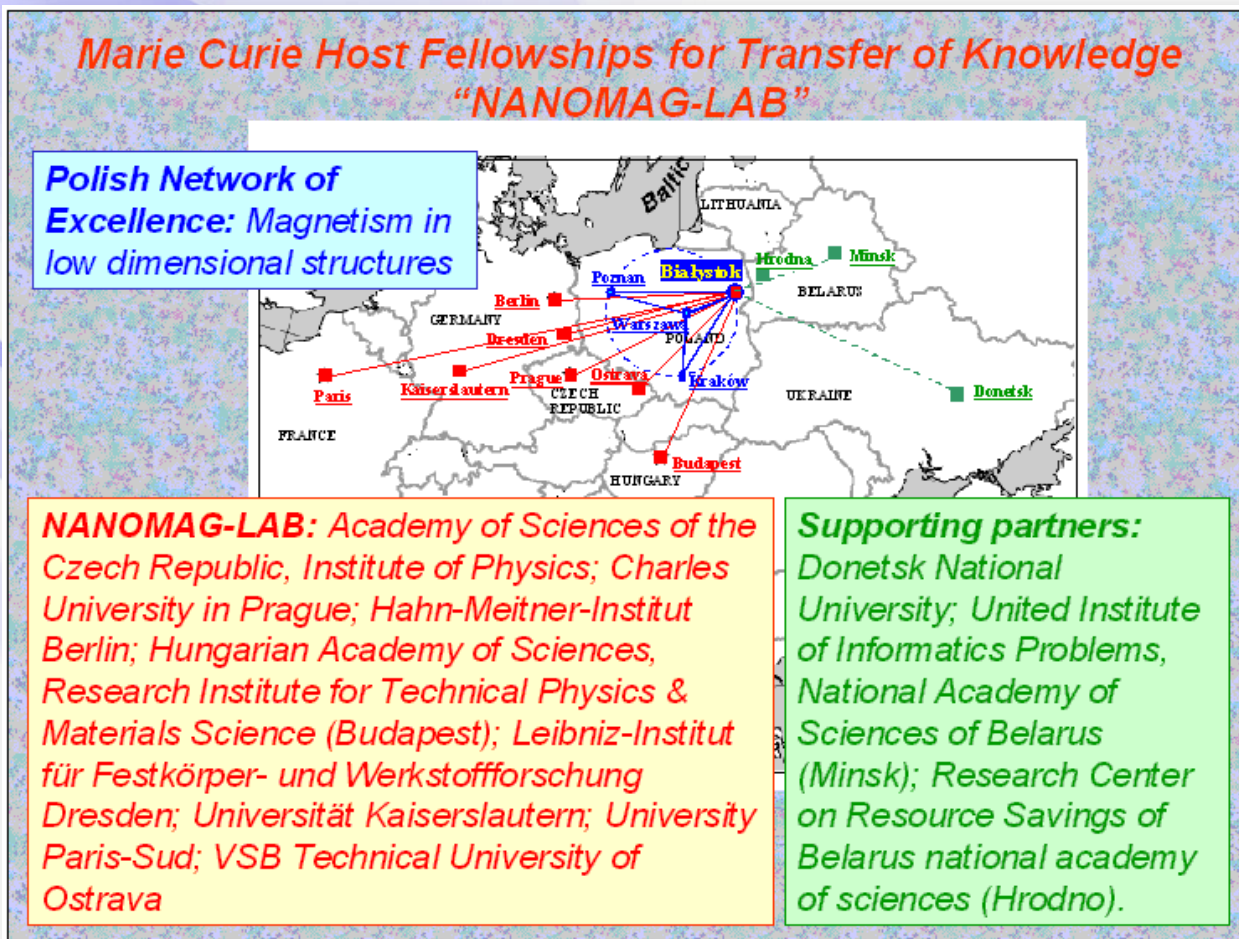
Austria, Armenia, Belarus, Belgium, Bulgaria, UK, Hungary, Germany, Greece, Denmark, Israel, Cyprus, China, Ireland, Island, Spain, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Russia, Romania, Serbia, Slovakia, Slovenia, Turkey, Ukraine, Finland, France, Croatia, Montenegro, Czech Rep., Sweden, Switzerland, Estonia





TRANSFER OF KNOWLEDGE

"Combined study of nanostructured magnetic materials" (NANOMAG-LAB)





