

UNN - Technology Commercialization Center



US Russia Bilateral Presidential Commission Innovation Working Group Meeting

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Moscow
October 29, 2013 z.



Tech Transfer/IP discovery and IP protection



Entrepreneurship training



Proof of Concept/commercial viability assessment



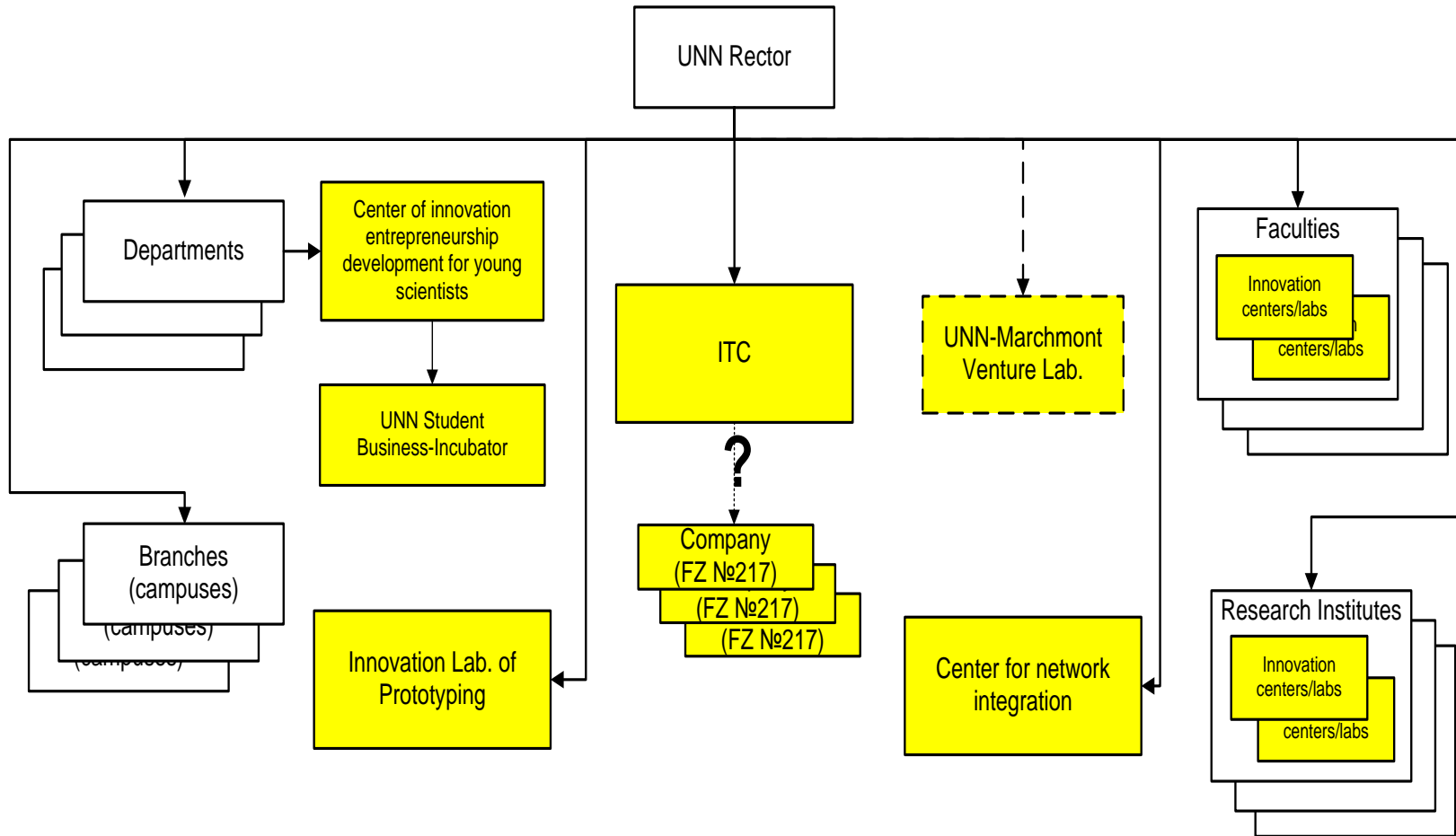
Incubator support services



Accelerator start-up programs



Work with angel investors, VC's and possible strategic buyers and or/corporate investors

