

## Prof. Jacek Ulański

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr		Title Prof.
First name	Jacek		
Last name	Ulański		
Position	Head of Department of Molecular Physics; Coordinator of the ECBNT		

ORGANISATION DETAILS					
Organisation name	European Centre of Bio- and Nanotechnology (ECBNT) at Technical University of Lodz				
Street *	Żeromskiego 116				
ZIP *	90-924	City *	Łódź	Country *	Poland
Phone *	+48 42 631 32 16		Fax	+48 42 631 32 18	
Email *	cbnt@p.lodz.pl		Web	<a href="http://www.cbnt.p.lodz.pl/">http://www.cbnt.p.lodz.pl/</a>	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input checked="" type="checkbox"/> <b>250+</b>	
Organisation type	<input checked="" type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Department of Molecular Physics and European Centre of Bio- and Nanotechnology				
Short description of your company or organization	ECBNT is an interfaculty research consortium at Technical University of Lodz unifying research groups from 6 faculties of Technical University of Lodz.				

TOPICS OF INTEREST REGARDING THE CALL IN “COLLABORATIVE S&T PROJECTS”
Sub-topic of exercise
<p><b>1. Innovative materials and cutting edge technological processes</b></p> <p>ultrahigh-power laser sources <input type="checkbox"/></p> <p>intelligent materials and nanomaterials <input checked="" type="checkbox"/></p> <p>quantum optics <input type="checkbox"/></p> <p><b>2. Research on serious human health problems</b></p> <p>viral infections: HIV and Hepatitis <input type="checkbox"/></p> <p>auto-immune diseases <input checked="" type="checkbox"/></p> <p>neurodegenerative diseases <input checked="" type="checkbox"/></p>

## Prof. Boris Krylov

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr Mr	<input type="checkbox"/> Ms	Title Professor
First name	Boris		
Last name	Krylov		
Position	Deputy Director		

ORGANISATION DETAILS				
Organisation name Pavlov Institute of Physiology Russian Academy of Sciences				
Street * nab. Makarova, 6				
ZIP * 199034	City * Saint-Petersburg		Country * Russian Federation	
Phone * +79112992597			Fax 812-3280501	
Email * krylov@infran.ru			Web http://www.infran.ru	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> + Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other			
Department				
Short description of your company or organization	Pavlov Institute of Physiology of the Russian Academy of Sciences originates from the Physiological Institute of the USSR Academy of Sciences, which was founded in 1925 on the base of the Physiological Laboratory. At present, Pavlov Institute of Physiology is one of the largest multi-profile physiological institutions of the country. Working in its 33 laboratories, sectors and groups are more than 250 researchers, including about 200 Doctors and Candidates of Sciences.			

TOPICS OF INTEREST REGARDING THE CALL IN “COLLABORATIVE S&T PROJECTS”	
Sub-topic of exercise	Clinical application of laser devices for chronic pain relief
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources + <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy convergion and storage <input type="checkbox"/>	
<b>3. Research on serious human health problems</b> viral infections: HIV and Hepatitis + <input type="checkbox"/>	

auto-immune diseases <input type="checkbox"/> neurodegenerative diseases + <input type="checkbox"/>
<b>4. Contemporary socio-economic studies</b> Social security systems and welfare state (in the context of globalization) <input type="checkbox"/> Labour, labour market, and employment <input type="checkbox"/> Transformation of the educational system <input type="checkbox"/>
Areas of activity ( <i>Free keywords</i> ) <i>Neurophysiology, Ionic channels of excitable membranes, pain relief, infrared laser irradiation</i>

PROJECT IDEA(S)	
Short description of project	<p>Responses of rat dorsal root sensory neuron cell membrane to the influence of infrared (IR) low-power irradiation were investigated using whole-cell patch-clamp method. As a very sensitive physiological indicator of membrane response, the effective charge transfer in the activation gating system of the tetrodotoxin-resistant (TTXr, Nav1.8) sodium channels which are responsible for pain sensation is measured. In this case, it is found using patch-clamp method that the threshold value of low-power IR irradiation was equal to the energy carried of 200 photons. Energy carried by 2000 photons (the wave length was equal to 10.6 mkm) lead to heating of the membrane. These values determine the energy range that should be used in clinical practice for pain relief. Our results indicate that the low-power IR irradiation that leads to the physiological effects under consideration is spectral selective. Low-power irradiation of wave lengths equal to 1.05 and 3.39 mkm were ineffective. But the change-over of the wave length from 10.57 mkm to 9.24 mkm results in existence and conservation of the physiological effect under consideration. We predict that ATP molecules are excited not only due to excitation of P-O-P bond (10.57 mkm) but also C-O-P bond (9.24 mkm). As a result, the transducer function of Na, K- ATPase should be activated. This fact, in turn, leads to the decrease in excitability of TTXr channels and to pain relief. This result is confirmed by the behavioral experiments on rats ("Formalin test"). The data obtained have clinical implications. The characteristics of medical device are formulated. These characteristics determine the efficiency of clinical application of the new-made laser device. Different forms of pain syndrome are incurable up-to-now. As a result millions of patients are suffering from chronic pain. Our preliminary impressions from clinical trials of the method are promising. The new results in the field of skin laser therapy show their effectiveness for pain relief. The aim of the project is the development of a new medical device for physiotherapy. New low-power IR laser for chronic pain relief should be constructed and certificated.</p>
Description of scientific expertise offered	<p>The scientific expertise has been done in 2008. This part of this work was supported by of Russian Foundation of Basic Research by the grant N <b>08-04-90029-Bel-a</b>            Recent publications on the topic were presented in Russian Journal "Sensory Systems" and Belarus Journal of Applied Spectroscopy in 2010.</p>
Description of technical expertise offered	<p>The standard procedure of technical expertise of the new medical laser device should be done in the certified State Institute of Medical Technique (Moscow).</p>
Description of requested partner scientific expertise	<p>The developed device should be tested PRACTICALLY in clinics. Positive results as pilot data have been obtained.</p>

Description of requested partner technical expertise	
Potential partners (name, organisation, address ...)	<p>At present an interested support of this Project is obtained by Professor Joergen Schwarz, Center of Molecular Neurobiology Hamburg (ZMNH) (Germany).          Juergen Schwarz <a href="mailto:juergen.schwarz@zmnh.uni-hamburg.de">juergen.schwarz@zmnh.uni-hamburg.de</a>          Prof. Juergen R. Schwarz          University Medical Center Hamburg-Eppendorf          ZMNH          Institut fuer Neurale Signalverarbeitung          Falkenried 94          20251 Hamburg          Germany          Tel.:040 - 7410 - 55083          Fax.:040 - 7410 - 56643</p>

## Prof. Boris Krylov

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr Mr	<input type="checkbox"/> Ms Ms	Title Professor
First name	Boris		
Last name	Krylov		
Position	Deputy Director		

ORGANISATION DETAILS				
Organisation name Pavlov Institute of Physiology Russian Academy of Sciences				
Street * nab. Makarova, 6				
ZIP * 199034	City * Saint-Petersburg		Country * Russian Federation	
Phone * +79112992597			Fax 812-3280501	
Email * krylov@infran.ru			Web http://www.infran.ru	
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Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> + Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other			
Department				
Short description of your company or organization	Pavlov Institute of Physiology of the Russian Academy of Sciences originates from the Physiological Institute of the USSR Academy of Sciences, which was founded in 1925 on the base of the Physiological Laboratory. At present, Pavlov Institute of Physiology is one of the largest multi-profile physiological institutions of the country. Working in its 33 laboratories, sectors and groups are more than 250 researchers, including about 200 Doctors and Candidates of Sciences.			

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<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy convergion and storage <input type="checkbox"/>	
<b>3. Research on serious human health problems</b> viral infections: HIV and Hepatitis + <input type="checkbox"/>	

auto-immune diseases <input type="checkbox"/> neurodegenerative diseases + <input type="checkbox"/>
<b>4. Contemporary socio-economic studies</b> Social security systems and welfare state (in the context of globalization) <input type="checkbox"/> Labour, labour market, and employment <input type="checkbox"/> Transformation of the educational system <input type="checkbox"/>
Areas of activity ( <i>Free keywords</i> ) <i>Neurophysiology, Ionic channels of excitable membranes, pain relief, infrared laser irradiation</i>

PROJECT IDEA(S)	
Short description of project	<p>Responses of rat dorsal root sensory neuron cell membrane to the influence of infrared (IR) low-power irradiation were investigated using whole-cell patch-clamp method. As a very sensitive physiological indicator of membrane response, the effective charge transfer in the activation gating system of the tetrodotoxin-resistant (TTXr, Nav1.8) sodium channels which are responsible for pain sensation is measured. In this case, it is found using patch-clamp method that the threshold value of low-power IR irradiation was equal to the energy carried of 200 photons. Energy carried by 2000 photons (the wave length was equal to 10.6 mkm) lead to heating of the membrane. These values determine the energy range that should be used in clinical practice for pain relief. Our results indicate that the low-power IR irradiation that leads to the physiological effects under consideration is spectral selective. Low-power irradiation of wave lengths equal to 1.05 and 3.39 mkm were ineffective. But the change-over of the wave length from 10.57 mkm to 9.24 mkm results in existence and conservation of the physiological effect under consideration. We predict that ATP molecules are excited not only due to excitation of P-O-P bond (10.57 mkm) but also C-O-P bond (9.24 mkm). As a result, the transducer function of Na, K- ATPase should be activated. This fact, in turn, leads to the decrease in excitability of TTXr channels and to pain relief. This result is confirmed by the behavioral experiments on rats ("Formalin test"). The data obtained have clinical implications. The characteristics of medical device are formulated. These characteristics determine the efficiency of clinical application of the new-made laser device. Different forms of pain syndrome are incurable up-to-now. As a result millions of patients are suffering from chronic pain. Our preliminary impressions from clinical trials of the method are promising. The new results in the field of skin laser therapy show their effectiveness for pain relief. The aim of the project is the development of a new medical device for physiotherapy. New low-power IR laser for chronic pain relief should be constructed and certificated.</p>
Description of scientific expertise offered	<p>The scientific expertise has been done in 2008. This part of this work was supported by of Russian Foundation of Basic Research by the grant N <b>08-04-90029-Bel-a</b>            Recent publications on the topic were presented in Russian Journal "Sensory Systems" and Belarus Journal of Applied Spectroscopy in 2010.</p>
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Description of requested partner technical expertise	
Potential partners (name, organisation, address ...)	<p>At present an interested support of this Project is obtained by Professor Joergen Schwarz, Center of Molecular Neurobiology Hamburg (ZMNH) (Germany).          Juergen Schwarz <a href="mailto:juergen.schwarz@zmnh.uni-hamburg.de">juergen.schwarz@zmnh.uni-hamburg.de</a>          Prof. Juergen R. Schwarz          University Medical Center Hamburg-Eppendorf          ZMNH          Institut fuer Neurale Signalverarbeitung          Falkenried 94          20251 Hamburg          Germany          Tel.:040 - 7410 - 55083          Fax.:040 - 7410 - 56643</p>