Terms:

01.09.2004- 31.08.2008

Coordinator:

University of Białystok (Poland)

Financial Support:

approx. 20K euro (EC contribution for UIIP NASB)

Description

Investigation of thin films to study of magnetic nanostructures focused on:

- magneto-optical both millimagnetometry and micromagnetometry (based on optical microscopy) for wide range of magnetic field pulse amplitude, orientation, and duration; temperature, light wavelength, light path configuration (enabling magnetization vector position analysis),...
- scanning probe microscopy, mainly AFM, MFM and STM. New theoretical approaches, supported by numerical simulations and verified by experiment, will be developed for deeper understanding of structural, magnetic (statics and dynamics of magnetization distribution), optical and magneto-optical properties of ultrathin systems.





Results

Methods for fine extraction of complex objects on magneto-optical images were developed for use in software systems analysis and processing of nano-optical images intended to study the properties of materials.

Supporting Partners

- Donetsk National University, Donetsk
- United Institute of Informatics Problems, National Academy of Sciences of Belarus, Minsk
- Research center on Resources Saving Belarus National Academy of Sciences, Hrodno



Baltic GRID: Second Phase

223807 FP7-INFRASTRUCTURES-2007-2



Terms

2008- 2010

Consortium:

13 partners from Belarus, Latvia, Lithuania, Poland, Switzerland, Sweden and Estonia.

Coordinator:

KTH Royal Institute of Technology, Sweden

Financial Support:

- approx. 3M euro in total
- approx. 170K euro EC contribution for UIIP NASB





Description

BalticGrid-II is designed to increase the impact, adoption and reach, and to further improve the support of services and users of the recently created e-Infrastructure in the Baltic States.

The overall vision is to support and stimulate scientists and services used in the Baltic region to conveniently access critical networked resources both within Europe and beyond, and thereby enable the formation of effective research collaborations.

BalticGrid-II is based on e-Infrastructure of 26 clusters built in five countries during the first phase of the *BalticGrid* (2005-2008), connected with *ECEGEE-II*, *GÉANT-II* in the framework of *FP7-INFRA-2007-1.2.3: e-Science Grid infrastructures*.





Results

- extended an infrastructure to Belarus through interoperation of the gLite-based infrastructure with *UNICORE* and *ARC* based Grid resources in the region;
- identified and addressed the specific needs of new scientific communities such as nano-science and engineering sciences;
- established new *Grid* services for linguistic research, Baltic Sea environmental research, data mining tools for communication modelling and bioinformatics.

The *Baltic Region* e-Infrastructure of *BalticGrid-II* project is fully interoperable with the pan-European e-Infrastructures established by *EGEE*, *EGEE* associated projects, and *EGI*.

Cooperation allowed:

- to become a partner of Trans-European association of research and education networks *TERENA*;
- to become a associated partner at EC *GÉANT-III* Project





Menu

- Applications
- Grid Operations
- Training
- Users' support
- Downloads
- Deliverables
- Related
- Feedback Form
- INTERNAL
- BalticGrid-I
- Baltic Cloud
- BalticGrid Innovation Lab

Become a next BalticGrid-II user

Log in

Login Name:

Password:

[Forgot your password?](#)

February 2014

Mo	Tu	We	Th	Fr	Sa	Su
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

Welcome to the BalticGrid-II Web Site

By [admin](#) — last modified 2010-08-12 11:30

On 1 May 2008, the BalticGrid Second Phase (BalticGrid-II) project has started. It is designed to increase the impact, adoption and reach, and to further improve the support of services and users of the recently created e-Infrastructure in the Baltic States. This will be achieved by an extension of the BalticGrid infrastructure to Belarus; interoperation of the grid-based infrastructure with UNICORE and ARC based Grid resources in the region; identifying and addressing the specific needs of new scientific communities such as nanoscience and engineering agencies; and by establishing new Grid services for linguistic research, Baltic Sea environmental research, data mining tools for communication modelling and Bioinformatics.

