

### Boletín de Oportunidades de Cooperación:

Biotecnología y Salud

Boletín nº 134 Agosto 2015









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### Technology Offer: Innovative solution to manufacture personalized supportive shoe inserts for high-heeled footwear

### **Summary**

An Estonian company has developed a solution where personalized supportive shoe inserts are manufactured specifically for high-heeled footwear with measurements taken from inside the shoe while the customer is walking around. The company is looking for partners to share their results and feedback to further improve the company's solution. Commercial agreement with technical assistance, license agreement, research cooperation agreement and technical cooperation agreement are suitable.

Creation Date07 July 2015Last Update30 July 2015Expiration Date29 July 2016

Reference TOEE20150707001

### **Details**

### **Description**

Wearing high-heeled footwear is painful and can over time lead to permanent medical conditions, many of them requiring a surgery to fix. Orthopedic inserts help reduce the pain and damage, but the generic solutions currently available on the market are hard to place correctly and do not take into account the differences between shoes. Made to measure inserts offered by podiatrists are usually too thick to fit into most high-heeled shoes and far too visible. In addition to that, the plantar pressure patterns exhibited are very different with different heel heights making the currently available, barefoot measurements unviable.

The solution developed by the Estonian company uses thin, self-contained sensor insoles with 600 pressure points to measure the customers' feet while they are walking around. Based on the captured data, the algorithms developed by the company are used to create a 3D model of the supportive inserts to fit the customer and the shoes that were measured. The inserts are then produced using silicone additionally covered with leather or breathable synthetic fabrics. The production line of the supportive inserts is inexpensive and easy to scale up with increasing demand.

The inserts produced help to increase comfort and allow wearing high-heeled footwear for a longer duration of time. Reduced fatigue directly leads to reduced risk of secondary injuries such as slip and trip injuries.

The company is looking for partners engaged in manufacturing or distribution of high-heeled footwear; partners looking for means of aftermarket fitting of supportive inserts to high-heeled footwear; partners looking to use the pressure sensors in a medical setting. The company is looking for partners that are interested in using the solution either as a part of their footwear offering to help increase sales due to added comfort; as a way to increase the comfort and safety of their employees by outfitting their shoes with described inserts; to measure plantar pressure in footwear with varying heel heights as part of medical assessment or research. The partners would be expected to partake in a profit sharing scheme or to share their results and feedback to further improve the company's solution.

### **Advantages and Innovations**

Since the plantar pressure patterns are very different in shoes with different heel heights, using sensor insoles is one of the few methods that allow measuring pressure in high-heeled shoes. Currently available sensor insoles are rather expensive and not retail-friendly.

The sensor insoles produced by the Estonian company are self-contained, robust and sufficiently easy to use in retail scenarios. They are also affordable at less than 100 euros per pair even before mass production and are estimated to cost less than 50 euros per pair at high volumes.

After taking the measurements, modeling the supportive shoe inserts is automatic. This leads to reduced workforce cost that is currently the main component of the price of orthoses. Fully personalized shoe inserts can be manufactured for less than 7 euros per pair even at low quantities.

Since in-shoe measurement provides enough data about the shoes, the supportive shoe inserts can be made thinner than regular orthoses that need to establish a common baseline for different footwear. The inserts are less than 1 mm thick with raised areas only where the feet need support. This means that they fit easily in almost all high-heeled shoes.

### **Stage of Development**

Available for demonstration

### **Comments Regarding Stage of Development**

The company is currently developing a suitable production line to scale up the production volume.

### **IPR Status**

Secret Know-how

### **Comment Regarding IPR status**

Patents are not essential to guard the technology but are being considered by the company for specific parts of the solution.

### **Profile Origin**

Other

### **Keywords**

**Technology** 

01004017 Work Hygiene and Safety Management 06001020 Physiotherapy, Orthopaedic Technology

Market

05005015 Orthopaedics

05007007 Other medical/health related (not elsewhere classified)

05010003 Patient rehabilitation & training 07002002 Clothing and shoe stores

**NACE** 

C.32.9.9 Other manufacturing n.e.c.
Q.86.9.0 Other human health activities

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### **Dissemination**

### **Send to Sector Group**

Textile and Fashion



### Client

### Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2014

**Already Engaged in Trans-National Cooperation** 

Yes

**Languages Spoken** 

English

Estonian

**Client Country** 

Estonia

### **Partner Sought**

### Type and Role of Partner Sought

Type of Partner Sought: The company is looking for partners that are interested in using the solution either as a part of their footwear offering to help increase sales due to added comfort; as a way to increase the comfort and safety of their employees by outfitting their shoes with described inserts; to measure plantar pressure in footwear with varying heel heights as part of medical assessment or research.

Role of Partner Sought: The partners would be expected to partake in a profit sharing scheme or to share their results and feedback to further improve the company's solution. In addition, commercial agreement with technical assistance, license agreement, research cooperation agreement and technical cooperation agreement are suitable for the company.

### Type of Partnership Considered

License agreement Commercial agreement with technical assistance Technical cooperation agreement Research cooperation agreement



### Technology Offer: Innovative support pillow.

### **Summary**

A Croatian innovator has developed a prototype of a support pillow that will decrease the pressure of head weight during sleep or rest thanks to its specific construction. The pillow is made out of two parts firm and soft and a protective layer. A cooperation through a licensing agreement and joint venture agreement will be considered.

Creation Date17 June 2015Last Update30 July 2015Expiration Date29 July 2016

Reference TOHR20140505001

### **Details**

### **Description**

An innovator from Croatia has made a prototype of a support pillow whose base is made of a relatively firm substance supposed to contain lighter materials such as firm sponge or other similar materials. The second part is made of soft sponge placed on the base part covered with a protective layer made of leather, vinyl, linen or other materials. It enables the head to be in the same, slightly lifted position providing the constant inclination of the body. The base constructional part of the pillow is square shaped observing from three sides of the pillow, but the forth side has a specific construction adjusted for head and shoulders to fit in comfortably no matter which side is person laying down.