**Mr Valery A. Rasskazov**

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Ph.D.
First name	Valery A.		
Last name	Rasskazov		
Position	Deputy Director		

ORGANISATION DETAILS				
Organisation name: Pacific Institute of Bioorganic Chemistry of Far Eastern Branch of RAS				
Street * Prospect Stoletya 159a				
ZIP *	690022	City *	Vladivostok	Country * Russian Federation
Phone *	+7(4232) 31-14-30		Fax *	+7(4232) 31-40-50
Email *	raskaz@piboc.dvo.ru		Web	http://www.piboc.dvo.ru/
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input checked="" type="checkbox"/> 51 - 250	<input type="checkbox"/> 250+
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other			
Department				
Short description of your company or organization	Pacific Institute of Bioorganic Chemistry conducts researches in the field of bioorganic chemistry, biochemistry, molecular immunology, marine microbiology and biotechnology. Objects of the researches are the marine organisms (including microorganisms) of Ocean and unique forests plants of the Far East of Russia. Many chemical compounds studied in Institute have been shown to possess a powerful physiological activity towards cancer cells and pathogenic viruses and bacteria, that has created the basis for production of the novel medicines and food additives for treatment and prophylaxis of the different human diseases.			

TOPICS OF INTEREST REGARDING THE CALL IN “COLLABORATIVE S&T PROJECTS”
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input checked="" type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input checked="" type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>
<b>3. Research on serious human health problems</b>



viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases ☐

**4. Contemporary socio-economic studies**

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)

Natural compounds, marine invertebrates, marine microorganisms, algae, structure, biological activity, anticancer effect, antifungal activity, antioxidants, antiviral activity, immunostimulator, cancer-preventive activity, novel leads against fungal, parasitic, bacterial, and viral diseases.

PROJECT IDEA(S)	
Short description of project	Searching for novel bioregulators among the marine organisms, including microorganisms, studying their structure and biological activity and working out the novel technologies to obtain the novel medicines and valuable biochemical preparations for diagnostics and treatment such diseases as cancer, viral, autoimmune, cardiovascular and neurodegenerative etc.
Description of scientific expertise offered	We would need scientific expertise to this project who: <ul style="list-style-type: none"> <li>- would carry out the investigations in field of the natural compounds chemistry and would carry out the investigations in field of natural compounds bioassaying;</li> <li>- would have the experience of the creation of the novel medicines to treat such diseases as cancer, viral, autoimmune, cardiovascular and neurodegenerative;</li> </ul>
Description of technical expertise offered	We would need technical expertise to this project who: <ul style="list-style-type: none"> <li>- would have the experience in field of working out the novel technological methods for preparations of the novel medicines;</li> <li>- would have the experience in assessment of market prospects for novel medicines</li> </ul>
Description of requested partner scientific expertise	We would need scientific expertise requested partner to this project who: <ul style="list-style-type: none"> <li>- would carry out the investigations in field of the natural compounds chemistry and would carry out the investigations in field of natural compounds bioassaying;</li> <li>- would have the experience of the creation of the novel medicines to treat such diseases as cancer, viral, autoimmune, cardiovascular and neurodegenerative;</li> </ul>
Description of requested partner technical expertise	We would need technical expertise requested partner to this project who: <ul style="list-style-type: none"> <li>- would have the experience in field of working out the novel technological methods for preparations of the novel medicines ;</li> <li>- would have the experience in assessment of market prospects for novel medicines</li> </ul>
Potential partners (name, organisation, address ...)	<ul style="list-style-type: none"> <li>- Proteome Center Rostock, University of Rostock, Schillingallee 69, D-18057 Rostock, Germany;</li> <li>- Institute of Immunology, University of Rostock, Schillingallee 68, D-18057 Rostock, Germany;</li> <li>- AstraZeneca Global;</li> <li>- Novartis Institutes for Biomedical Research;</li> <li>- Pharma Research and Early Development, Roche;</li> </ul>

## Ms Elena Zaklyazminskaya

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input checked="" type="checkbox"/> Ms	Title M.D, PhD
First name	Elena		
Last name	Zaklyazminskaya		
Position	Head of Medical Genetics Laboratory		

ORGANISATION DETAILS					
Organisation name	Russian Research Centre of Surgery RAMS				
Street *	2, Abricosovsky per.				
ZIP *	119991	City *	Moscow	Country *	Russian Federation
Phone *	+7 499 2485495		Fax	+7 499 2485495	
Email *	<a href="mailto:helenezak@gmail.com">helenezak@gmail.com</a>		Web	<a href="http://www.med.ru/">http://www.med.ru/</a>	
Employees	<input checked="" type="checkbox"/> 1-10	<input checked="" type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> <u>Research Institution</u> <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Medical Genetics Laboratory				
Short description of your company or organization	Russian Research Centre of Surgery provides all kind of surgery, expertise in neurosurgery. Medical Genetics Laboratory aims to develop genetic diagnostics for patients with neurodegenerative diseases, neurofibromatosis, cardiomyopathies, arrhythmogenic diseases and genetic counseling. We study genetic bases of action potential formation and impulse propagation, conduction diseases, brain and cardiac expression of ion channels.				

TOPICS OF INTEREST REGARDING THE CALL IN “COLLABORATIVE S&T PROJECTS”	
Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy convergion and storage <input type="checkbox"/>	
<b>3. Research on serious human health problems</b> viral infections: HIV and Hepatitis <input type="checkbox"/> <u>auto-immune diseases</u> <input type="checkbox"/>	

neurodegenerative diseases ☐

#### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*) Human genetics, DNA diagnostic, cell cultivation, medico-genetic counseling, neuronal, cardiac diseases, transplantation and rejection.

PROJECT IDEA(S)	
Short description of project	Genetic and functional analysis of ion channels and CHIPs in patients with neurodegenerative diseases
Description of scientific expertise offered	Molecular genetic analysis of individuals and population
Description of technical expertise offered	Sanger sequencing , PCR, PCR in Real-time
Description of requested partner scientific expertise	Functional analysis of mutations of genes of ion channels
Description of requested partner technical expertise	Cell culture, transfection, patch clamp
Potential partners (name, organisation, address ...)	<p><b>Prof. Hugues Abriel, MD PhD</b>  Director, Department of Clinical Research  Group leader Ion Channel Research</p> <p>University of Bern  Department of Clinical Research  MEM H 821  Murtenstrasse 35  3010 Bern  Switzerland</p> <p>Phone +41 31 632 09 28  Fax +41 31 632 09 46  E-Mail <a href="mailto:hugues.abriel@dkf.unibe.ch">hugues.abriel@dkf.unibe.ch</a></p>

## Turkey

### Mr Turgay Dalkara

PARTICIPANT				
Gender	X	<input type="checkbox"/> Ms	Title MD, PhD	
First name	Turgay			
Last name	Dalkara			
Position	Professor			

  

ORGANISATION DETAILS					
Organisation name	Hacettepe University, Institute of Neurological Sciences and Psychiatry				
Street *	Sihhiye				
ZIP *	06100	City *	Ankara	Country *	Turkey
Phone *	90 (312) 305 2620		Fax	90 (312) 309 3451	
Email *	tdalkara@hacettepe.edu.tr		Web	http://www.norbil.hacettepe.edu.tr/	
Employees	<input type="checkbox"/> 1-10	X	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input checked="" type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department					
Short description of your company or organization	The Institute of Neurological Sciences and Psychiatry of Hacettepe University is established to promote integrative research between basic and clinical neurosciences. Institute of Neurological Sciences and Psychiatry is composed of 3 departments organized in 16 work groups covering various fields in basic and clinical neurosciences.				

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Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>	
<b>3. Research on serious human health problems</b>	

viral infections: HIV and Hepatitis <input type="checkbox"/> auto-immune diseases <input type="checkbox"/> neurodegenerative diseases X
<b>4. Contemporary socio-economic studies</b> Social security systems and welfare state (in the context of globalization) <input type="checkbox"/> Labour, labour market, and employment <input type="checkbox"/> Transformation of the educational system <input type="checkbox"/>
Areas of activity ( <i>Free keywords</i> )      Cerebral ischemia, cell death, migraine, blood-brain barrier

PROJECT IDEA(S)	
Short description of project	Basic mechanisms of ischemic cell death and migraine. Neuroprotection and anti-migraine treatments
Description of scientific expertise offered	Organization and infrastructure for translation of basic laboratory findings to clinic
Description of technical expertise offered	Animal models of stroke and migraine.
Description of requested partner scientific expertise	Cutting edge imaging techniques
Description of requested partner technical expertise	Optogenetics, novel fluorescent probes
Potential partners (name, organisation, address ...)	