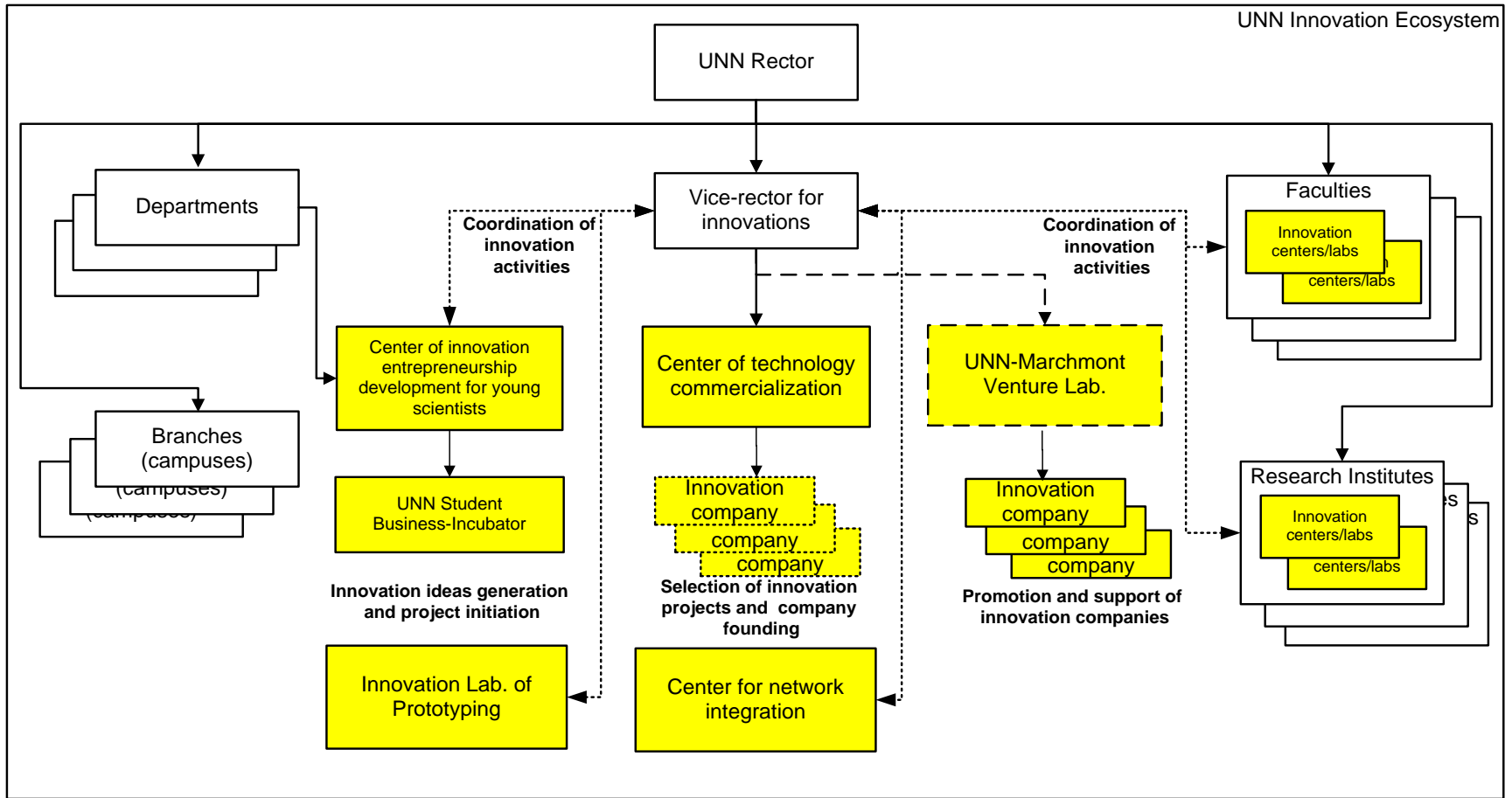


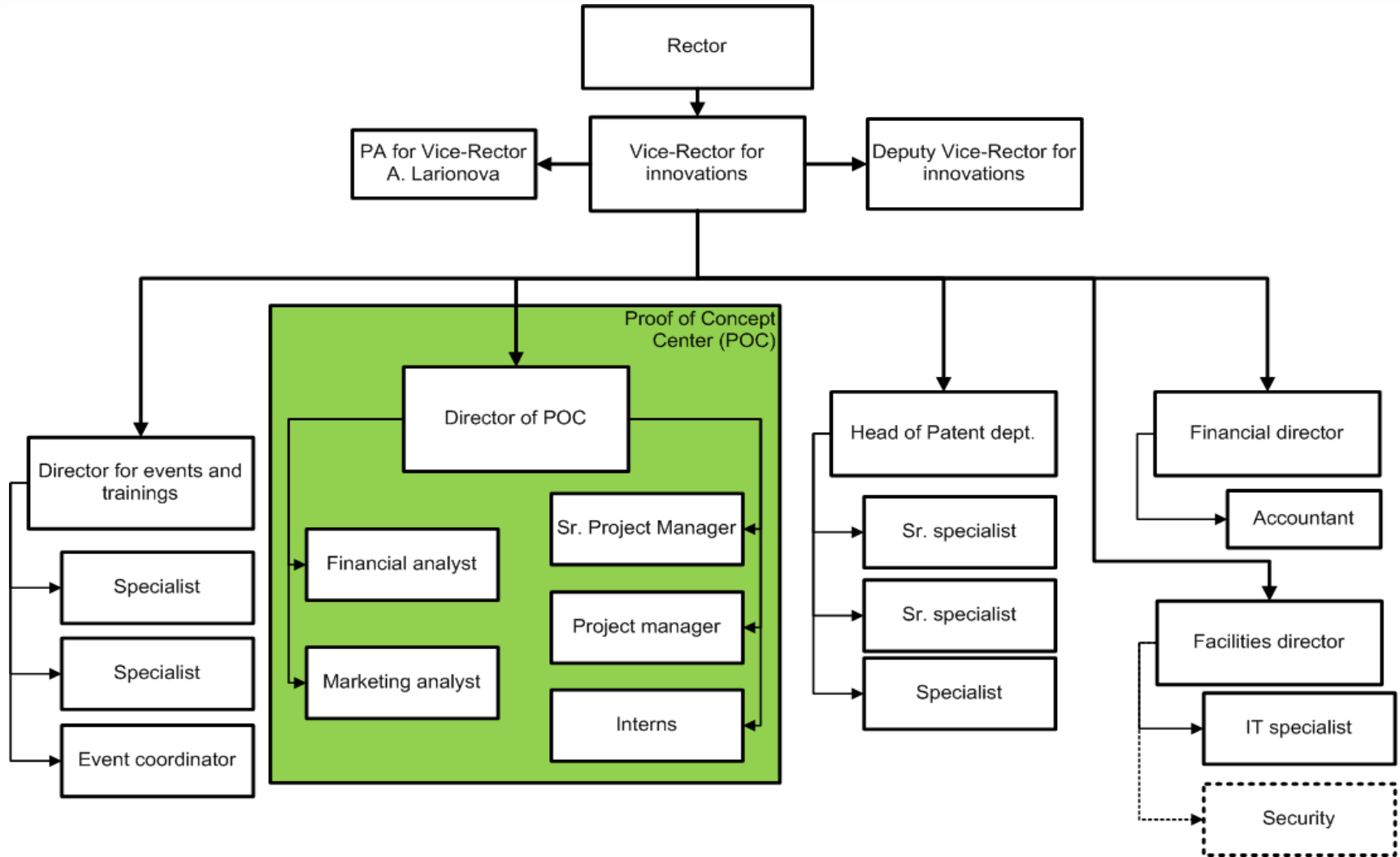
Strengths:

- Accumulated experience in cooperation with Russian and foreign companies
- Successful experience derived from international, federal and regional programs
- Establishment of highly effective "breeding ground" environment for the development of innovation initiatives and work for groups of researchers / developers
- Extensive experience in international cooperation, including the EUREKA program launched in 2010

Weaknesses:

- Unclear mechanisms and processes to achieve the objectives of UNN innovation activities
- Lack of a single focal point for innovation
- Weak cross-structure interaction in the process of innovation
- Insufficient ITC activity in developing horizontal industrial and cross departmental connections
- Lack of a systematized approach to technology commercialization and new business incubation
- A low level of efficiency in the development of the existing innovation companies (FZ 217) support
- Lack of a systemic portfolio management approach to patent searches and licensing arrangements





Technology Commercialization Center KPI's

- Optimization of the work of the Centre of technology commercialization , (including the new POC)
 - Systematize the process of selection of innovative projects
 - Development of the system for support and promotion of innovative companies
 - Liaising with the structural units of UNN in the field of innovation
 - Organization of the process of interaction with investors
 - Organization of the regular formation of the register relevant technologies
 - Organization of the regular formation of the registry technologies (products) demanded on the world market in the context of the immediate / long-term perspective and to inform them about the technology developers (foresighting)
 - Liaising with global technology centers , technology transfer centers and business incubators to promote projects .
 - Adaptation of foreign expertise, with a view to improving its own model of commercialization of innovative projects.
 - Liaising with Russian and foreign companies in order to promote innovative products
 - Cooperation with federal and state government authorities to develop effective programs to support innovative entrepreneurship .
 - Taking active part in the Russian and foreign innovation forums and exhibitions , and other events to promote innovative projects. Creating a positive image of UNN
- A generalized diagram of the target structure of innovation management UNN is shown in Fig. 1.3.

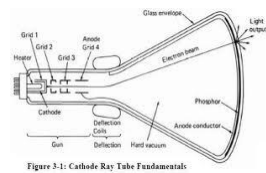
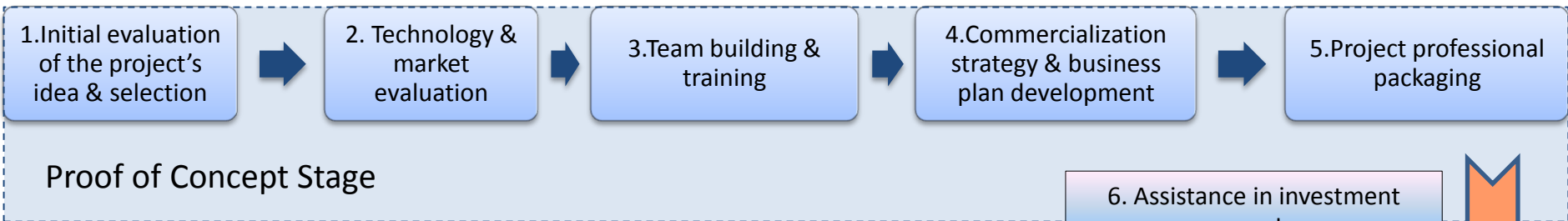
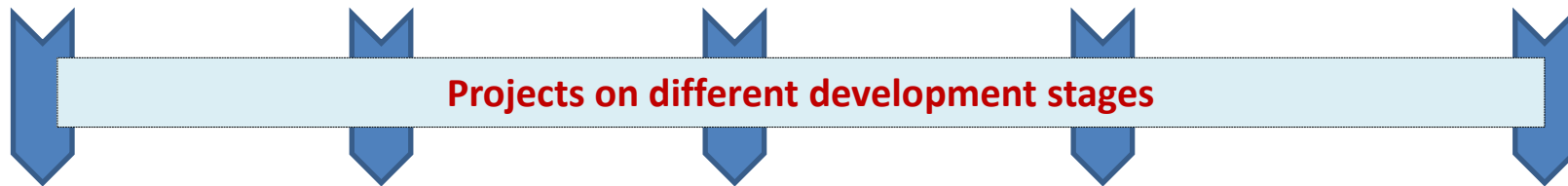