The innovator is looking for companies involved in pillow production interested in expanding their line of products with his innovation. He is interested in commercial production of the pillow in way of licensing and joint venture agreement.

### **Advantages and Innovations**

Support pillow will decrease the pressure of head weight in conscious or unconscious state during sleep or rest. The base The invention is designed to insure that one's head is in a proper position during sleep or rest creating the pressure of head weight.

The innovation is in the pillow design. Pillow is square shaped observing from three sides of the pillow, but the forth side has a specific construction. The forth side of the pillow is slightly curved into ellipse with a gap in the middle shaped as Gauss curve for the neck part. The gap also allows smooth positioning of shoulders into the free space when turning to the side position.

### **Stage of Development**



Prototype available for demonstration

**IPR Status** 

Patents granted

### **Comment Regarding IPR status**

Consensual patent granted in Croatia Consensual patent pending in the EU

### **Profile Origin**

Private (in-house) research

### Keywords

**Technology** 

06001023 Medical Furniture

Market

05007007 Other medical/health related (not elsewhere classified)

**NACE** 

Q.86.9.0 Other human health activities

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### Dissemination



### **Send to Sector Group**

Healthcare

### Client

Type and Size of Organisation Behind the Profile

Inventor

Year Established

1991

**Turnover** 

<1M

**Already Engaged in Trans-National Cooperation** 

No.

**Languages Spoken** 

**English** 

German

Croatian

**Client Country** 

Croatia

### **Partner Sought**

### Type and Role of Partner Sought

- Type of partner sought: companies
- Specific area of activity of the partner: manufacturer of medical equipment or medical furniture
- Task to be preformed by the partner sought: partner should have specialized knowledge and experience in the production of pillows

Type and Size of Partner Sought

251-500,SME 51-250

Type of Partnership Considered

License agreement Joint venture agreement



### Technology Offer: New molecule for reduction of obesity in humans

### Summary

A Catalan research center has developed a new molecule that reduces the lipid content in humans. This allows the treatment of obesity and other pathologies where an abnormal accumulation of fat is present, like fatty liver disease (FLD). Pharmaceutical companies to co-develop or license the technology are sought.

Creation Date 21 May 2015 Last Update 29 July 2015

**Expiration Date** 26 November 2015 **Reference** TOES20150521002

### **Details**

### **Description**

Obesity is a multifactorial metabolic disorder that is associated with a cluster of chronic and progressive diseases. There are few treatments that produce modest weight loss but little is known about how these drugs affect longer-term complications of obesity.

Bariatric surgery is the most effective procedure. However, due to its costs and the risk of complications, other effective yet less invasive treatments are needed.

A Catalan research center with strong expertise in cardiovascular diseases has discovered a molecule for the treatment of obesity and related illnesses. This molecule had been identified in metabolic disorders as a biomarker to predict an increased risk of developing type 2 diabetes and cardiovascular diseases. It has been demonstrated that it plays a role in the development and progression of these diseases by reducing the lipid content in human hepatocytes and adipocytes due to its role as lipolytic agent and inhibitor of the lipogenesis.

It has been demonstrated in vivo that overexpression of this molecule reduces body weight increase in a genetically induced and in a diet induced obesity models.

The results were validated in human hepatocytes, human adipocytes and human liver biopsies.

The center is seeking pharmaceutical companies which are developing products in metabolic disorders with particular focus on obesity to further develop the technology through a codevelopment or licence agreement. It could be developed as a new pharmacological compound, a new cosmetic product or a new nutraceutical.

### **Advantages and Innovations**

In contrast with current treatments for overweight, which act preventively by reducing lipids absorption or suppressing the appetite, here it is proposed a treatment to actively reduce lipid accumulation in human tissues.

This is the first time this molecule is found to be a therapeutic target for diseases where an abnormal accumulation of fat is present in different tissues, such as overweight, obesity or fatty liver disease.

### **Stage of Development**

Under development/lab tested

### **IPR Status**

Patent(s) applied for but not yet granted

### **Comment Regarding IPR status**

PCT patent application

### **Profile Origin**

National R&D programme

### **Keywords**

T	ec	hn	0	00	VF

06001005 Diagnostics, Diagnosis

06001015 Pharmaceutical Products / Drugs 06002002 Cellular and Molecular Biology

Market

05001001 Diagnostic services 05003001 Therapeutic services

05005003 Endocrinology

05007007 Other medical/health related (not elsewhere classified)

07004002 Health and beauty aids

**NACE** 

Q.86.1.0 Hospital activities

Q.86.9.0 Other human health activities

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### **Dissemination**

**Send to Sector Group** 

Bio Chem Tech

### Client

Type and Size of Organisation Behind the Profile

**R&D** Institution

Year Established

0

**Already Engaged in Trans-National Cooperation** 

Yes

**Languages Spoken** 

English

French

Spanish

**Client Country** 

Spain

### **Partner Sought**

### **Type and Role of Partner Sought**

- Type of partner sought: pharmaceutical companies
- Specific area of activity of the partner: metabolic disorders with particular focus on obesity
- Task to be performed by the partner sought: co-develop de product and bring it to the market **Type of Partnership Considered**

License agreement Technical cooperation agreement



### Technology Offer: Surgical instruments and devices for Spinal Stenosis surgery.

### Summary

A research team from a Catalan medicine school is developing novel surgical instruments for an improved, faster and safer approach to solve Spinal Stenosis (SS) and some other pathology requiring vertebral procedures. License agreement or technical cooperation agreement are envisaged with companies.