## Dr. Seval Korkmaz

PARTICIPANT					
Gender	<input type="checkbox"/> Mr	<input checked="" type="checkbox"/> Ms	Title Dr		
First name	Seval				
Last name	Korkmaz				
Position	Cell Culture and In Vitro Screening Supervisor				
ORGANISATION DETAILS					
Organisation name	Abdi Ibrahim Ilac A.S.				
Street *	Hosdere Mevkii Tunc Cd. No:3 Esenyurt				
ZIP *	34555	City *	Istanbul	Country *	Turkey
Phone *	90 212 6226850		Fax	90 212 6231952	
Email *	seval.korkmaz@abdiibrahim.com.tr		Web	www.abdiibrahim.com.tr	
Employees	<input type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input checked="" type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input checked="" type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	R&D Center				
Short description of your company or organization	<p>Country : Turkey            Founded : 1912            Number of Employees: 3300            State of Ownership : Private</p> <p><b>Corporate description/mission</b></p> <p>Abdi Ibrahim (AI) Pharmaceuticals is most established Turkish Pharmaceutical Company with almost 100 years of tradition. From 2003 onwards, Abdi Ibrahim Pharmaceuticals is the leader of the pharmaceutical sector in Turkey in terms of annual turnover (850 million USD in 2010) and the number of boxes sold (&gt; 130 million) with a market share of 7.6 percent in Turkey. Additionally Abdi Ibrahim also exports its products to 15 countries.</p> <p>Abdi Ibrahim is the first and the only Turkish Company, which is amongst the top 100 Pharmaceuticals Company in the world according to the IMS Data. Our aim is to enlarge our current global presence and to continue the growth above the market average – domestic and international.</p> <p>AI currently work almost 40 licensors worldwide with long and established win-win business relationships. We also have in-house developed generics that consist of 40% of company's sales value. In total, we are marketing 150 brands with 250 preparations.</p>				

	<p>AI present in all major therapeutic areas such as; Respiratory, CNS, Muscle-Skeletal, Alimentary and Track Metabolism and Blood &amp; Blood forming organs and growing well in Gastro-intestinal and we aim to strengthen our portfolio in the areas of Oncology, Metabolism/ Endocrinology and Anti-InfectiveS. AI has the highest share of voice with a field force size of &gt; 2.000 sales reps, trained to detail to specialist doctors.</p> <p>Abdi İbrahim recognizes its R&amp;D capabilities as a vital component of its business strategy that will provide the c with a sustainable, long-term competitive advantage. The R&amp;D center is the first stand alone R&amp;D center in Turkish Pharmaceutical Industry accredited by the Ministry of Industry and Trade. 125 scientists from different scientific diciplines have been worked at R&amp;D department of AI.</p> <p>Internationally we have subsidiaries in Algeria (where we are amongst the top 10 companies), Russia, Kazakhstan, Ukraine, Azerbaijan and Georgia.</p> <p>OUR VISION: Growing faster than the market, continue to be a preferred and respected company in Turkey and become a Global Player.</p> <p>OUR MISSION: Strive continuously for a better quality of human life. Be at the service of medical science, humanity.</p> <p>Abdi İbrahim Pharmaceuticals is fully committed to satisfy its licensors and partners requests. We are experienced with different partnering models and seek for the best solution to reach a mutual benefit based on a long-term commitment. Our special interest is in In-licensing opportunity for the Turkish territory where we can use our strong position and Marketing experience for rapid penetration as well as for the markets, we are present. Other partnerships like Co-development proposals and Toll manufacturing opportunities are welcome.</p> <p>Some of our current licensors are:</p> <p>Allergan, Dompe, Farmaceutici Damor, Dentinox, Gifrer, Grünenthal, HRA Pharma, Italfarmaco, LEO Pharma, LGLS, Madaus, Medinova, Meiji, Molteni, Nycomed, OM Pharma, Orion, Otsuka, Pfizer, Pharmavite, Reckitt Benckiser, , Roha, Rottapharm, Dr. Willmar Schwabe, Seven Seas Healthcare, UPSA Laboratories, Uriach, Vifor</p>
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climate change in the artic and subartic regions	<input type="checkbox"/>
Material sciences connected with energy convergion and storage	<input type="checkbox"/>
<b>3. Research on serious human health problems</b>	
viral infections: HIV and Hepatitis	<input type="checkbox"/>

auto-immune diseases <input type="checkbox"/> neurodegenerative diseases <input checked="" type="checkbox"/>
<b>4. Contemporary socio-economic studies</b> Social security systems and welfare state (in the context of globalization) <input type="checkbox"/> Labour, labour market, and employment <input type="checkbox"/> Transformation of the educational system <input type="checkbox"/>
Areas of activity ( <i>Free keywords</i> )      Neurodegenerative Diseases, QSAR, Docking, High-throughput Screening, Multi-targeted Drug Design, In silico Screening, In Vitro Screening, computer-aided drug design, intestinal permeability, blood-brain barrier

PROJECT IDEA(S)	
Short description of project	<p>Alzheimer's disease (AD) is the most common neurodegenerative disorder affecting around 15 million people worldwide. Because of the increase in life expectancy already for 2020, the number of cases will rise to about 30 million people worldwide.</p> <p>A sufficient amount of evidence suggests, for example, that antioxidants from the diet can influence the occurrence of neurodegenerative disorders such as AD and Parkinson's disease (PD). In particular, the antioxidant flavanols- catechins have shown great promise..</p> <p>Previous studies have shown that the polyphenol (-)-epi-gallocatechine gallate (EGCG), found in large amounts in green tea, has neuroprotective effects by its properties such as anti-amyloidogenic, ion chelating, antioxidant, anti-inflammatory, esterases inhibitory, COX inhibitory and its modulatory effects on TAU proteins and several different intracellular mechanisms.</p> <p>In current project it is planned that EGCG structure based new therapeutic group can be designed by in silico methods, synthesized and their effects on Alzheimer mechanisms can be tested by in vitro drug screening methods. Intestinal and blood-brain barrier permeability studies of new synthesized drug candidates will be exerted by in vitro techniques.</p> <p>During the project, in silico methods (QSAR, docking, PASS), synthesis of new molecules and in vitro drug screening methods on neuroprotective mechanisms will be exerted.</p> <p>It is aimed that a new therapeutic neuroprotective/ anti-Alzheimer group can be obtained or at least effectiveness of substitutions can be better identified at the end of current project.</p> <p>According to our data we will have obtained at the end of this project, further in vivo and clinical studies will be planned as another project.</p> <p>Approximately 10.000 new designed molecules will be searched and about 50-100 molecules will be synthesized and their in vitro pharmacological effects will be evaluated.</p>
Description of scientific expertise offered	<p>Collaborators of this project should be experienced on those fields;</p> <p>Computer-aided drug design</p> <p>QSAR (Quantitative Structure activity relationship) expertise</p> <p>Expertises for docking: Neuroprotective mechanisms (like, beta-Amyloid, esterases, BACE, MAO)</p> <p>In silico high-throughput screening of new designed drug candidates</p> <p>Expertises for PASS (Prediction of biological activity spectra for substances)</p> <p>Pharmaceutical Chemists for synthesis of new molecules</p> <p>Synthesis of neuroprotective drugs</p> <p>High- throughput cell culture methods of neuroprotective mechanisms</p> <p>Expertises for intestinal and blood-brain barrier permeability</p>
Description of	Some technicians who are experienced on scientific details of this project will be employed.



technical expertise offered	
Description of requested partner scientific expertise	Especially it will be needed who works on docking of specific mechanisms of Alzheimer Diseases
Description of requested partner technical expertise	
Potential partners (name, organisation, address ...)	<ul style="list-style-type: none"> <li>• Dr. Seval Korkmaz (Abdi Ibrahim Pharmaceuticals, Istanbul, Turkey)</li> <li>• Prof. Dr. Anatoli Dimoglo (Gebze Institute of Technology, TURKEY)</li> <li>• Assoc. Prof. Dr. Athina Geronikaki (Aristotle University of Thessaloniki, GREECE)</li> <li>• Prof. Dr. Bachurin (Russian Academy of Science, RUSSIA)</li> <li>• Dr. Fliur Macaev, (Institute of Chemistry, Academy of Sciences, MOLDOVA)</li> <li>• Assoc. Prof. Dr. Maria Laura Bolognesi (Bologna University Fac. Of Pharmacy, Department of Pharmaceutical Chemistry)</li> <li>• Dr. Manfred Windisch (JSW Life Sciences, Graz, AUSTRIA)</li> <li>• Prof. Dr. Romeo Cecchelli (Artois University, FRANCE)</li> <li>• Dr. Seval Korkmaz (Abdi Ibrahim Ilac, TURKEY)</li> </ul>



## 28 February 2011, Ekaterinburg, Brokerage Event

### ERA.Net-RUS Pilot Joint Call

### For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title
First name	Valery		
Last name	Chereshnev		
Position	Director of Institute of Immunology and Physiology URAL BRANCH OF THE RUSSIAN ACADEMY OF SCIENCES		

ORGANISATION DETAILS				
Organisation name				
Street *				
ZIP *	City *		Country *	
Phone *			Fax	
Email *			Web	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> <b>Research Institution</b> <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other			
Department	Institute of Immunology and Physiology URAL BRANCH OF THE RUSSIAN ACADEMY OF SCIENCES			
Short description of your company or organization	<p>The Institute came into being officially on 28 January 2003 with the reorganization of the Ekaterinburg Branch of the Institute of Ecology and Genetics established on 1 June 2000. Now the Institute is incorporated in the Biology Department of Physiology Section at the Russian Academy of SCIENCES. The high-profile staff of 79 employes hosts 1 Full Member, 1 Corresponding Member of RAS? 12 Doctors of Science and 24 PhDs.</p> <p>The research activity encompasses the following principal areas:</p> <ul style="list-style-type: none"> <li>- Immunological mechanisms of inflammation and regeneration (supervised by Academician V.A. Chereshnev and M.D. E.Y. Gusev), immunological regulation of physiological functions both under normal and pathological processes (supervised by Academician V.A. Chereshnev and M.D. B.G. Yushkov).</li> <li>- Optimization mechanisms of contractile myocardium function (supervised by RAS Corresponding Member V.S. Markhasin).</li> <li>- Molecular mechanisms of actin-myosin interaction (supervised by Doctors of Science S.Y. Bershitsky).</li> </ul>			



TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<p><b>1. Innovative materials and cutting edge technological processes</b>            ultrahigh-power laser sources <input type="checkbox"/>            intelligent materials and nanomaterials <input type="checkbox"/>            quantum optics <input type="checkbox"/></p> <p><b>2. Environmental research and climatic change</b>            biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/>            climate change in the arctic and subarctic regions <input type="checkbox"/>            Material sciences connected with energy conversion and storage <input type="checkbox"/></p> <p><b>3. Research on serious human health problems</b>  <b>viral infections: HIV and Hepatitis ++</b> <input type="checkbox"/>              auto-immune diseases <input type="checkbox"/>            neurodegenerative diseases <input type="checkbox"/></p> <p><b>4. Contemporary socio-economic studies</b>            Social security systems and welfare state (in the context of globalization) <input type="checkbox"/>            Labour, labour market, and employment <input type="checkbox"/>            Transformation of the educational system <input type="checkbox"/></p>
Areas of activity ( <i>Free keywords</i> )