Figure 3-1: Cathode Ray Tube Fundamentals

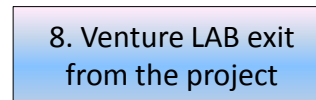
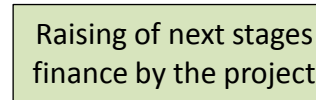
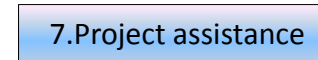
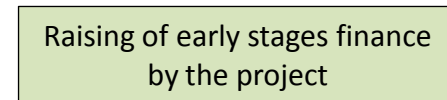
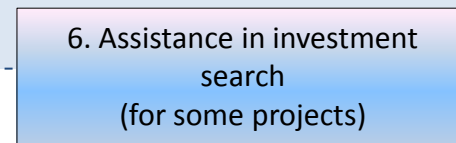
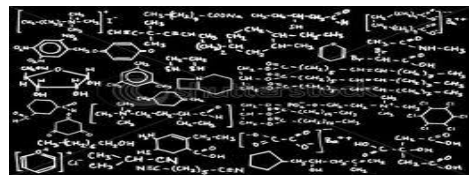


Russian Experts



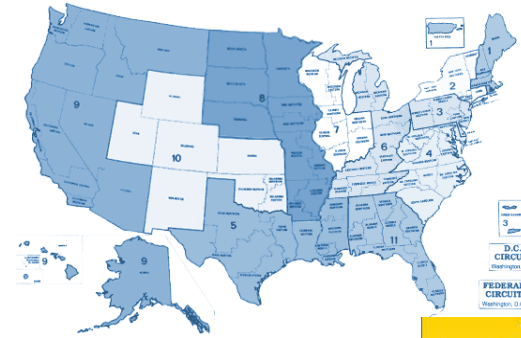
Foreign Russian Innovation Diaspora

External Expertise



Packaged Business Plans

The Venture LAB will pre screen and package projects in the advanced medical diagnostics and devices sector for further development in the Maryland State University International Incubator





EURECA PROGRAM IS BEING IMPLEMENTED WITH THE SUPPORT OF THE US-RUSSIA FOUNDATION FOR ECONOMIC ADVANCEMENT AND THE RULE OF LAW (USRF)





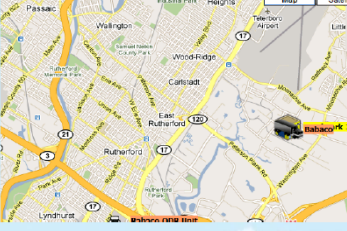
UNIVERSITY OF
MARYLAND


UCLA


The EURECA program and its partners have developed a new Innovation Corridor which can help to speed up the entry of viable Russian technology products into the US market.

I. Company Information	
Company Name	LLC Lasens (Nizhny Novgorod, Russia)
Project name	Diagnostic complex (DC) for the early detection of oncological disease
Project leaders	Zemskov Alexander, Novikov Viktor
Contacts	Email: csi@csi.unn.ru ; Phone: +7-920-077-75-36
Company history and achievements	Spin-off company of UNN, established in 2013.
II. Project Information	
Technology/product description	Schemes and photos
DK composed of chips, the reagent kit and the optoelectronic detector thereto software required for the registration, processing and analysis of ongoing diagnostic. It allows you to identify a human blood samples messenger RNA testicular cancer-gene.	
Value for customers	
With high reliability (95%) determines in 1-2 stages all socially significant cancer. It minimizes the risk of medical errors. It is affordable, reliable, easy to absorb an average medical staff. It is designed for screening.	
Key advantages	
*20 tumor markers on a single chip; High sensitivity (95%); Low price analysis for the patient (forecast) - \$ 14; The reasonable price of the complex; The capacity of 100 chips / hour; PC control and opto-electronic unit; Storage of results; Modifications for fixed and mobile laboratories.	
Potential customers and market opportunities	
*hospitals; clinical and immunological laboratories of medical institutions in various fields; institute of medical and biological profile; Sales (Russia, the forecast) - \$ 187 million / year ..	Comparison with competitors *OM-Biochip" for the simultaneous quantification of 6 markers of cancer; Luminex (U.S.) for multiplex analysis of tumor markers and growth factors based on the technology of x-MAR - 6 markers.
Current status of technology/product	Papers and patents
Prototypes of the DC, in October 2013, planned clinical trials in the Regional Hospital. Semashko, N. Novgorod	*more than 10 articles in national and international journals; detector design is framed as a know-how; Patent Pending (Russia) № 2012144891 from 22.10.12.
Goals of visit to USA	Potentially interesting types of US contacts
<ul style="list-style-type: none"> To demonstrate technology/product to potential customers To investigate US market To find partners and/or investors Etc.... 	<ul style="list-style-type: none"> doctors and biologists developers and manufactures of medical equipment/devices distributors of medical equipment/devices *Представители страховых компаний