Creation Date20 July 2015Last Update30 July 2015Expiration Date29 July 2016

Reference TOES20150720002

### **Details**

### **Description**

A research team from a Catalan university composed of neuroanatomists with wide experience on generation of 3D models from human anatomy and neurosurgeons experts on surgical approach routes are developing surgical instruments to solve Spinal Stenosis and some other pathologies. Spinal Stenosis (SS) is the gradual narrowing of the spinal canal due to progressive degenerative changes of the spine. 5 out of every 1000 persons over the age of 50 will suffer from some degree of spinal stenosis and it is the leading reason for spine surgery in persons over 65. Current techniques of Laminoplasty allow decompressing the spinal canal but with a rate of postoperative morbidity due to the deformation and/or elimination of the posterior vertebral unit and leading frequently to postoperative Kyphosis and Chronic pain.

Spinous Process Shortening Laminoplasty (SPS-L) is a novel surgical technique than has been developed by the research group to avoid the most common postoperative complications. SPS-L technique is expected to have good acceptance among surgeons because it will considerably lower the risk of nerve lesion and the time of operation. Moreover, SPS-L has been planned to be useful not only to SS but also to other pathologies with high incidence as spinal cord tumors, abscess and vascular malformations.

Preliminary results on 3D, plastic and cadaveric models have shown that SPS-L is a feasible technique. But actual instruments and devices do not allow reproducing adequately some steps of SPS-L. For that reason the research team is developing a specific set of surgical instruments. This instrumental kit is designed to set up the surgeon with all the required tools to use SPS-L safely in human patients.

In addition, these new instruments can be also useful to improve the approach of other common procedures to hand surgery, peripheral nerves surgery and brain and spine surgery.

Companies active in the field of surgery equipment for using and selling the technology via license agreement or technical cooperation agreement are sought.

### **Advantages and Innovations**

- Reduction of Laminoplasty postoperative complications.
- Potential application in other Brain and Spine surgical techniques.
- High user acceptance of the procedure (SPS-L).
- Lower risk of nerve lesion.
- Lower time of operation.
- Possibility of full-solution kit for users.
- Addressed to frequent pathologies: spinal stenosis, spinal cord tumours, abscess and vascular malformations.

### **Stage of Development**

Under development/lab tested

### **Comments Regarding Stage of Development**

Spinous process splitting laminectomy (SPS-L) procedure: validated on 3D, plastic and cadaveric models.

Spinous process splitting laminectomy (SPS-L) Kit instruments and devices: prototype designs are already available. Functional prototypes are required to validate them on cadaveric models and perform biomechanical test.

Testing on animal models: available if required.

### **IPR Status**

Patent(s) applied for but not yet granted

### **Comment Regarding IPR status**

Patent application priority date: July 2014

### **Profile Origin**

Other

### **Keywords**

**Technology** 

06001017 Surgery

**Market** 

05003002 Surgical instrumentation and equipment



05004006 Surgical instrumentation and equipment

**NACE** 

Q.86.9.0 Other human health activities

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### **Dissemination**

Send to Sector Group

Bio Chem Tech

### Client

Type and Size of Organisation Behind the Profile

**R&D** Institution

Year Established

0

**Already Engaged in Trans-National Cooperation** 

No.

Languages Spoken

**English** 



Spanish
Client Country
Spain

### **Partner Sought**

### Type and Role of Partner Sought

- Type of partner sought: medium-sized or multinational companies from the healthcare/medicine sector.
- Specific area of activity of the partner: medium-sized or multinational companies active in the field of surgery equipment.
- Type of Partnership Considered: The Catalan research group is looking for partners interested in using and selling the technology through a licensing agreement.

### Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

### **Type of Partnership Considered**

License agreement Technical cooperation agreement



### Technology Offer: Efficient, low cost and easy-to-deploy home health information system for Ambient Assisted Living and Medical Telemetry

### **Summary**

A Portuguese technology-based start-up has developed a wireless sensors' based e-health platform for the continuous monitoring of health status and location of the elderly or chronically hill people. The platform enables the integration of the user's medical information in a safe place where it can be accessed by health care providers, whether formal or informal, and facilitates the rapid assistance in emergencies by sending automatic alerts for the caregiver and/or centralised emergency system.

Creation Date13 March 2015Last Update24 June 2015Expiration Date05 July 2016

Reference TOPT20150114001

### **Details**

### **Description**

The increasing ageing of the population combined with issues of independence and quality of life results in the fact that many elderly people live separated from their families, often living alone or accompanied by another old person and significantly increasing the number of elderly people found dead at home without any assistance, formal or informal.

Moreover, regarding people with an increasingly busy day-to-day that make up the active population, it is difficult to keep the continuous surveillance of their elderly relatives with diagnosed diseases. In the case of these elderly that need to be continuously monitored due to cardiovascular problems or others, it becomes essential to have a platform to empower this process and which allows the remote monitoring.

Also in the case of independent elderly without diagnosed problems, it may be of interest to maintain monitoring of vital signs and their activities, allowing a timely intervention in case of emergency, such as a fall

A third of people aged over 65 fall at least once a year. These falls, which might result in fractures, can immobilize the elderly, who need urgent medical attention. In the case of an elderly person who lives alone, he/she can spend hours without being assisted, which will increase the effects of a fall that could be harmless.

The new e-health platform responds to the problem identified, allowing for the continuous monitoring

of vital signs or other parameter type and the reporting of the data information to a remote application for the caregiver.