PROJECT IDEA(S)	
Short description of project	Challenges and perspectives for improved management of HIV/ Hepatitis co-infection. HIV and Hepatitis are two widespread and highly successful microbes whose synergy in pathogenesis has created a significant threat for human health globally.
Description of scientific expertise offered	
Description of technical expertise offered	
Description of requested partner scientific expertise	



Description of requested partner technical expertise	
<b>PARTNERS</b>	
Partners' names, organizations and addresses	A. Meyerhans Infection Biology Group Deps of Experimental and Health Sciences University Pompeu Fabra Romm 322.8 Edificio PRBB-3er piso Doctod Aiguader 88 08003 Barcelona Spain E-mail: andreas.meyerhans@upf.edu



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### ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	Mrs		Title Candidate of science
First name	Galina		
Last name	Chernova		
Position	Academic Secretary		

ORGANISATION DETAILS				
Organisation name: <b>Institute of Technical Chemistry</b>				
Street * : <b>Korolev, 3</b>				
ZIP *	<b>614013</b>	City *	<b>Perm</b>	Country * <b>Russia</b>
Phone *	<b>( 342) 237 82 69</b>		Fax	<b>(342) 237 82 62</b>
Email *	<b>e-mail: <a href="mailto:itch-uro-ran@yandex.ru">itch-uro-ran@yandex.ru</a></b>		Web	<b><a href="http://www.itch.perm.ru">http://www.itch.perm.ru</a></b>
Employees			100-110	
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other			
Department	<b>Ural Branch of the Russian Academy of Sciences</b>			
Short description of your company or organization	<b>Institute of Technical Chemistry has been conducting research work in chemistry since 1985. General areas: (a) design of materials with a set of ordered physic-chemical and mechanical properties and structures on the basis of organic polymers and inorganic compounds; (b) development of the theory of chemical structure and of synthesis methods for organic compounds including those with biological activity.</b>			

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input checked="" type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input checked="" type="checkbox"/>	



climate change in the arctic and subarctic regions ☐

Material sciences connected with energy conversion and storage ☐

**3. Research on serious human health problems**

viral infections: HIV and Hepatitis ☒

auto-immune diseases ☐

neurodegenerative diseases ☐

**4. Contemporary socio-economic studies**

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)

PROJECT IDEA(S)	
Short description of project	
Description of scientific expertise offered	
Description of technical expertise offered	
Description of requested partner scientific expertise	
Description of requested partner technical expertise	
PARTNERS	
Partners' names, organizations and addresses	



## 28 February 2011, Ekaterinburg, Brokerage Event

### ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	Mrs		Title candidate of science
First name	Viktoria		
Last name	Grishko		
Position	Head of Laboratory of Biologically Active Compounds		

ORGANISATION DETAILS				
Organisation name: Institute of Technical Chemistry				
Street * : Korolev, 3				
ZIP *	614013	City *	Perm	Country * Russia
Phone *	( 342) 237 82 65		Fax	(342) 237 82 62
Email *	e-mail: grishko@aport.ru		Web	<a href="http://www.itch.perm.ru">http://www.itch.perm.ru</a>
Employees			100-110	
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other			
Department	Ural Branch of the Russian Academy of Sciences			
Short description of your company or organization	<b>Institute of Technical Chemistry has been conducting research work in chemistry since 1985. General areas: (a) design of materials with a set of ordered physic-chemical and mechanical properties and structures on the basis of organic polymers and inorganic compounds; (b) development of the theory of chemical structure and of synthesis methods for organic compounds including those with biological activity.</b>			

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/>



climate change in the arctic and subarctic regions ☐  
Material sciences connected with energy conversion and storage ☐

### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☒  
auto-immune diseases ☐  
neurodegenerative diseases ☐

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐  
Labour, labour market, and employment ☐  
Transformation of the educational system ☐

Areas of activity (Free keywords)  
*stomatitis virus (Indiana strain)*

*Secotriterpenoids, acylhydrazones, antiviral activity, immunotropic action, vesicular*

PROJECT IDEA(S)	
Short description of project	<p><b>Novel antiviral compound as a basis for medication against vesicular stomatitis virus.</b></p> <p>Currently, vesicular stomatitis virus (VSV) is a concern in the world, and an analogue of the proposed active component does not exist in the world so far. In addition, the pharmaceutical market can offer neither a vaccine nor any antiviral medication for prevention and therapy of the VSV. Researchers of the <b>Laboratory of Biologically Active Compounds</b> have designed a novel antiviral compound which combines prophylactic and healing activity <i>in vitro</i> against the VSV and exhibits stimulating selective immune activity <i>in vivo</i>. Outstanding works supposed to be conducted jointly with a foreign partner include:</p> <ul style="list-style-type: none"> <li>- Next stages of the <i>in vivo</i> research of antiviral activity;</li> <li>- Pre-clinical and clinical studies</li> </ul> <p>Further studies and commercialization of the product demanded in many countries are impossible without financial support and meeting international standards.</p>
Description of scientific expertise offered	During the research work, 4 articles have been published, 6 presentations made on conferences, 4 patent applications submitted.
Description of technical expertise offered	Expertise in synthesis of biologically active compounds on the basis of vegetative terpenoids. Our strategic partner – the BIOMED Research and Production Company (Perm) develops and produces medical immunobiological preparations.
Description of requested partner scientific expertise	Research institutions of adequate profile
Description of requested partner technical expertise	Pharmaceutical companies
PARTNERS	
Partners' names, organizations and	To be learned yet.





addresses	



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### For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title
First name	Igor		
Last name	Kandoba		
Position	Senior Scientist		

ORGANISATION DETAILS					
Organisation name	Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences				
Street *	S. Kovalevskoy, 16				
ZIP *	620000	City *	Yekaterinburg	Country *	Russia
Phone *	+79222226843		Fax		
Email *	kandoba@imm.uran.ru		Web		
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Applied control problems department				
Short description of your company or organization	Research in theoretical and applied mathematics and computer sciences.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/>



Material sciences connected with energy convergion and storage <input type="checkbox"/>	
<b>3. Research on serious human health problems</b>	
viral infections: HIV and Hepatitis <input checked="" type="checkbox"/>	
auto-immune diseases <input checked="" type="checkbox"/>	
neurodegenerative diseases <input checked="" type="checkbox"/>	
<b>4. Contemporary socio-economic studies</b>	
Social security systems and welfare state (in the context of globalization) <input type="checkbox"/>	
Labour, labour market, and employment <input type="checkbox"/>	
Transformation of the educational system <input type="checkbox"/>	
Areas of activity ( <i>Free keywords</i> )	image processing, real-time video and signal processing, medical data analysis, pattern recognition, tomography image analysis and understanding

PROJECT IDEA(S)	
Short description of project	Creating the special-purpose system for medical video data and signals analysis.
Description of scientific expertise offered	Image, video and signal processing, recognition and understanding.
Description of technical expertise offered	Software design, development, testing and evaluation.
Description of requested partner scientific expertise	Strong expertise in an application domain (medical, microscopy) for data analysis problem formulation.
Description of requested partner technical expertise	Necessary input data acquisition. Evaluation of results obtained by software.
PARTNERS	
Partners' names, organizations and addresses	



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### ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr		Title <b>no</b>
First name	<b>Evgueni</b>		
Last name	<b>Naimushin</b>		
Position	<b>International Officer</b>		

ORGANISATION DETAILS					
Organisation name: <b>Institute of Technical Chemistry</b>					
Street * : <b>Korolev, 3</b>					
ZIP *	<b>614013</b>	City *	<b>Perm</b>	Country *	<b>Russia</b>
Phone *	<b>( 342) 237 82 75</b>		Fax	<b>(342) 237 82 62</b>	
Email *	<b>e-mail: <a href="mailto:international@itch.perm.ru">international@itch.perm.ru</a></b>		Web	<b><a href="http://www.itch.perm.ru">http://www.itch.perm.ru</a></b>	
Employees			100-110		
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	<b>Ural Branch of the Russian Academy of Sciences</b>				
Short description of your company or organization	<b>Institute of Technical Chemistry has been conducting research work in chemistry since 1985. General areas: (a) design of materials with a set of ordered physic-chemical and mechanical properties and structures on the basis of organic polymers and inorganic compounds; (b) development of the theory of chemical structure and of synthesis methods for organic compounds including those with biological activity.</b>				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input checked="" type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b>



biodiversity and ecophysiology of natural ecosystems ☒  
climate change in the arctic and subarctic regions ☐  
Material sciences connected with energy conversion and storage ☐

### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☒  
auto-immune diseases ☐  
neurodegenerative diseases ☐

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐  
Labour, labour market, and employment ☐  
Transformation of the educational system ☐

Areas of activity (*Free keywords*)

## PROJECT IDEA(S)

Short description of project	
Description of scientific expertise offered	
Description of technical expertise offered	
Description of requested partner scientific expertise	
Description of requested partner technical expertise	

## PARTNERS

Partners' names, organizations and addresses	



## 28 February 2011, Ekaterinburg, Brokerage Event

### ERA.Net-RUS Pilot Joint Call

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## PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title
First name	Denis		
Last name	Perevalov		
Position	Lead Developer		

ORGANISATION DETAILS					
Organisation name	Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences				
Street *	S. Kovalevskoy, 16				
ZIP *	620000	City *	Yekaterinburg	Country *	Russia
Phone *	+79090164491		Fax		
Email *	denis.perevalov@mail.ru		Web		
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Applied control problems department				
Short description of your company or organization	Research in theoretical and applied mathematics and computer sciences.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/>