I. Company Information	
Company Name	RiCo LLC (Nizhny Novgorod, Russia)
Project name	Portable wireless IR pyrometer for medical usage
Project leader	Igor Nikiforov, Ph.D.
Contacts	Email: igor.nikiforov@inbox.ru Phone: +79051918786
Company history and achievements	Spin-off company of Lobachevsky State University of Nizhny Novgorod, established in 2010. In 2012 RiCo participated in program START In 2012 pyrometer has been tested in Nizhny Novgorod Institute of Traumatology and Orthopedics In 2012 developed methods for differential diagnosis of degenerative and inflammatory processes In 2013 first sales of pyrometer
II. Project Information	
Technology/product description	Schemes and photos
New type of device for biomedical research (precise measurement of temperature) is proposed. It can be used for the differential diagnosis of degenerative and inflammatory processes during clinical examination and prophylactic examinations of the population, with evaluation and selection of treatment and the timing of recovery.	
Value for customers	
Key advantages	
Potential customers and market opportunities	Comparison with competitors
Current status of technology/product	Papers and patents
Goals of visit to USA	Potentially interesting types of US contacts

I. Company Information	
Company Name	WirelessInMotion LLC (WIM LLC) (Nizhny Novgorod, Russia)
Project name	Remote Diagnostic and GPS/GLONASS Vehicle Tracking
Project leader	Alexander Afanasjev, Ph.D.
Contacts	Email: aafanasj@yahoo.com Phone: +79625183285
Company history and achievements	In 2011 WirelessInMotion was established In 2012 prototype of remote diagnostic device was developed In 2013 field testing of remote diagnostic device has been started
II. Project Information	
Technology/product description	Schemes and photos
New system for remote diagnostic and GPS/GLONASS vehicle tracking is proposed. Diagnostic device is installed in standard OBDII vehicle connector. Device supports 2 communication interfaces: Bluetooth and GSM/LTE. Bluetooth interface allows to diagnose vehicle by driver using own cell phone. LTE interface allows to transmit data to WEB server and engineer establish diagnostic remotely using special software. Vehicle tracking functionality is supported by embedded GPS/GLONASS.	 
Value for customers	
<ul style="list-style-type: none"> • Out of the box and easy to use • Improve driving safety • Vehicle tracking • Quick troubleshooting 	
Key advantages	
<ul style="list-style-type: none"> • Real-time online vehicle diagnostics • Diagnostic can be performed by driver and remotely by engineer • Supports 5 standard and 4 original diagnostic protocols • Supports as freeware diagnostic software as specialized software provided by automakers • GPS/GLONASS tracking • Notification of accidents (accelerometer) • Saving the data on embedded NVM and WEB server 	
Potential customers and market opportunities	Comparison with competitors
<ul style="list-style-type: none"> • SMART car insurance • SMART rent car • SMART after-sale service • Dealerships automakers • Diagnostic centers and service stations • Logistics companies 	<ul style="list-style-type: none"> • Supports 5 standard and 4 original diagnostic protocols • Supports GLONASS tracking • Supports Bluetooth and international GSM/LTE • Alarm and Guard functionality • Motion detection
Current status of technology/product	Papers and patents
<ul style="list-style-type: none"> • Device certification tests • Preparation for production and pilot batch launch • Development of WEB service for remote diagnostics and vehicle tracking 	<ul style="list-style-type: none"> • Patenting device for remote vehicle diagnostic • Patenting software system for remote vehicle diagnostic
Goals of visit to USA	Potentially interesting types of US contacts
<ul style="list-style-type: none"> • To demonstrate technology/product to potential customers • To investigate US market • To find partners and/or investors 	<ul style="list-style-type: none"> • Dealerships automakers • Car insurance companies • Logistics companies