The new e-health platform developed enables the integration of user information (elderly or chronically ill) in a safe place where it can be accessed by health care providers, whether formal or informal. Through continuous monitoring of health status and location of the user, the platform facilitates expeditious assistance in emergencies, since when anomalies occur, alerts are automatically issued for the caregiver and/or centralized emergency system. The system is based on two complementary modules:

- A mobile application which is responsible for acquiring and processing the data monitored by the Bluetooth wireless sensors and for transmitting these data to the central server. This module is also responsible for triggering alerts if the values fall below or above the thresholds previously defined.
- A web application in which the caregiver can consult the monitored data in real time and also define and setup a set of parameters.

The wireless sensors available in the solution enable the monitoring of the following parameters: Heart rate; Oximetry; Blood Pressure; Location; Glucose; Weight; Temperature. Concurrently, the company is developing other products based on this technology to address other markets such as the monitoring of well-being.

### **Advantages and Innovations**

Continuously monitoring of vital signs and daily activity information can help to promote better healthcare and better quality of life.

Medical telemetry is not a new concept, but the vast majority of available solutions are not capable to re-organize its different sensing components on a network and to transmit and retransmit data to other sensors or expand it to several devices. In addition, most available products in the market require the patient to stay in bed and the few ambulatory wireless products are usually too big and heavy.

In recent years, there have been many technological developments that aim to address this problem, due to the large market potential.

This e-health platform is aimed at different types of patients (characterized by their diseases or symptoms) and at the part of population that is concerned about their health. It is also directed to the promotion of health and well being allowing the user to measure his continuous heartbeat during physical activity and monitor the evolution of his physical condition. The consultation of health data history and evolution might be done online and shared with the health professional, given that in order to protect the privacy of the users, the system needs to have bidirectional authorization. The platform is modular and cloud based in order to add new features easily and to be highly/worldwide scalable.

### Stage of Development

Already on the market

### **Comments Regarding Stage of Development**

This e-health platform was developed in January 2012. The trial version was completed in December 2012, having started the pilot project with a national municipally in March 2013. The year 2013 served to test the product in the market and make the necessary adjustments on the technology.

With the validation of this e-health platform in a real environment and having obtained a very positive feedback from the end-users, the product is able to enter the national and international market and succeed.

### **IPR Status**

**Trade Marks** 

### **Profile Origin**

Private (in-house) research

### **Keywords**

Technology	
01004001	Applications for Health
06005002	Sensors & Wireless products
06005003	Health information management
06005004	Remote diagnostics
Market	
02003	Specialised Turnkey Systems
05007004	Monitoring equipment
NACE	
Q.86.1.0	Hospital activities
Q.86.2.1	General medical practice activities
Q.86.9.0	Other human health activities
Q.87.1.0	Residential nursing care activities
Q.87.3.0	Residential care activities for the elderly and disabled

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### **Dissemination**

**Send to Sector Group** 

Healthcare

### Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2011

**Turnover** 

<1M

**Already Engaged in Trans-National Cooperation** 

No.

Languages Spoken

English

Portuguese

**Client Country** 

Portugal

### **Partner Sought**

### Type and Role of Partner Sought

Partners and potential clients are:

- Homecare companies and professionals
- Nursing homes

- Day care centers
- Residential homes
- Rehabilitation companies

Interested partners have the option of signing a license agreement, to engage into a commercial agreement with technical assistance or to establish a services agreement.

### Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

### **Type of Partnership Considered**

Services agreement License agreement Commercial agreement with technical assistance



### Technology Offer: Low cost 3D scanning technology for breast reconstruction and other body scanning applications

### **Summary**

A UK based university has developed a low cost 3D scanning technology for breast reconstruction professionals and other body scanning applications. The system assists the surgeon in planning the operation and choosing the most suitable implant in order to improve patient outcomes and reduces the necessity for repeat surgery. The university is looking for design partners for technical cooperation agreements in order to advance the product to commercial readiness.

Creation Date 02 July 2015
Last Update 24 July 2015
Expiration Date 23 July 2016

Reference TOUK20150702001

### **Details**

### **Description**

The rising incidence of breast cancer has created an increased demand for all forms of breast cancer surgery, including breast reconstruction. To plan reconstruction and choose the breast implant, the surgeon relies on a standard set of manual measurements taken on the patient. This approach does not allow an accurate reconstruction of breast shape and volume, and asymmetries often arise after surgery. In the UK, one in six reconstruction patients were readmitted for repeat surgery.

Research at this UK based university has developed a relatively low cost 3D scanning system based on an array of commercially available depth cameras and unique software that calibrates the system and provides accurate data outputs. The system has been trialled successfully with a consultant surgeon at a UK hospital and allows simple, inexpensive 3D surface imaging of the breast region to further the accuracy of forming true to life implants.

The university is looking for medical device design partners for technical cooperation agreements in order to advance the product to commercial readiness. Partners with medical regulatory awareness from previous projects in the healthcare field and with links to hospitals/public health bodies for testing and evaluation purposes would be beneficial.

The system has other potential market applications such as in sports and biomechanics to monitor obesity or the success of any intervention or in face scanning, for example in orthodontics. Hence, the university is also very interested in developing the system in other health and wellbeing related

applications where body morphology and analysis of body shape is important but prohibited by the cost and complexity of current 3D surface imaging systems.