[More info ...](#)

Events

1. TERENA Networking Conference (TNC) 2010 was held in Vilnius, Lithuania, on 31 May - 3 June 2010. [More info ...](#)

Hot news

The BalticGrid-II project ended on 30th April 2010. [More info ...](#)

1. BalticGrid-II project members participated in the BOBE User Forum, which was held in Uppsala, Sweden, on 12-13 April 2010. [More info ...](#)

2. The e-learning course on Grid computing fundamentals is now available. [More info ...](#)

[Get a leaflet](#) [Get a poster](#)

3. The final version of the BG-II movie is now available. [More info ...](#)

New disseminative materials

BalticGrid-II movie
137 MB AVI file

Get the presentation from TERENA BOBE Enhanced Application Services

BalticGrid-II Applications
[www.balticgrid.eu](#)

[All materials ...](#)

[Send this](#) — [Print this](#) —

BalticGrid, Contact Webmaster
Copyright © 2008 by BG-II Consortium

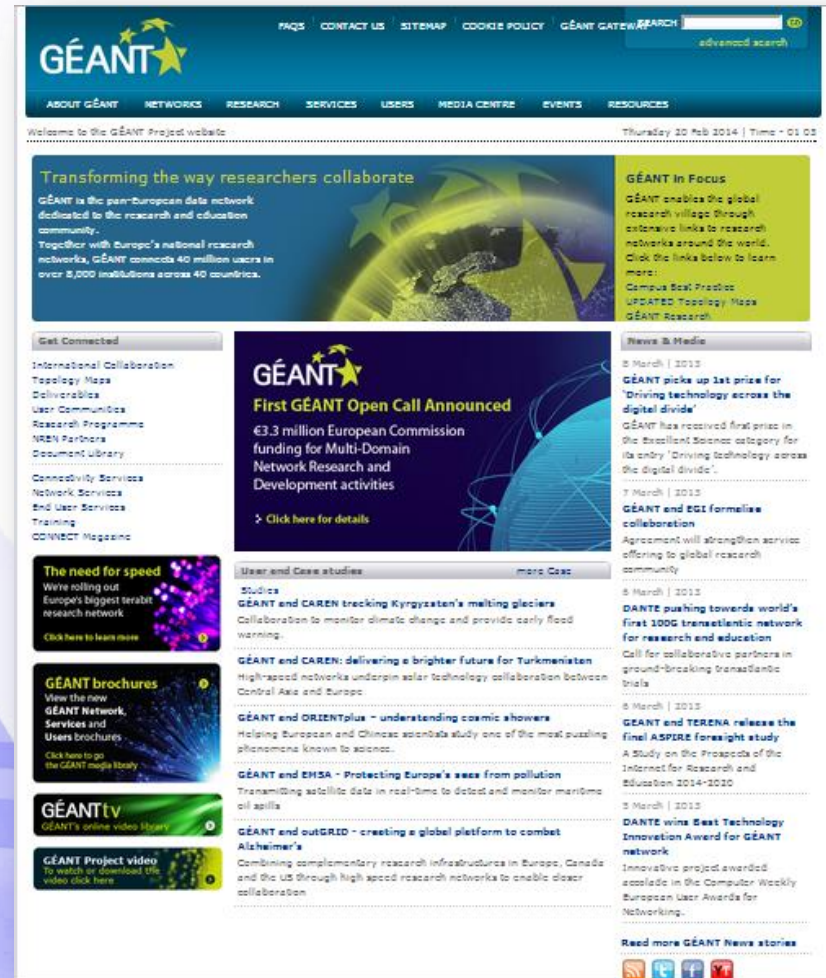
http://www.balticgrid.org

Baltic Grid Second Phase (BalticGrid-II) project is funded by the EU within the framework of the Seventh Framework Programme, in the 'Research infrastructure' activity area, FP7-INFRA-2007-1.2.3: e-Science Grid infrastructure, contract No 223807.



GÉANT Network

- The *GÉANT* network is the fast and reliable pan-European communications infrastructure serving Europe's research and education community.
- Co-funded by European National Research & Education Networks (*NRENs*) and the EC
- the *GÉANT* network is entering now its 4th generation, along with associated development activities.
- *GÉANT's* core objective is to deliver real value and benefit to society by enabling research communities across Europe, and the world, to transform the way they collaborate on ground-breaking research.