I. Company Information	
Company Name	Laboratory of mobile services LLC (Nizhny Novgorod, Russia)
Project name	Personal Knowledge Management System
Project leader	Alexey Umnov, Ph.D.
Contacts	Email: umnov@vl.unn.ru Phone: +79056687348
Company history and achievements	Spin-off company of UNN, established in 2011. Best mobile app (contest Continuum (Intel + Skolkovo) 2011), Silver medal (international inventors expo in Geneva in 2012).
II. Project Information	
Technology/product description	Schemes and photos
<p>Software and hardware platform that allows the user:</p> <ul style="list-style-type: none"> Create interactive multimedia personal documents organized into personal knowledge base (on the principles of the semantic network). Distribute the organized information through multiple communication channels: email, social networks, thematic sites and by AZ-built devices Link Internet of documents with internet of things Organize personal activity according right thinking style 	
Value for customers	
High efficiency in education, professional work and personal life	
Key advantages	
<ul style="list-style-type: none"> Rich multimedia documents with semantic marks Personal semantic network Personal analytic tools Creative thinking tools Critical thinking tools Interaction with environment via various gadgets 	
Potential customers and market opportunities	Comparison with competitors
<ul style="list-style-type: none"> Students Persons interesting in Self Improvement Teachers and University professors Businesses coaches 	<ul style="list-style-type: none"> Evernote, One Note, other PIMs Alterozoom has: <ul style="list-style-type: none"> Tools for semantic work with information Tools for organization of thinking process Tools for self estimation Tools for linking Traditional Internet and Internet of Things
Current status of technology/product	Papers and patents
<ul style="list-style-type: none"> Beta testing of the system. Ready to market output. 	<ul style="list-style-type: none"> 2 patents of RF
Goals of visit to USA	Potentially interesting types of US contacts
<ul style="list-style-type: none"> To demonstrate technology / product to potential customers To investigate US market To find partners and/or investors 	<ul style="list-style-type: none"> Investors, interested in IT projects, Professors of schools and universities Business coaches Authors of books for self-development.

I. Company Information	
Company Name	Radiotechnology - NN LLC (Nizhny Novgorod, Russia)
Project name	Self - training system for monitoring and forecasting of the local weather with ultra-high space resolution
Project leader	Igor Karpunin
Contacts	Email: ikarpuni@gmail.com Phone: +7 9058696969
Company history and achievements	Spin-off company of UNN, established in 2011
II. Project Information	
Technology/product description	Schemes and photos
Hardware-software system, built with using of wireless sensor network technology, allowing the measurement and forecasting of parameters of atmosphere and related media with spatial resolution of several meters	
Value for customers	
Correct weather information in the place of interest in the time of interest	
Key advantages	
<ul style="list-style-type: none"> High space resolution of weather and microclimate parameters Enhancement of forecasting for system placed on monitoring area during long time 	Traditional weather monitoring and forecasting methods space resolution – more then 20-30 square kilometers Proposed technology - 1 -10 meters (but on localized object)
Potential customers and market opportunities	Papers and patents
<ul style="list-style-type: none"> Farmers Landscape designers Sportsmen (yachtsmen, paragliders, climbers etc.) The owners of estates The owners of recreational territories and objects 	<ul style="list-style-type: none"> A lot of scientific papers; participation in the Russian and international conferences; 2 patents of RF
Current status of technology/product	Potentially interesting types of US contacts
There are prototypes of the system elements and algorithms. About 1 year to market output.	<ul style="list-style-type: none"> Distributors of the meteorological equipment Investors Farmers, landscape designers etc.
Goals of visit to USA	
<ul style="list-style-type: none"> To demonstrate technology / product to potential customers To investigate US market To find partners and/or investors 	

Key mechanisms which can be created by the university and the PoC to improve its commercialization efforts



- 1. Promotion of university “Discoveries’ to global science audience**
- 2. Enhancement of university reputation in global rankings**
- 3. Improvement of university efforts to commercialize science discoveries**
- 4. Improvement in developing Commercial relationships between global corporations and university departments**
- 5. Investment project review board in the work with projects**
- 6. Work with Business - angel clubs**
- 7. Mentor and coaching network**
- 8. Systems integrator role**