Material sciences connected with energy convergion and storage <input type="checkbox"/>	
<b>3. Research on serious human health problems</b>	
viral infections: HIV and Hepatitis <input checked="" type="checkbox"/>	
auto-immune diseases <input checked="" type="checkbox"/>	
neurodegenerative diseases <input checked="" type="checkbox"/>	
<b>4. Contemporary socio-economic studies</b>	
Social security systems and welfare state (in the context of globalization) <input type="checkbox"/>	
Labour, labour market, and employment <input type="checkbox"/>	
Transformation of the educational system <input type="checkbox"/>	
Areas of activity ( <i>Free keywords</i> )	image processing, real-time video and signal processing, medical data analysis, pattern recognition, tomography image analysis and understanding

PROJECT IDEA(S)	
Short description of project	Creating the special-purpose system for medical video data and signals analysis.
Description of scientific expertise offered	Image, video and signal processing, recognition and understanding.
Description of technical expertise offered	Software design, development, testing and evaluation.
Description of requested partner scientific expertise	Strong expertise in an application domain (medical, microscopy) for data analysis problem formulation.
Description of requested partner technical expertise	Necessary input data acquisition. Evaluation of results obtained by software.
PARTNERS	
Partners' names, organizations and addresses	



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### ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title
First name	Gennady		
Last name	Rusinov		
Position			

ORGANISATION DETAILS				
Organisation name	Institute of Organic Synthesis RA S			
Street *	S.Kovalevskoy st. 22			
ZIP *	City * Ekaterinburg		Country * Russia	
Phone *	+7-3433745944		Fax +7-3433683058	
Email *	rusinov@ios.uran.ru		Web	
Employees	<input type="checkbox"/> 1-10	<input checked="" type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +
Organisation type	<input type="checkbox"/> Higher Education Institution	<input checked="" type="checkbox"/> Research Institution	<input type="checkbox"/> Industry	<input type="checkbox"/> SME <input type="checkbox"/> other
Department	Laboratory of heterocyclic compounds			
Short description of your company or organization	Studying of the nature of chemical bonds and reaction ability of organic compounds, of mechanisms and stereochemistry of reactions, and also of structure and properties of chemical substances; development of new methodology of organic synthesis, including biologically active substances, first of all among heterocyclic compounds .			

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> <input checked="" type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> <input checked="" type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/>





climate change in the arctic and subarctic regions ☐  
Material sciences connected with energy conversion and storage ☐v

### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐v  
auto-immune diseases ☐  
neurodegenerative diseases ☐

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐  
Labour, labour market, and employment ☐  
Transformation of the educational system ☐

Areas of activity (*Free keywords*)

PROJECT IDEA(s)	
Short description of project	
Description of scientific expertise offered	
Description of technical expertise offered	
Description of requested partner scientific expertise	
Description of requested partner technical expertise	
PARTNERS	
Partners' names, organizations and addresses	



## 28 February 2011, Ekaterinburg, Brokerage Event

### ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender		<input checked="" type="checkbox"/> Ms	
First name	Evgeniya		
Last name	Saydakova		
Position	post-graduate student		

ORGANISATION DETAILS				
Organisation name Institution of the Russian Academy of Sciences, Institute of Ecology and Genetics of Microorganisms, the Ural Branch of the RAS				
Street * 13 Golev				
ZIP *	614094	City *	Perm	Country * Russia
Phone *	(342)280-83-34		Fax	(342)280-92-11
Email *	radimira@list.ru		Web	
Employees	<input checked="" type="checkbox"/> 1-10			
Organisation type	<input type="checkbox"/> Research Institution			
Department	Russian Academy of Sciences			
Short description of your company or organization	General direction of the scientific-research work of our institute complies with the status determined by the decisions adopted by the Presidium of the Russian Academy of Sciences and the Ural Branch of the Russian Academy of Sciences, namely the development of the fundamental issues in general biology, ecology, and genetics of microorganisms. Since 1990 the scientific subjects of the Institute was supplemented with the investigations in experimental and ecological immunology. Last years were marked with the intensive developments in molecular biology and biotechnology.			

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
3. Research on serious human health problems viral infections: HIV and Hepatitis <input type="checkbox"/>	
Areas of activity (Free keywords)	Thymus, T cell receptors, TREC, HIV, HAART



PROJECT IDEA(s)	
Short description of project	The effectiveness of Highly Active Antiretroviral Therapy (HAART) is dependent on the productive function of the thymus, which can be reflected in the number of T cell receptor excision circles (TRECs) – episomal molecules that are formed during T cell receptor rearrangement process. Hence, determination of the number of TRECs opens the opportunity for analyzing possible effects of curing HIV.
Description of scientific expertise offered	
Description of technical expertise offered	
Description of requested partner scientific expertise	
Description of requested partner technical expertise	
PARTNERS	
Partners' names, organizations and addresses	



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title
First name	Jürgen		
Last name	Fehmer		
Position	Sales Director Eastern Europe		

ORGANISATION DETAILS					
Organisation name	TSE Systems GmbH				
Street *	Siemensstr. 21				
ZIP *	61352	City *	Bad Homburg	Country *	Germany
Phone *	+49 (0)6172-789-282		Fax		
Email *	Juergen.Fehmer@TSE-Systems.com		Web		www.TSE-Systems.com
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input checked="" type="checkbox"/> SME <input type="checkbox"/> other				
Department	Sales Department for Behavior, Metabolism and Inhalation Instrumentation				
Short description of your company or organization	TSE Systems is a leading supplier of sophisticated research instrumentation in the global life science market. With over 120 years experience, we provide total customer solutions including expandable, integrated hard- and software platforms for in-vivo studies in neuroscience, phenotyping, drug screening and toxicology.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>



### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases ☒

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)      Parkinson, Alzheimer, multiple sclerosis, neurobiology

PROJECT IDEA(S)	
Short description of project	Development of new methods of treatment of neurodegenerative diseases (Parkinson's disease, Alzheimer's disease, multiple sclerosis). Evaluation of mechanism of the development of neurodegenerative by long term longitudinal in-vivo studies. Large-scale, high-throughput automated systems for phenotyping in-vivo animal models of human neurodegenerative disease.
Description of scientific expertise offered	Experience in development of individual instrumentation solutions for in-vivo research in field of neurodegenerative disease. Consulting, conceptual design and manufacturing of brand new research devices for in-vivo experiments, based of established user-proved equipment.
Description of technical expertise offered	Scientific Instrumentation for long term behavioral and cognitive in-vivo tests (mice and rats). Following tools and technical expertise are available: <ul style="list-style-type: none"> <li>▪ Systems for cognition testing</li> <li>▪ System for different conditioning tests (passive avoidance, active avoidance, fear conditioning, learned helplessness, place preference conditioning ect.)</li> <li>▪ System for kinematic analysis</li> </ul>
Description of requested partner scientific expertise	Advanced expertise in pathogenesis, diagnostics and treatment of chronic neurodegenerative diseases, new genetically modified animal models for neurodegenerative diseases
Description of requested partner technical expertise	Expertise in in-vivo research (working with animals)
Potential partners (name, organisation, address ...)	Prof. Michael Ugrumov, Koltzov Institute of Developmental Biology, Labor for Hormonal Regulation, ul. Vavilova 26, Moscow Prof. A. Markel, Institute of Cytology & Genetics, SB RAS, 10, Lavrentiev Ave. , 630090 Novosibirsk



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Prof.
First name	Vladimir		
Last name	Katanaev		
Position	Group Leader		

ORGANISATION DETAILS					
Organisation name	University of Konstanz				
Street *	Universitätsstrasse 10				
ZIP *	78457	City *	Konstanz	Country *	Germany
Phone *	0049 7531 884659		Fax	0049 7531 884944	
Email *	vladimir.katanaev@uni-konstanz.de		Web	http://www.uni-konstanz.de/FuF/Bio/katanaev/	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input checked="" type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Biology				
Short description of your company or organization	research group (conducting research in the field of cell and developmental biology) at the Biology Department of the University of Konstanz				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>



### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases ☒

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)      cell biology, developmental biology, signal transduction, cancer research, drug discovery

PROJECT IDEA(S)	
Short description of project	Development of small molecule- and biologics-based agonists and antagonists of the Wnt/Frizzled signaling as novel therapeutic agents
Description of scientific expertise offered	Broad expertise in cell, developmental, and cancer biology
Description of technical expertise offered	A variety of modern techniques of molecular cell biology and genetics and drug discovery
Description of requested partner scientific expertise	Expertise in protein structural analysis and bioinformatics techniques
Description of requested partner technical expertise	Protein crystallization and structural analysis; cell-free systems of protein expression; molecular docking; bioinformatics
Potential partners (name, organisation, address ...)	Institute of Protein Research, Russian Academy of Sciences, Pushchino, Institutskaya St. 4, 142290, Moscow region



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Dr.
First name	Christoph		
Last name	Riethmüller		
Position	Founder, CEO		

ORGANISATION DETAILS				
Organisation name	Serend-ip GmbH			
Street *	Heisenbergstrasse 11			
ZIP * 48149	City * Münster	Country *	Germany	
Phone * 0049 251 8363440	Fax			
Email * <a href="mailto:info@serend-ip.de">info@serend-ip.de</a>	Web <a href="http://www.serend-ip.com">www.serend-ip.com</a>			
Employees	<input checked="" type="checkbox"/> 1-10 X	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +
Organisation type	Higher Education Institution	Research Institution	Industry	SME X other
Department				
Short description of your company or organization	High Tech Start up Nanobiological Analysis of Cells			

TOPICS OF INTEREST REGARDING THE CALL IN “COLLABORATIVE S&T PROJECTS”
Sub-topic of exercise





1. Innovative materials and cutting edge technological processes

Atomic force Microscopy

3. Research on serious human health problems

Patho-Physiology of cultivated cells, pattern analysis

Areas of activity (Free keywords) High Content Analysis for Cell Culture, Contract Research

## PROJECT IDEA(S)

Short description of project	Develop and establish phenotypic „cell based assays“ for drug profiling
Description of scientific expertise offered	Physiological function and Quality assessment for drug testing
Description of technical expertise offered	Quantitative Pattern Analysis of nanoscale cell topography, Atomic force Microscopy
Description of requested partner scientific expertise	Cell Biology, Drug Development, Drug safety
Description of requested partner technical expertise	Cell biological assays, High Content Screening, Drug profiling expertise
Potential partners (name, organisation, address ...)	