<http://www.geant.net>



GÉANT3 (GN3)

Terms

2009-2013

Consortium

32 European networks и 4 associated partners (incl. UIIP NASB)

Coordinator

Dante, UK

Financial support

Approx. 93M of EC contribution



GÉANT3plus (GN3plus)

605243 FP7-INFRASTRUCTURES-2013-1

Terms

2013-2015

Consortium

41 partner

Coordinator

Dante, UK

Financial Support:

- approx. 84M euro in total
- approx. 30K euro EC contribution for UIIP NASB





Description

- *GN3plus* is the extension to the third term of the successful networking project that lies at the heart of the EU's e-Infrastructure strategy.
- seeks to promote the free, unimpeded movement of scientific data
- and knowledge, by connecting and empowering research and education (*R&E*) communities within Europe and other world regions. By driving knowledge creation as the global hub for
- research networking excellence, *GÉANT*'s vision is to become the unified European Communications Commons.



Results

- The *GÉANT* network has established itself as a vital part of the European e-Infrastructure, providing the reliable, high-speed, international *R&E* network and working in close partnership with Europe's *NRENs* and **over 65 *NRENs*** outside of Europe.
- *GN3plus* delivered fast and efficient provisioning of advanced services, develop operational support across management domains and enhance security to ensure service integrity and protection of network resources.
- Application services were developed which are in a federated environment such as mobile and wireless roaming, supported
- by *Authentication and Authorisation Infrastructure (AAI)* meta-service environments for individuals in the *R&E* community.
- It connected user communities:
 - more than 250 organizations connected by *GEANT3Plus*
 - 43 countries,
 - 50M. end-users,
 - 10K universities



ORIENTplus

283334 FP7-INFRASTRUCTURES-2011-2

Linking European and Chinese Research Infrastructures and Communities



Terms

2011-2014

Consortium

12 partners

Coordinator

Dante, UK

Financial support

- No EC contribution
- free connecting channel to China

The screenshot shows the ORIENTplus website interface. At the top, there is a navigation bar with links for 'News', 'About ORIENTplus', 'Media', and 'Links'. The main content area is titled 'About ORIENTplus' and includes a 'Translate: Chinese English' option. Below this, there is a paragraph describing the project's history and purpose. The 'Latest news' section lists three recent updates: a workshop on CHAIN-REDS, two new case studies, and a lunch event. A map of Europe and China is displayed with a glowing fiber optic link connecting the two continents.

<http://www.orientplus.eu/>



Description

ORIENTplus is created to maintain and further develop infrastructure between *GÉANT* and China that is open for use by all European and Chinese researchers. The main focus of the this project is to support the infrastructure link.

- A key objective is to upgrade the link during the term of *ORIENTplus* to meet the growing capacity demands and provide a wider range of services.
- A second objective is to ensure that *ORIENTplus* connectivity will be used to greatest effect by the EU and Chinese user communities.
- In addition the proposal sets out unfunded supporting activities to optimise the performance of the link, promote the use of the link, and provide users with technical support.





Results

- The *ORIENTplus* upgraded previous link from 2.5 Gbps to 2x2.5 Gbps or even to 10 Gbps. *ORIENTplus* operated in hybrid mode, to carry both IP and point-to-point (*lightpath*) services.
- It was optimized and enhanced the Europe-China connectivity by supporting the deployment of services and tools such as *perfSONAR* (for network performance monitoring), *eduroam* (roaming access service for the research and education community) and *Bandwidth on Demand* service (to enable dynamic path establishment).



EGI-InSPIRE

261323 FP7-INFRASTRUCTURES-2010-2

**Integrated Sustainable Pan-European Infrastructure for
Researchers in Europe**



Terms

2010-2014

Consortium

50 organizations from more than 40 стран

Coordinator

EGI.eu, Netherlands

Financial Support

Approx. 40K (EC contribution for UIIP NASB)



Description

- *EGI-InSPIRE's* mission is to establish a sustainable *European Grid Infrastructure (EGI)*.
- It is ideally placed to join together the new *Distributed Computing Infrastructures (DCIs)* such as clouds, supercomputing networks and desktop grids, for the benefit of user communities within the European Research Area.

Results obtained by UIIP NASB

- An infrastructure of *g-lite* segment is deployed.
- Operational research portal of *grid* network is created and its interactions with information systems of a pan-European grid infrastructure EGI are organized



mobile share

egi European Grid Infrastructure

COMMUNITY • INFRASTRUCTURE • SERVICES • SOLUTIONS • HOW TO? • CASE STUDIES • NEWS & MEDIA • ABOUT

EGI.eu

HOME > ABOUT > EGI-INSPIRE

EGI-InSPIRE

The EGI-InSPIRE project (Integrated Sustainable Pan-European Infrastructure for Researchers in Europe) started on 1 May 2010, co-funded by the [European Commission](#) (contract number: RI-261323) for four years, as a collaborative effort involving more than [50 institutions](#) in over 40 countries. Its mission is to establish a sustainable [European Grid Infrastructure \(EGI\)](#).