### **Advantages and Innovations**

### Benefits:

- Improve breast reconstruction outcomes
- Simple, inexpensive, 3D surface scanning
- Improves accuracy and reduces the need for extra surgery
- Supports pre-operative planning
- Enables post-operative evaluation
- No need for special training requirements
- Improves patient satisfaction and quality of life
- Good value for money

### **Stage of Development**

Available for demonstration

**IPR Status** 

Copyright

### **Profile Origin**

Other

### **Keywords**

Technology	
06001002	Clinical Research, Trials
	B) (1 B) (1

06001005 Diagnostics, Diagnosis

06001008 Environmental Medicine, Social Medicine, Sports Medicine

06001012 Medical Research

06001017 Surgery

**Market** 

005001002 Medical imaging
05001001 Diagnostic services
05002005 Other medical imaging

05004006 Surgical instrumentation and equipment

05006 Anatomy, Pathology, Immunology, Physiology

**NACE** 

Q.86.1.0 Hospital activities

Q.86.9.0 Other human health activities

### **Network Contact**

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### **Dissemination**

Send to Sector Group

Healthcare

### Client

Type and Size of Organisation Behind the Profile

University

Year Established

0

**Already Engaged in Trans-National Cooperation** 

No.

**Languages Spoken** 

English

**Client Country** 



United Kingdom

### **Partner Sought**

### Type and Role of Partner Sought

Type of partner sought - SME or larger company

Specific area of activity of the partner - medical device or product design/development companies with links to hospitals/public health bodies to facilitate testing and evaluation.

Task to be performed by the partner sought - evaluate technology with a view to considering technical cooperation agreements.

### **Type of Partnership Considered**

License agreement Technical cooperation agreement

### Technology Offer: Mobile application platform that connects with wearable biometric sensor for remote clinical health monitoring of patients

### **Summary**

A UK SME has developed a complete clinical medical solution for the remote monitoring of patients by healthcare professionals. The system provides vital sign information and biometric data for remote monitoring of the elderly, chronically ill and post operative patients or use in professional sports. The company is looking for technical cooperation and/or license agreements with healthcare providers or sports professionals who wish to enhance their current service provision.

Creation Date 06 July 2015
Last Update 14 July 2015
Expiration Date 13 July 2016

Reference TOUK20150706001

### **Details**

### **Description**

The ability to monitor a patients' vital signs and activity data and provide data and notifications to healthcare professionals can both save health services large amounts of money and improve patient quality of life. Recent advances in mobile technology and wearable sensors have made this dream a commercial reality. This UK based SME has taken a commercially available wearable sensor and built a healthcare platform around this which is affordable, robust and configurable for the healthcare professional. This SME is in the process of developing a range of healthcare solutions using their considerable integration expertise. The company is looking for established healthcare service providers or sports professionals for technical cooperation and/or license agreements and who wish to enhance their current product offering, or enter the market with a new solution that matches their business model.

### **Advantages and Innovations**

FDA/CE cleared vital sign monitoring of:

- Single-lead ECG
- Heart rate
- Heart rate variability
- Respiratory rate
- Skin temperature



- Body posture including fall detection/severity
- Steps

### Biometric monitoring:

- Contextual heart rate
- Stress
- Energy expenditure (Kc)
- Energy rate (Kc/min)
- Sleep actigraphy,
- Sub-posture sleep quality (Hypnogram)
- Sleep duration,
- Bed entry/exit
- Apnea pre-Screen

Solution also integrates with FDA/CE cleared wireless pulse oximeter to provide Sp02 (blood oxygen) biometric

### Software platform:

- Android/Apple devices
- Cloud based biometric storage and analysis
- Customisable
- Configurable notifications upon change of condition

As a clinical medical solution it has accuracy of 99% and should not be confused with consumer based products on the market.

### **Stage of Development**

Already on the market

**IPR Status** 

Copyright

**Profile Origin** 

Other

### **Keywords**

### **Technology**

06001005 Diagnostics, Diagnosis

06001013 Medical Technology / Biomedical Engineering



06005002 Sensors & Wireless products
06005003 Health information management

06005004 Remote diagnostics

**Market** 

05001001 Diagnostic services

05004001 Electromedical and medical equipment

05004005 Diagnostic equipment 05007004 Monitoring equipment

05007006 Computer-aided diagnosis and therapy

**NACE** 

Q.86.1.0 Hospital activities

Q.86.2.1 General medical practice activities
Q.86.2.2 Specialist medical practice activities

Q.86.9.0 Other human health activities

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### **Dissemination**

### **Send to Sector Group**

Healthcare

### Client

### Type and Size of Organisation Behind the Profile

Industry SME <= 10

### Year Established

0

### **Already Engaged in Trans-National Cooperation**

No.

### **Languages Spoken**

**English** 

Portuguese

### **Client Country**

United Kingdom

### **Partner Sought**

### Type and Role of Partner Sought

Type of partner sought - SME, larger company or public sector

Specific area of activity of the partner - Healthcare provision, professional sports services such as athlete training or research

Task to be performed by the partner sought - assess the technology and develop solutions to fit their needs

### **Type of Partnership Considered**

License agreement

Technical cooperation agreement



### Technology Offer: Development of custom-made oligonucleotides for use in innovative applications in genetics, molecular biology, biotechnology and nanotechnology

### Summary

A UK oligonucleotide synthesis company specialising in chemically modified and complex DNA analogues is seeking partners who require custom-made oligonucleotides with unusual or difficult modifications, towards the co-development of novel applications in a range of sectors, including genetics and biotechnology. They are seeking joint ventures, technical cooperation agreements, manufacturing agreements or commercial agreements with technical assistance.

Creation Date 16 June 2014
Last Update 22 July 2015
Expiration Date 21 July 2016

Reference TOUK20140616002

### **Details**

### **Description**

The presence of modifications introduces complexity into oligonucleotides (short-stranded DNA and RNA molecules). Oligonucleotides have a wide range of applications in sectors including genetics, genomics, molecular biology, biochemistry, biotechnology and nanotechnology. Modifications are added either during oligonucleotide synthesis, or post-synthetically. Small tweaks at this stage can lead to large differences in the yield and purity of the finished oligonucleotide, such that particular care is needed when multiple different modifications are required. Modifications can interact with one another, both during synthesis and purification, and in subsequent experiments.