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title MBA
First name	Elena		
Last name	Wenzler		
Position	Vice Sales Director Eastern Europe		

ORGANISATION DETAILS					
Organisation name	TSE Systems GmbH				
Street *	Siemensstr. 21				
ZIP *	61352	City *	Bad Homburg	Country *	Germany
Phone *	+49 (0)6172-789-282		Fax		
Email *	Elena.Wenzler@TSE-Systems.com		Web www.TSE-Systems.com		
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input checked="" type="checkbox"/> SME <input type="checkbox"/> other				
Department	Sales Department for Behavior, Metabolism and Inhalation Instrumentation				
Short description of your company or organization	TSE Systems is a leading supplier of sophisticated research instrumentation in the global life science market. With over 120 years experience, we provide total customer solutions including expandable, integrated hard- and software platforms for in-vivo studies in neuroscience, phenotyping, drug screening and toxicology.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>  <b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>	



### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases ☒

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)      Parkinson, Alzheimer, multiple sclerosis, neurobiology

PROJECT IDEA(S)	
Short description of project	Development of new methods of treatment of neurodegenerative diseases (Parkinson's disease, Alzheimer's disease, multiple sclerosis). Evaluation of mechanism of the development of neurodegenerative by long term longitudinal in-vivo studies. Large-scale, high-throughput automated systems for phenotyping in-vivo animal models of human neurodegenerative disease.
Description of scientific expertise offered	Experience in development of individual instrumentation solutions for in-vivo research in field of neurodegenerative disease. Consulting, conceptual design and manufacturing of brand new research devices for in-vivo experiments, based of established user-proved equipment.
Description of technical expertise offered	Scientific Instrumentation for long term behavioral and cognitive in-vivo tests (mice and rats). Following tools and technical expertise are available: <ul style="list-style-type: none"> <li>▪ Systems for cognition testing</li> <li>▪ System for different conditioning tests (passive avoidance, active avoidance, fear conditioning, learned helplessness, place preference conditioning ect.)</li> <li>▪ System for kinematic analysis</li> </ul>
Description of requested partner scientific expertise	Advanced expertise in pathogenesis, diagnostics and treatment of chronic neurodegenerative diseases, new genetically modified animal models for neurodegenerative diseases
Description of requested partner technical expertise	Expertise in in-vivo research (working with animals)
Potential partners (name, organisation, address ...)	Prof. Michael Ugrumov, Koltzov Institute of Developmental Biology, Labor for Hormonal Regulation, ul. Vavilova 26, Moscow Prof. A. Markel, Institute of Cytology & Genetics, SB RAS, 10, Lavrentiev Ave. , 630090 Novosibirsk



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input checked="" type="checkbox"/> Ms	Title Prof
First name	Gulden		
Last name	Celik		
Position	Head of Microbiology Department		

ORGANISATION DETAILS					
Organisation name	Yeditepe University Medical Faculty				
Street *	Kayisdagi Cad				
ZIP *	34755	City *	Istanbul	Country *	Turkey
Phone *	+90 216 578 05 35, +90 533 625 39 96		Fax		
Email *	gulden.yilmaz@yeditepe.edu.tr		Web		www.yeditepe.edu.tr
Employees	<input checked="" type="checkbox"/> 1-10	<input checked="" type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input checked="" type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Medical Microbiology				
Short description of your company or organization	<p>Yeditepe University Medical Faculty is located on the Anatolian side of Istanbul. Since its establishment in 1996, more than 400 graduates have been educated in our faculty. Medical Microbiology Department have four experienced senior researcher and a good team of technical personnel. Besides routine microbiology work, we have expertise on HIV diagnosis and follow up and autoantibodies related to autoimmunity. We have well equipped molecular microbiology and flow cytometry laboratories that are run by experienced scientists and staff. We have good collaborations with infectious diseases and internal medicine departments.</p>				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"
Sub-topic of exercise
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/>



Material sciences connected with energy convergion and storage ☐

### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☒

auto-immune diseases ☒

neurodegenerative diseases ☐

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)      HIV, autoimmunity, molecular techniques,

PROJECT IDEA(S)	
Short description of project	We have expertise on HIV diagnosis and follow up. Our projects aims the rapid detection of viral resistance mutations by real time PCR in comparison with sequencing.
Description of scientific expertise offered	Routine and scientific experience on diagnosis and follow up of HIV since 1988.
Description of technical expertise offered	Experience on molecular diagnostics and flow cytometry (immunophenotyping, DNA content analysis).
Description of requested partner scientific expertise	Experience on diagnosis and follow up of HIV.
Description of requested partner technical expertise	Experience on molecular diagnostics and flow cytometry.
Potential partners (name, organisation, address ...)	



## 28 February 2011, Ekaterinburg, Brokerage Event

### ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

## PROFILE FORM

PARTICIPANT			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Prof.
First name	Vitaly		
Last name	Berdyshev		
Position	Director		

ORGANISATION DETAILS					
Organisation name	<b>Institute of Mathematics and Mechanics (IMM), Ural Branch of the Russian Academy of Sciences</b>				
Street *	16 S. Kovalevskoj st.				
ZIP *	620990	City *	Ekaterinburg	Country *	Russia
Phone *	+7 343 374 83 32		Fax	+7 343 374 25 81	
Email *	bvi@imm.uran.ru		Web	www.imm.uran.ru	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution	<input checked="" type="checkbox"/> Research Institution	<input type="checkbox"/> Industry	<input type="checkbox"/> SME	<input type="checkbox"/> other
Department					
Short description of your company or organization	Research in pure and applied mathematics, computer science, and mechanics.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/>	



climate change in the arctic and subarctic regions ☐  
Material sciences connected with energy conversion and storage ☐

**3. Research on serious human health problems :** human heart modeling

viral infections: HIV and Hepatitis ☐  
auto-immune diseases ☐  
neurodegenerative diseases ☐

**4. Contemporary socio-economic studies**

Social security systems and welfare state (in the context of globalization) ☐  
Labour, labour market, and employment ☐  
Transformation of the educational system ☐

Areas of activity (*Free keywords*)

mathematical modeling of live systems, cardiovascular physiology and pathophysiology

PROJECT IDEA(S)	
Short description of project	It is known that the high mortality from cardiovascular disease worldwide is one of the priority social problems. Integrative mathematical modeling and analysis of the heart as a multi-level physiological system allows via computer experiments to understand more deeply the mechanisms of functioning of the system in normal and pathological conditions, as well as to predict effective methods of heart disease treatment. In this project we will create three-dimensional mathematical model (3D-model) of the heart of human and laboratory animals and make their computer implementation for further fundamental research and applications in physiology, pharmacology and medicine. In the 3D-model we will take into account the mechanisms of regulation of cardiac function at different levels of cardiac organization (from molecular to organ) and will replicate geometry of the heart chambers and a complicated location and orientation of muscle fibers in cardiac walls.
Description of scientific expertise offered	The IMM headed by Corresponding Member of the RAS V.I. Berdyshev has world-class specialists in mathematics, mechanics and computer science who will be involved in the implementation of the project. In particular, to date, we have successful experience in modeling the architectonics of the human heart left ventricle.
Description of technical expertise offered	IMM has a supercomputer and all the necessary technologies of parallel computations, adequate to the complexity of the task and amount of calculations to simulate the heart performance. Calculations on supercomputers can be carried out in remote that allows the sharing of technology between the partners from other institutions.
Description of requested partner scientific expertise	1. Research group from the Institute of Immunology and Physiology (IIP) headed by Corresponding Member of RAS V.S. Markhasin has an unique long-term experience in the development and implementation of mathematical computer models of myocardium electromechanical activity at cellular and tissue levels. The models were widely published in the international journals. The models were used to predict electrical and mechanical phenomena both in cardiomyocytes and in more complex heterogeneous myocardial systems



	<p>consisting of elements with different electromechanical properties. The predictions obtained in the framework of mathematical models of heterogeneous myocardium were verified experimentally using physiological models of the inhomogeneous myocardium.</p> <p>Group of mathematical physiology has a long fruitful international contacts and experience of collaborative research in the framework of international projects supported by grants from foreign funds, with the world's leading experts in the field of computation cardiophysiology, in particular, with the Laboratory of Physiology (headed by Prof. D. Noble), the Laboratory of Mechano-electrical Feedback (headed by Prof. P. Kohl), both are at the Department of Anatomy, Physiology and Genetics, Oxford University; and with the Laboratory of Mathematical Biology (headed until recently by Prof. A. Panfilov), Utrecht University, etc.</p> <p>2. Professor at the University of Gent, A.V. Panfilov, is one of the world's leading experts in the field of computer modeling of electrophysiological processes in the human and animal hearts. His mathematical models of the excitation propagation in heart, a model of spiral waves and models of action potential development in cardiomyocytes are key to understanding a number of fundamental problems of cardiac electrophysiology, disturbances of the cardiac electrical function including fibrillation appearance. The results of his work have been published in leading international scientific journals (such as Science). In his studies, much attention is paid to the modeling of direct (electromechanical) and feedback (mechano-electrical) links in the contracting heart, and this is a natural background for cooperation with other participants of the project.</p>
Description of requested partner technical expertise	<p>1. IIP has a base of efficient PCs needed for the modeling which are networked.</p> <p>2. University of Ghent has excellent infrastructure and computer facilities for parallel computing which is the most challenging part of the project. Prof. Panfilov's group has a vast experience in anatomical computations, developing of software for such problems and its optimization for various computer systems.</p>
<b>PARTNERS</b>	
Partners' names, organizations and addresses	<p>1. Prof. Vladimir S. Markhasin          Institute of Immunology and Physiology, Ural Branch of the Russian Academy of Sciences          106 Pervomajskaya st.          Ekaterinburg, 620041</p> <p>2. Prof. Alexander V. Panfilov, Ph.D          Department of Physics and Astronomy          Gent University          Krijgslaan 281, S9          9000 Gent, Belgium</p>





## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

EXPERT DETAILS			
Gender	<input type="text" value="XXXXXX"/>	<input type="checkbox"/> Mr <input type="checkbox"/> Ms	Title PhD
First name	Andrei		
Last name	Bratov		
Position	Senior Researcher		

ORGANISATION DETAILS					
Organisation name	Instituto de Microelectronica de Barcelona, IMB-CNM CSIC				
Street *	Campus UAB Bellaterra				
ZIP *	08193	City *	Barcelona	Country *	Spain
Phone *			Fax		
Email *			Web		
Employees	<input type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Micro- and Nano-systems				
Short description of your company or organization	Research institution with clean room facilities, CMOS standard processes and nanofabrication technologies				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>	



### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases ☒

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)

PROJECT IDEA(s)	
Short description of project	Electrochemical immunosensor system for the detection of neuroactive tryptophan metabolites as tentative biomarkers of neurological and neurodegenerative disorders. A common sensing platform for biomedical research, point-of-care testing, therapy development and personalized therapeutics.
Description of scientific expertise offered	The Spanish research team is formed by two groups of CSIC (National council of scientific research) IMB-CNM – responsible for sensor fabrication using microelectronic technology; and the AMRg-GIE-CSIC group that has a consolidated experience in the development of antibodies and immunoreagents for small molecules detection and on the establishment of bioanalytical methods for a variety of targets of relevance in the food safety and in the clinical fields. See Biosensors and Bioelectronics, 2008, 24 (4), 729-735
Description of technical expertise offered	Microelectronics facilities for sensor fabrication. Anigen/antibody production , sensor fuctionalisation, measurement protocols establishment
Description of requested partner scientific expertise	Investigation of neurodegenerative disorders, biosample análisis.
Description of requested partner technical expertise	Preparation of samples with biomarkers,
Potential partners (name, organisation, address ...)	