EGI-InSPIRE is ideally placed to join together the new Distributed Computing Infrastructures (DCIs) such as clouds, supercomputing networks and desktop grids, for the benefit of user communities within the European Research Area.

- [Governance](#)
- [Activity](#)
- [Deliverables & Milestones](#)
- [Project partners](#)
- [Gender Action Plan](#)
- [Project metrics](#)

MORE ABOUT EGI-INSPIRE

- [Project presentation, May 2011 \(.pdf\)](#)
- [Factsheet \(.pdf\)](#)
- [Project's templates](#)

MINI-PROJECTS

[An overview of the EGI-InSPIRE mini-projects \(Inspired 11\)](#)

contact • site map • events • blog • intranet • glossary • disclaimers

Last updated: 01 May 2013 | ©2012 EGI.eu. Website hosted by CESNET, Bmo on behalf of EGI.eu. subscribe: Follow

<https://www.egi.eu>

SCUBE ICT

231148 FP7-ICT-2007-3

Strategic Cooperation in Ukraine, Belarus and EU in Information and Communication Technologies

Terms

2009 – 2010

Consortium:

9 partners from EU, Belarus and Ukraine

Coordinator:

International Environment and Quality Services North Greece Ltd

Financial Support:

- approx. 700K euro in total
- approx. 30K euro of EC contribution for UIIP NASB



EU-Eastern Europe and Central Asia
Gateway on ICT research and development



Description



- *SCUBE-ICT* was an innovative EU funded initiative aiming to upgrade the cooperation in the field of Information and Communication Technologies (ICT) between EU, Belarus and Ukraine in key areas of mutual interest in order to create substantial socio-economic benefits in all three regions.
- A wide range of diversified activities have been implemented at two levels:
Research / industrial level and Policy level

Results

- Belarusian and Ukrainian research and industrial ICT domains were analyzed.
- A 'pool' of key ICT players from Belarus and Ukraine was created to promote collaboration with their EU counterparts.
- highly motivated ICT actors from the three regions were advised consulted and supported for FP7-ICT research activities.
- Existing and future commonalities and differences in ICT R&D policies between EU and the targeted countries were identified and analyzed .
- Policy dialogue towards future cooperation directions in the ICT Research and Development field were supported and facilitated .



EECa **picture**

EU-Eastern Europe and Central Asia Gateway for ICT Research, Development and Policy Dialogue

Home About EECA Countries Working groups Useful information Partners area Contact us

Search

Search

Find your Research Partner
search application that helps you find the right partner

F.A.Q.
Frequently Asked Questions

Ask for assistance

Glossary

The EECA Countries

Belarus, Ukraine, Moldova, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgystan, Tajikistan, Uzbekistan, Turkmenistan, Russia

News

- 11-12-2013 Third PICTURE newsletter
- 05-12-2013 Commission welcomes EU Member States' adoption of Horizon 2020
- 01-10-2013 ICT Eastern Partnership (EaP) Information Day successfully organized in Yerevan

Newsletter

I want to receive newsletter

Your email...

Events

March 2014

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Follow us on

SCUBE **ICT**

SCUBE ICT

EECA Web portal
www.eeca-ict.eu
National ICT reports
ICT main actors "Promotion Guide"

Mapping Questionnaire
Help-Desk www.extend-ict.eu/helpdesk

ISTOK SOYUZ

EXTEND

On-line Competence Platform
www.eeca-ict.eu/index.php/competence

<http://www.eeca-ict.eu/>

EU-Eastern Europe and Central Asia Gateway on ICT research and development





SECURE-R2I

609534 FP7-INCO-2013-9

Reinforcing cooperation with Eastern Partnership countries on bridging the gap between research and innovation for inclusive and secure societies.