The UK company has specific experience and knowledge of the chemistry of modified oligonucleotides that enables them to anticipate these difficulties at a high level, providing ongoing technical support to co-develop the oligonucleotide design for specific applications. They work with the researchers during the synthesis of the oligo and in subsequent biochemical experiments.

### **Advantages and Innovations**

The UK company has a focus and expertise in the synthesis of high quality modified DNA and RNA oligonucleotides, modified oligos, fluorescent probes, long oligos, oligonucleotide analogues and large scale oligo synthesis. A significant advantage is that the company has specific and extensive

experience in nucleic acids chemistry, which is not usual in oligo synthesis companies. The company also has a dedicated research and development lab, exploring new methods of oligonucleotide synthesis, along with related technologies.

### **Stage of Development**

Already on the market

**IPR Status** 

Other

**Profile Origin** 

Other

### **Keywords**

Tec	hno	logy

05001001 Analytical Chemistry 06002006 Synthetic Biology

06003002 Gene Expression, Proteome Research

06004 Micro- and Nanotechnology related to Biological sciences

06006 Industrial Biotechnology

Market

04001002 Industrial genetic engineering applications 04001003 Medical genetic engineering applications

04005 Biochemistry / Biophysics

04015 Gene Expression, Proteome Research

04017 Micro- and Nanotechnology related to Biological sciences

NACE

Q.86.9.0 Other human health activities

### **Network Contact**

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### **Dissemination**

**Send to Sector Group** 

Bio Chem Tech

### Client

Type and Size of Organisation Behind the Profile

Industry SME 11-49

Year Established

Λ

**Already Engaged in Trans-National Cooperation** 

Yes

**Languages Spoken** 

**English** 

**Client Country** 

United Kingdom

### **Partner Sought**

### Type and Role of Partner Sought

- Type of partner sought: Industry
- Specific area of activity of the partner: Genetics, genomics, molecular biology, biochemistry,



### biotechnology, nanotechnology

- Task to be performed by the partner sought: Provision of oligonucleotides for co-development (modification and synthesis) towards novel applications

### **Type and Size of Partner Sought**

SME 11-50,SME <10,251-500,SME 51-250,>500

### **Type of Partnership Considered**

Manufacturing agreement Commercial agreement with technical assistance Technical cooperation agreement Joint venture agreement



### Technology Offer: Controlled release formulation for a gastroretentive delivery of drugs.

### **Summary**

A French research team developed an innovative gastroretentive dosage system (GRDS) for sustained release of active pharmaceuticals ingredients by improved residence time in the small intestines or stomach. This GRDS avoids the "all or nothing effect" during the gastric emptying, improving the bioavailability and the drug efficiency. The research team is currently looking for an industrial partner interested for licensing-in the technology and/or R&D collaboration.

Creation Date15 May 2015Last Update17 June 2015Expiration Date05 July 2016

Reference TOFR20150515001

### **Details**

### **Description**

Retention in the upper gastrointestinal tract is critical for some active pharmaceutical ingredients (API), in particular for API which:

- are locally active in the stomach (e.g. antacids and antibiotics against Helicobacter pylori);
- have an absorption window in the stomach or in the upper small intestine;
- are unstable in the intestinal or colonic environment
- exhibit low solubility at high pH values

Gastric retentive dosage systems (GRDS) are available (high & low density, expendable, superporous hydrogel, mucoadhesive, magnetic) but all these technologies require a lag time in order to swell or to activate gas production, leading to the all or nothing effect.

A French research laboratory from South of France has developed an oral GRDS characterized by intrinsic low density and high porosity. Researchers produce them by state of the art wet granulation manufacturing process. The formulation incorporates highly hydrophobic dusty powder that allows immediate and continuous buoyancy in the stomach and sustained release of API up to 18h, even on a gastric emptying. The final forms of the GRDS are tablets and hard capsules.

### Results:

- In vitro evaluation of dissolution profiles and buoyancy in drastic conditions (150rpm, pH=1,2)
- APIs studied: theophylline, doxycycline, paracetamol, carbamazepine, metformin...
- In vivo evaluation on pigs showed sustained release of doxycycline with a retention time 

   ≥6 hours

Pharmaceutical industry in human and animal is the market's target for:

- Improved formulation and life-cycle management of drugs
- Generics or new drugs requiring sustained release by improved gastric residence time Other applications could be investigated for Food processing industry.

Licensing-in the technology and/or R&D collaboration are therefore expected with industries, depending on the specifications and further development considered.

### **Advantages and Innovations**

This invention has the following advantages:

- Allows "Once a day" administration of drugs, reducing both frequency of administration and fluctuations in drug plasma levels and improving bioavailability and drug efficiency.
- As opposed to others GRDS, our formulation floats immediately within the gastric juice: avoids the "all or nothing effect" during the gastric emptying
- Pills contain up to 85% of API vs. 50% for current GRDS
- Allows the delivery of all types of API (hydrophobic or hydrophilic) and especially suitable for API with very narrow absorption window.

### **Stage of Development**

Under development/lab tested

### **IPR Status**

Patents granted

### **Comment Regarding IPR status**

Granted in China, Japan and the US. Patent pending in Europe, Canada, India

### **Profile Origin**

National R&D programme

### Keywords

### **Technology**

06001015 Pharmaceutical Products / Drugs

07001009 Veterinary Medicine

Market

05003005 Drug delivery and other equipment 05007002 Pharmaceuticals/fine chemicals



05009003

Animal health

**NACE** 

Q.86.9.0

Other human health activities

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### Client

Type and Size of Organisation Behind the Profile

University

Year Established

2012

**Already Engaged in Trans-National Cooperation** 

Yes

**Languages Spoken** 

English

**Client Country** 

France

### **Partner Sought**

### **Type and Role of Partner Sought**

Partner sought are industrial companies (Small, medium and large companies) from these specific sectors :

- Drug delivery and Formulation companies
- Pharmaceutical companies or generic manufacturers, in human or animal health

The research team is looking for industrial partners interested in a license agreement and/or R&D further collaboration.