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

EXPERT DETAILS			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Dr
First name	IOANNIS		
Last name	TARNANAS		
Position	Head of Virtual Reality laboratory		

ORGANISATION DETAILS					
Organisation name	Alzheimer Hellas Association				
Street *	Kon. Karamanli 164				
ZIP *	54248	City *	Thessaloniki	Country *	Greece
Phone *	+302310351451		Fax	+30 2310 351456	
Email *	i.tarnanas@alzheimer-hellas.gr		Web	www.alzheimer-hellas.gr	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input checked="" type="checkbox"/> X other				
Department	Virtual Reality department				
Short description of your company or organization	The Greek Association of Alzheimer Disease and Relative Disorders (GAARDR) is a non for profit organization that was founded in 1995, by relatives of patients suffering from Alzheimer Disease as well as by doctors of all specialties - mainly by Neurologists and Psychiatrists and also by other experts (such as psychologists, social workers, physiotherapists, etc) that deal with the problems caused by this disease and by other types of dementia.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>	



### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases XX

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)      neuroimaging, virtual reality, fmri

PROJECT IDEA(S)	
Short description of project	<p>Scientific and clinical research in the area of Alzheimer's disease (AD) during the last years have shifted their focus to earlier diagnosis and especially to the transitional phase between normal aging and dementia, named Mild Cognitive Impairment (MCI). Lately, the concept of MCI has been expanded to address observed clinical heterogeneity, and subtypes were recognized: amnesic (including memory impairment) and non-amnesic (including impairment in other non-memory cognitive domains), with the later including deficits in executive functioning. Executive functions (EF) are defined as higher order functions that are needed for completing complex or non-routine tasks. Deficits in EF refer to a collection of deficits in attention, planning, problem-solving, multitasking, monitoring and behavioral control and persons who suffer from impairments in EF typically have difficulty in initiating or suspending activities, show impaired mental flexibility, as well as increased distractibility and have difficulty in learning novel tasks despite apparently intact cognitive abilities.</p> <p>Procedures using virtual reality (VR) are ideally placed to answer the need for ecologically valid tools for use in the functional assessment of memory impairments. Although behavioral experiments using real world environments provide useful data, it is often not feasible to test patients outside the clinic; computer-based VR tasks can provide a bridge between conventional neuropsychological tests and behavioral observation. One compelling strength of VR tests is that they can be constructed to simulate the demands of everyday life, which commonly require, for example, the ability to remember and initiate responses to more than one task (e.g., multitasking). Further, in everyday life there is typically no external agent (analogous to the tester) to elicit the appropriate response. Consequently, patients need to be able to recognize for themselves salient events or cues in the environment, and act accordingly, an important aspect of EF tasks. To simulate this, computers can be used to provide an interactive environment with prompts and cues for action that are administered independently of the tester.</p> <p>Given the latest findings regarding EF and MCI, the aim of the current study is to examine the validity of virtual reality as a cognitive rehabilitation or decline prevention method by means of fMRI and Neuropsychological Assessment for the assessment of patients with MCI. More specifically, the objectives of the proposed project are:</p> <ol style="list-style-type: none"> <li>(1) to assess the feasibility of virtual reality as a cognitive rehabilitation or decline prevention method by means of fMRI and Neuropsychological Assessment for the improvement of EF in MCI;</li> <li>(2) to compare between the performance of patients with MCI and healthy matched controls in the virtual reality by means of Neuropsychological Assessment and fMRI, and</li> <li>(3) to assess the relative importance of virtual reality by means of Neuropsychological Assessment and fMRI measures for the differentiation of the groups.</li> </ol> <p>We have expertise in evaluating non-pharmacological interventions for neurodegenerative</p>



Description of scientific expertise offered	<p>diseases:</p> <ul style="list-style-type: none"> <li>• Our research and experimental expertise will try to measure change in Executive Functions and in Instrumental Activities of Daily Living (IADL) as a result of intervention by Virtual Reality Fire Evacuation Environment among people with Mild Cognitive Impairment. The will be an experimental group and a control group.</li> <li>• Our experimental group will be persons diagnosed as suffering from Mild Cognitive Impairment and persons at early Alzheimer.</li> <li>• Our Virtual Reality tool will be distributed among the project partners and at least 60 control and 60 experimental people will undergo a series of 9 sessions the virtual environment to improve their Executive and IADL functions.</li> <li>• Before and after intervention outcomes will be measured by means of fMRI and normal neuropsychological assessment to test for deficits in cognition and executive function. The neuropsychological assessment must consist of several neuropsychological tests used in clinical practice and research and the domains being assessed are attention, memory, visuomotor learning, spatial memory, executive function and mental flexibility.</li> </ul>
Description of technical expertise offered	We have expertise in virtual reality, electroencephalography, event related potentials, neuroimaging. We have developed a virtual reality scenario that we can adapt and research it's use as an intervention and early diagnosis tool. We also have expertise in human kinetics capture in relation to virtual reality.
Description of requested partner scientific expertise	We would like expertise in functional neuroimaging (fmri) and neuropsychological assessment of mild cognitive impairment and Alzheimer disease. Also expertise the mechanisms and management of human chronic neurodegenerative and neurocognitive diseases. Emphasis is on the etiology, pathophysiology, detection and diagnosis, functional consequences and the development of therapeutic strategies for chronic/neurodegenerative disorders that affect cognition and behavior.
Description of requested partner technical expertise	<p>Specific areas covered by this project that require expertise are:</p> <ul style="list-style-type: none"> <li>* Evaluation of improvements in technologies underlying medical imaging systems, as well as studies of available medical imaging systems to evaluate novel medical applications.</li> <li>* Medical imaging systems and accessories, fMRI.</li> <li>* Prediction, selection, and monitoring of therapeutic response based on imaging studies, with or without exogenous agents, using one or more modalities, especially for multi-temporal investigations to measure changes relative to a pretreatment baseline.</li> <li>* Applications of imaging systems and modification of diagnostic methods for use in: screening; characterizing physiological effects, and assessing risk.</li> <li>* Image-guided interventions in integrated diagnostic and therapeutic systems.</li> <li>* Development of surrogate endpoints based on quantitative imaging for use in clinical trials of medical devices, biologics and other therapeutic interventions.</li> </ul>
Potential partners (name, organisation, address ...)	



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

EXPERT DETAILS			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Dr.
First name	Markos		
Last name	Tsipouras		
Position	Chief Research Officer		

ORGANISATION DETAILS					
Organisation name	Q base R&D				
Street *	Science & Technology Park of Epirus				
ZIP *	45110	City *	Ioannina	Country *	Greece
Phone *	+30 26510 07696		Fax	+30 26510 07673	
Email *	info@qbase.gr		Web	www.qbase.gr	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input checked="" type="checkbox"/> SME <input type="checkbox"/> other				
Department					
Short description of your company or organization	<p><b>Q base R&amp;D</b> is a spin-off company that has been established by three PhD graduates of University of Ioannina, Greece, in October of 2009 and it is located in the Scientific and Technological Park of Epirus in Ioannina, Greece. The company's strategic planning includes the development of new, innovative products and services in the fields of digital signal and image processing, biomedical informatics and intelligent information systems, by capitalizing existing research of its shareholders and pioneer in cutting-edge scientific research. <b>Q base R&amp;D</b> is currently participating in a R&amp;D projected funded by the General Secretariat for Research and Technology in Greece, under the Greek National Strategic Reference Framework. The main topics of interest include biomedical informatics, intelligent information systems, decision support systems, data mining, computational intelligence techniques, digital signal and image processing.</p>				



TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
<p><b>1. Innovative materials and cutting edge technological processes</b>            ultrahigh-power laser sources <input type="checkbox"/>            intelligent materials and nanomaterials <input type="checkbox"/>            quantum optics <input type="checkbox"/></p> <p><b>2. Environmental research and climatic change</b>            biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/>            climate change in the arctic and subarctic regions <input type="checkbox"/>            Material sciences connected with energy conversion and storage <input type="checkbox"/></p> <p><b>3. Research on serious human health problems</b>            viral infections: HIV and Hepatitis <input checked="" type="checkbox"/>            auto-immune diseases <input checked="" type="checkbox"/>            neurodegenerative diseases <input checked="" type="checkbox"/></p> <p><b>4. Contemporary socio-economic studies</b>            Social security systems and welfare state (in the context of globalization) <input type="checkbox"/>            Labour, labour market, and employment <input type="checkbox"/>            Transformation of the educational system <input type="checkbox"/></p>	
Areas of activity (Free keywords)	Intelligent Information Systems, Computer Science

PROJECT IDEA(S)	
Short description of project	<p>We are interested in participating in projects related to:</p> <ol style="list-style-type: none"> <li>1. Medical informatics, bioinformatics</li> <li>2. Intelligent information systems</li> <li>3. Decision support systems</li> <li>4. Anything that is related to our research areas (<a href="http://www.qbase.gr/en/research-fields">http://www.qbase.gr/en/research-fields</a>)</li> </ol> <p>A list of scientific publications from <b>Q base R&amp;D</b> company members can be found in:  <a href="http://www.qbase.gr/en/publications">http://www.qbase.gr/en/publications</a></p>
Description of scientific expertise offered	<p><b>Q base R&amp;D</b> scientific experience includes:</p> <ol style="list-style-type: none"> <li>1. Biomedical informatics and information systems, automated diagnosis</li> <li>2. Digital signal, image and video processing</li> <li>3. Artificial intelligence, computational intelligence, data mining</li> <li>4. Expert systems, decision support system, intelligent information systems</li> <li>5. Fuzzy logic and modeling</li> </ol> <p>A detailed description of <b>Q Base R&amp;D</b> research fields can be found in:  <a href="http://www.qbase.gr/en/research-fields">http://www.qbase.gr/en/research-fields</a></p>



	A list of scientific publications from <b>Q base R&amp;D</b> company members can be found in: <a href="http://www.qbase.gr/en/publications">http://www.qbase.gr/en/publications</a>
Description of technical expertise offered	<b>Q base R&amp;D</b> can offer technical experience in the areas related to the research fields of the company and additionally related to web development.
Description of requested partner scientific expertise	Partners with similar topics of interest/research fields.
Description of requested partner technical expertise	Partners with similar topics of interest/research fields.
Potential partners (name, organisation, address ...)	





## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

EXPERT DETAILS			
Gender		<input checked="" type="checkbox"/> Ms	Title MD, PhD
First name	Oksana		
Last name	Rymar		
Position	Leading researcher, laboratory of the population and preventive studies of therapeutic and endocrine diseases		

ORGANISATION DETAILS					
Organisation name	Institute of Internal Medicine SB RAMS				
Street *	Bogatkova 175\1				
ZIP *	630089	City *	Novosibirsk	Country *	Russia
Phone *	+7-383-2642516		Fax	+7-383-2642516	
Email *	orymar23@gmail.com		Web	www.iimed.ru	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input checked="" type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organization type	<input type="checkbox"/> Higher Education Institution <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input type="checkbox"/> SME <input type="checkbox"/> other				
Department	Department studies of therapeutic and endocrine diseases				
Short description of your company or organization	Institute of Internal Medicine SB RAMS was established in 1981. Its activity is focused on an epidemiology and risk factors of the major therapeutic diseases in various regions of Siberia and Far East of Russia. A huge prospective database of patients includes data on clinical, biochemical, molecular, genetics indices, diagnoses and treatment.				

TOPICS OF INTEREST REGARDING THE CALL IN "COLLABORATIVE S&T PROJECTS"	
Sub-topic of exercise	
<b>1. Innovative materials and cutting edge technological processes</b> ultrahigh-power laser sources <input type="checkbox"/> intelligent materials and nanomaterials <input type="checkbox"/> quantum optics <input type="checkbox"/>	
<b>2. Environmental research and climatic change</b> biodiversity and ecophysiology of natural ecosystems <input type="checkbox"/> climate change in the arctic and subarctic regions <input type="checkbox"/> Material sciences connected with energy conversion and storage <input type="checkbox"/>	



### 3. Research on serious human health problems

viral infections: HIV and Hepatitis ☐

auto-immune diseases ☐

neurodegenerative diseases ☐

### 4. Contemporary socio-economic studies

Social security systems and welfare state (in the context of globalization) ☐

Labour, labour market, and employment ☐

Transformation of the educational system ☐

Areas of activity (*Free keywords*)

PROJECT IDEA(S)	
Short description of project	The purpose of the study is to investigate susceptibility genes of autoimmune thyroid diseases (AITD: Graves` disease, Hashimoto` disease), environmental and behavioral factors in complex, their links with clinical features in patients having at least one AITD` proband in the family history (first-degree relatives). We focus on the contribution of the TSH receptor and vitamin D receptor genes polymorphisms, CTLA-4 and PTPN22 genes polymorphisms to the familial cases of AITD.
Description of scientific expertise offered	Our recent studies have shown a significant association between polymorphisms of CTLA-4 and PTPN22 genes and autoimmune thyroid diseases (reported at the 34th Annual Meeting of the European Thyroid Association., Lisbon, 2009).
Description of technical expertise offered	Equipment and qualified personnel for sequencing and genotyping DNA using real-time PCR.
Description of requested partner scientific expertise	Expertise in the field of thyroid diseases
Description of requested partner technical expertise	Expertise in the field of genetic analysis
Potential partners (name, organisation, address ...)	any



## ERA.Net-RUS Pilot Joint Call For Collaborative S&T Projects

### PROFILE FORM

EXPERT DETAILS			
Gender	<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	Title Dr.
First name	Evaggelos		
Last name	Karvounis		
Position	Chief Research Officer		

ORGANISATION DETAILS					
Organisation name	i-plan				
Street *	Tsianou 8				
ZIP *	45500	City *	Ioannina	Country *	Greece
Phone *	+30 26510 02262		Fax	+30 26510 07702	
Email *	support@i-plan.gr		Web	www.i-plan.gr	
Employees	<input checked="" type="checkbox"/> 1-10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51 - 250	<input type="checkbox"/> 250 +	
Organisation type	<input type="checkbox"/> Higher Education Institution <input type="checkbox"/> Research Institution <input type="checkbox"/> Industry <input checked="" type="checkbox"/> SME <input type="checkbox"/> other				
Department					
Short description of your company or organization	<p><b>i-plan</b> is a Research &amp; Development (R&amp;D) company that has been established in March of 2011 and is incubated in Ioannina, Greece. The company has two founding members and two main research collaborators, all specialized in health informatics. <b>i-plan</b> is a highly innovative and self-contained research company which activates in the fields of Biomedical Engineering and development of Intelligent Information systems. It has an internationally acknowledged excellence in conducting high quality scientific research and developing innovative Information Technology (IT) applications, products and services. It focuses on applications in the areas of medical diagnosis, therapy and therapy control as well as on equivalent needs in various industries.</p> <p>The <b>i-plan's</b> research activities cover a variety of subjects and they are classified into the following domains:</p> <ul style="list-style-type: none"> <li>▪ <b>Biomedical Research:</b> Modelling and simulation of human tissues using applied mathematics methods.</li> <li>▪ <b>Automated Diagnosis:</b> Processing and analysis of biomedical signals (e.g. ECG, EMG) and images (e.g. MRI, ultrasound).</li> <li>▪ <b>Biomagnetism and Biomaterials:</b> Development of phenomenological models for the interpretation of magneto-mechanical characteristics of highly technological ferromagnetic materials. Direct applications include the determination of the role of material properties, biomagnetism, actuator and sensor devices (Fero-fluids, magnetic drug targeting).</li> <li>▪ <b>Bioinformatics:</b> Analysis of Biological Sequences (DNA, Proteins, etc.) providing better understanding of living organisms, identification of genetic risks and design of the appropriate</li> </ul>				



	<p>drugs.</p> <ul style="list-style-type: none"> <li>▪ <b>Networks:</b> Design, development and operation of networks and network applications especially for Wireless Communication and 3G Applications.</li> <li>▪ <b>Medical Informatics:</b> Use and development of information technologies (Ontologies, lexicons, etc.) for the better storage and exchange of information among heterogeneous medical systems interface technologies (speech to text, text to speech), natural language processing, etc.</li> </ul>
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Areas of activity ( <i>Free keywords</i> )	

PROJECT IDEA(S)	
Short description of project	<p>Our company have been carrying out significant research experience on the following domains:</p> <ul style="list-style-type: none"> <li>• Intelligent Information Systems</li> <li>• Decision support systems</li> <li>• Medical information Technology, bioinformatics</li> <li>• Development of Medical Data Management Systems</li> <li>• Telemedicine</li> <li>• Neural networks in medicine and health</li> <li>• Biosensors - biometric technologies</li> <li>• Digital medical image processing</li> <li>• Digital bio-signals processing</li> </ul>
Description of	<p>All research members of the company (funding &amp; collaborative) have big experience in the field of medical informatics. For instance:</p>



scientific expertise offered	<p><b>Evaggelos C. Karvounis (funding), Ph.D. BSc in Computer Science. email: <a href="mailto:ekarvounis@i-plan.gr">ekarvounis@i-plan.gr</a></b>  Received BSc degree in the Department of Computer Science of Aristotele University of Thessaloniki and his PhD from the Department of Materials Science and Engineering, University of Ioannina in 2009. He is a research assistant at the Unit of Medical Technology and Intelligent Information Systems at the Department of Materials Science and Engineering. He has participated in a series on international and national projects (in EU, CEECs, NIS) and as a result, he has gained great experience in decision support systems, quantitative analysis of data, biomedical signal processing, data mining, databases, web-based user interfaces (including programming in Java web and application technologies, and also in .NET technologies with C#.NET and XML Web Services), monitoring tools and quantitative analysis of data. He is deeply interested in data modeling and data transformations, information processing and information distribution. Additionally he carries a very good knowledge of the European biomedical engineering sector. He has four years of teaching experience in universities and technological educational institutes. He is author of one book chapter and more than fifteen papers in scientific journals and several papers in international conference proceedings.</p> <p><b>Alexandros T. Tzallas (funding), Ph.D. BSc in Physics. email: <a href="mailto:atzallas@i-plan.gr">atzallas@i-plan.gr</a></b>  Received B.S. degree in Physics from the University of Ioannina, Ioannina, Greece (in 2001) and Ph.D. degree in Medical Physics from the University of Ioannina, Ioannina, Greece (in 2009). He has worked on several research and development European and national programs as a software engineer, researcher, seminar instructor and post-doc researcher. He has three years of teaching experience in universities and technological educational institutes. He has published 11 papers in scientific journals, 16 papers in peer-reviewed conference proceedings and 1 chapter in book in less than 8 years of research activity. He is currently working as post-doctoral researcher in the in the Department of Materials Science and Engineering at the University of Ioannina. He is a member of IEEE and reviewer in several scientific journals and conferences.</p>
Description of technical expertise offered	
Description of requested partner scientific expertise	
Description of requested partner technical expertise	
Potential partners (name, organisation, address ...)	