SECURE-R2I

Terms

2013 – 2016

Consortium:

12 partners

Coordinator:

Intelligentsia Consultants, Luxembourg

Financial Support:

- approx. 1M euro in total
- approx. 71K euro of EC contribution for UIIP NASB



Description

The overall aim of the *SECURE-R2I* is to reinforce cooperation with *Eastern Partnership Countries (EPC)* on bridging the gap between research and innovation for *Horizon 2020 Societal Challenge 7 "Secure Societies"*. The research domains encompassed by "Secure Societies" are broad and include *ICT; Security; Nano sciences, Nanotechnologies, Materials (NMP); and Social Sciences and Humanities (SSH)*. These research domains also form the basis of important economic sectors in the *EPC*, with many potential benefits for the EU, but which also need European support to increase their exploitation. Addressing this issue, the *SECURE-R2I* project will assist R&D and innovation (*RDI*) organizations in *EPC* via a range of knowledge and technology transfer activities with the support of European specialists.



SECURE-R2I

The screenshot shows the SECURE-R2I website homepage. At the top, there is a navigation menu with links for Home, Project Summary, Partners, Publications, Pilot Projects, and Events & News. Below the menu, the main content area is titled "Home" and contains the following sections:

- SECURE-R2I**: Reinforcing cooperation with Eastern Partnership countries on bridging the gap between research and innovation for inclusive and secure societies.
- Latest News**:
 - H2020 work programme for 2014 for "Secure Societies" (21.01.2014)
 - New publication highlights FP7-funded Security projects (13.01.2014)
 - SECURE-R2I: Security related technology transfer between EU and Eastern Partnership Countries (1.11.2013)
- Upcoming Events**: FP7 SECURE-R2I Summer School 2014 – Tallinn, Estonia, 2-6 June 2014.
- Pilot Projects**: Ukraine, Belarus, Armenia, Georgia.
- Upcoming Events**: FP7 SECURE-R2I Summer School 2014 – Tallinn, Estonia, 2-6 June 2014. call for applicants !!

<http://secure-r2i.eu>





Activities

- Networking between *EPC* organizations involved in *RDI* for *Societal Challenge 7*: It consists in mapping *EPC RDI* organizations and organizing brokerage events to stimulate cooperation;
- Analyzing the tech transfer opportunities and bottlenecks of *EPC* organizations involved in *RDI* for *Societal Challenge 7*: It consists in surveying these organizations and holding discussions with representatives of government, industry, government and intermediary bodies;
- Exchanging best practices in knowledge/technology transfer via a range of specific training courses and intensive summer schools in Europe;
- Twinning via Research to Innovation (*R2I*) pilot projects: Each *EPC* research partner in the consortium will twin with another consortium partner who will support them to implement a bilateral *R2I* pilot project;
- Providing innovation support services to selected, high-potential *EPC* (and European) *RDI*: The activities will consist in coaching and advisory services on innovation and tech-transfer.





BMBS COST Action

BM1304

Applications of MR imaging and spectroscopy techniques in neuromuscular disease: collaboration on outcome measures and pattern recognition for diagnostics and therapy development

Terms

2013 – 2017

Participations:

15 COST countries and 3 partners from COST Near Neighbour Countries (incl. UIIP NASB)





Description

- This *COST Action* will overcome the main hurdles to rollout of magnetic resonance (*MR*) techniques by sharing expertise and data, validating protocols across platforms and exploring the potential of magnetic resonance imaging and spectroscopy techniques (*MRI and MRS*) as a helpful diagnostic tool and a quantitative outcome measure in Neuromuscular diseases (*NMD*) clinical trials.
- The objectives of standardizing applications of *MRI* and *MRS* in *NMD*, training of early stage researchers and the development of an online atlas of neuromuscular imaging will enhance knowledge of scientists and healthcare professionals and ultimately benefit patients with *NMD*.





TEMPUS IV Projects



European Commission

TEMPUS

543853-TEMPUS-1-2013-1 DE-TEMPUS-SMHES

Fostering the Knowledge Triangle in Belarus, Ukraine and Moldova

2013 –2016

EC Contribution - approx. 700K euro

TEMPUS 517151-TEMPUS-1-2011-1-SK-TEMPUS-JPHES

Centers of Excellence for young REsearchers

2013 –2016

EC Contribution - approx. 700K euro





UIIP NAS Belarus

6, Surganova str.

220012 Minsk

Republic of Belarus

www.uiip.bas-net.by

cic@newman.bas-net.by



Alexei

BELOTSERKOVSKY

On behalf of Space NCP

Tel. :+375 17 284 22 96

Fax:+375 17 331 84 03

ncp4space.by@gmail.com

HORIZON 2020