### **Type and Size of Partner Sought**

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

### **Type of Partnership Considered**

License agreement Technical cooperation agreement



### Technology Offer: Innovative molecular target to treat spasticity and drug repositioning

### **Summary**

A French neurosciences institute identified a new therapeutic target responsible for muscular spasticity after a spinal cord injury. Specific drugs are able to activate at very low doses this target and could be first-in-class drugs to replace or combine with baclofen for the treatment of spasticity. The Institute is currently looking for an industrial partner interested for licensing-in the technology and/or technical R&D collaboration.

Creation Date 11 May 2015
Last Update 15 July 2015
Expiration Date 14 July 2016

Reference TOFR20150511004

### **Details**

### Description

Baclofen is commonly used for treating severe spasticity and can be administered in a patient by means of an implanted pump when the oral administration either becomes inefficient or has too many side effects (such as drowsiness, dizziness...).

However, treatments using baclofen are very expensive, even without counting the surgery act for implantation of the pump.

These phenothiazine derivatives administered at  $10\mu g/kg$  (IV) are as effective as Baclofen injected as 2mg/kg (IV), offering an interesting treatment option for spasticity.

Spasticity, characterized by hyperexcitability of the stretch reflex, muscle stiffness, co- contraction of antagonistic muscles and painful spasms, is a common consequence of spinal cord injury (75% of patients) or cerebrovascular accident. It deeply affects the quality of life of patient. Spasticity results from both an increase of excitability of motor neurons and a reduction of the strength of the inhibition in the neural network of the spinal cord.

A French research team demonstrated that KCC2 protein (potassium-chloride co-transporter 2) expression decreases after spinal cord injury and is responsible for spasticity. KCC2 appears to be an attractive target for treating spasticity but, up to now, no drug or pharmacological tools having a positive activity on KCC2 by increasing expression or functions thereof has been developed yet.

Researchers screened the Prestwick Chemical Library® and identify some active phenothiazine derivatives that activate KCC2, known to be able to penetrate into the central nervous system and administered by oral route in humans

Preliminary in vivo efficacy was validated on a spasticity model due to spinal cord injury: spasticity is reduced with 50ng/kg dose, administrated 30 days after complete transection of spinal cord.

### 2 markets are targeted:

- Treatment of generalized and regional spasticity (orphan drug designation) due to spinal cord injury,
- Potential therapy for spasticity caused by multiple sclerosis, stroke, cerebral palsy, traumatic brain injury.

The Institute is looking for R&D oriented companies focused on neurosciences: Pharmaceutical companies, Biotechnology companies.

Sought partners are industrial partners interested in a license agreement and/or R&D collaboration according to partnership.

### **Advantages and Innovations**

This invention has the following advantages:

- New molecular target on this indication
- Efficient at very low doses to treat spasticity, reducing side-effects risks
- Repositioned compounds: drugs already approved for CNS disorders (antipsychotic & antiemetic)

### **Stage of Development**

Under development/lab tested

### **IPR Status**

Patent(s) applied for but not yet granted

### **Comment Regarding IPR status**

European patent filed in 2014, PCT filed in 2015

### **Profile Origin**

National R&D programme

### **Keywords**

### **Technology**

06001014 Neurology, Brain Research

06001015 Pharmaceutical Products / Drugs



### Market

05003001 Therapeutic services

05006 Anatomy, Pathology, Immunology, Physiology

05007002 Pharmaceuticals/fine chemicals

**NACE** 

Q.86.9.0 Other human health activities

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### Client

### Type and Size of Organisation Behind the Profile

University

Year Established

2012

**Already Engaged in Trans-National Cooperation** 

Yes

### **Experience Comments**

The client is one-stop shop for transfer and commercialization of innovative technologies from Public Research in South of France.

### **Languages Spoken**



English
Client Country

France

### **Partner Sought**

### Type and Role of Partner Sought

The Institute is looking for companies engaged in R&D and focused on neurosciences : Pharmaceutical companies, Biotechnology companies, of all size: small, medium and large companies.

Sought partners are industrial partners interested in a license agreement and/or R&D collaboration. The institute plans to identify other non-generic drugs.

### Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

### **Type of Partnership Considered**

License agreement Technical cooperation agreement



### Technology Offer: Material for local wounds healing based on biodegradable nanofibers

### **Summary**

A Czech university has developed nanofiber material for local wounds healing based on biodegradable nanofibers. The material gradually degrades and bioactive agents bound to it are liberated just in affected spot. The material is also biocompatible, and non-toxic. The university is looking for partners interested in research cooperation agreement.

Creation Date01 June 2015Last Update15 July 2015Expiration Date14 July 2016

Reference TOCZ20150601001

### **Details**

### **Description**

A Czech university has developed a special, nano-based material, used in human and veterinary medicine to heal wounds. It is manufactured by way of electrospinning the sol-gel. Solution is thermally stabilized under specific conditions that ensure easy biodegradability in the future.

High specific surface of the nanofibers (tens of m2/g) allows to bind much more of the bioactive substance than in case of traditional materials that are currently used in medicine.

The novel material is biocompatible, biodegradable and non-toxic. As for biodegradation, it was tested in vitro in certain types of mocked human liquids.

The tests proved quick and easy degradation of the novel material. By way of gradual degradation it is possible to control release of therapeutic agents that are placed on the material.

Tests, carried out by certified independent lab for cytotoxicity, skin irritation and chromosomal aberration has confirmed that the material is non-toxic. In all the mentioned tests the results were comparable with results of the negative control.

Viability of tested cell lines has surpassed 95%, so the material was marked as "material without provable toxic effect".

Bioactive substances that are bound the material are quantified by way of spectrophotometric

methods and also by HPLC (high-performance liquid chromatography).

Tests of the kinetics of releasing therapeutic substances (e.g. antibiotics) are in plans.

Scientists are looking for partners interested in further research and development.

### **Advantages and Innovations**

- Nanofibers have capabilities to imitate structures of the real tissue this leads to better adhesion and proliferation of the cell
- Chemical (anorganic, SiO2) nature of the material ensures inertness of the material towards a human organism
- Nanofibers have a very good porosity except for substances of certain molecular weight while permeability is ensured in both cases. The material also inhibits bacteria to infect damaged skin
- In comparison to commonly used materials, the nanofibers have notably larger specific surface and therefore they allow binding of much higher number of molecules of active ingredient.
- Biodegradability of the material is manageable so the bound active ingredient can be released locally as needed
- As the novel material is applied locally then the organism is not stressed as in the case when therapeutic agents is provided.

### **Stage of Development**

Field tested/evaluated

### **Comments Regarding Stage of Development**

Material is now in pre-clinical tests' phase (in vitro a in vivo – lab animals)

### **IPR Status**

Patents granted

### **Comment Regarding IPR status**

Patent granted in the Czech Republic, PCT application is submitted

### **Profile Origin**

National R&D programme

### **Keywords**

### **Technology**

06001013 Medical Technology / Biomedical Engineering

06001015 Pharmaceutical Products / Drugs

06001024 Medical Biomaterials



06004 Micro- and Nanotechnology related to Biological sciences

Market

05003005 Drug delivery and other equipment

**NACE** 

Q.86.2.1 General medical practice activities
Q.86.9.0 Other human health activities

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### **Dissemination**

**Send to Sector Group** 

Healthcare

### Client

Type and Size of Organisation Behind the Profile

Industry 250-499

Year Established

1953

**Turnover** 

1 - 10M

**Already Engaged in Trans-National Cooperation** 

No.

**Languages Spoken** 

English

**Client Country** 

Czech Republic

### **Partner Sought**

Type and Role of Partner Sought

The university seeks partner for further research and cooperation.

**Type and Size of Partner Sought** 

University

**Type of Partnership Considered** 

Research cooperation agreement



### Technology Request: Seeking an ISO 13485 medical device manufacturer/integrator

### Summary

A Paris-based medical device company is looking for an ISO13485 compliant manufacturer/integrator. The French company is specialised in opthamology and its objective is to produce a diagnostic physiological measurement device. Nowadays a prototype has been developed and is available for demonstration. The French company is looking for a manufacturing agreement or subcontracting in order to produce such an innovative medical device.

Creation Date 09 July 2015
Last Update 30 July 2015
Expiration Date 28 October 2015
Reference TRFR20150709001

### **Details**

### Description

The French company is specialised in medical devices in ophtalmology. They have developed a demonstrator which is a diagnostic physiological measurement device with a lot of innovative advantages compared to the current competitive methods. Nowadays this functionnal demonstrator has to be industrialised.

The company is looking for a strong partnership with a manufacturer in order to produce small series of prototypes.

Manufacturer/integrator with industrialisation capacities is sought.

Moreover compliance with FDA registration would be appreciated. Technical competencies in mechanics, software, electronics, optics and hydraulics would be an added value as the objective is to produce a diagnostic physiological measurement device.

### **Technical Specification or Expertise Sought**

The manufacturer/integrator sought has to be:

- ISO 13485 certified
- compliant with the medical device certifications mandatory in the other countries like Australia
- FDA registered.



### **Stage of Development**

Prototype available for demonstration

**IPR Status** 

Patents granted

**Profile Origin** 

Private (in-house) research

### **Keywords**

Tec	hnc	logy
166		<i>7</i> 1099

01002010 Printed circuits and integrated circuits

06001013 Medical Technology / Biomedical Engineering

06005002 Sensors & Wireless products

06005004 Remote diagnostics

09001007 Optical Technology related to measurements

Market

02007012 Medical/health software

03005 Laser Related 05001007 Other diagnostic

05004005 Diagnostic equipment

NACE

Q.86.9.0 Other human health activities

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### **Dissemination**

### **Send to Sector Group**

Healthcare

### **Restrict Dissemination to Specific Countries**

France, Germany, Hungary, Ireland, Netherlands, Norway, Sweden, Switzerland, United Kingdom,

### Client

### Type and Size of Organisation Behind the Profile

Industry SME <= 10

### Year Established

0

### **Already Engaged in Trans-National Cooperation**

No.

### **Languages Spoken**

**English** 

French

### **Client Country**

France

### **Partner Sought**

### Type and Role of Partner Sought

- Type of partner sought: Medical device certified manufacturer. A specific expertise in ophthalmology would be appreciated.
- Task to be performed by the partner sought:

Prepare the industrialisation with a small series of functional prototypes.

### **Type of Partnership Considered**

Manufacturing agreement



### Technology Request: Non-centrifugation based plasma sample preparation technology

### Summary

A UK-based SME is looking for companies that have technology, products and expertise that would allow for plasma separation of blood samples within 15 minutes without using centrifugation and that can be used in resource limited settings. Ideally these companies will also have fluid volume control and delivery capabilities. The SME is seeking commercial agreements to manufacture or license such technology to them with technical assistance. Joint venture agreements will also be considered.

Creation Date 04 June 2015
Last Update 15 July 2015
Expiration Date 14 July 2016

Reference TRUK20150604001

### **Details**

### Description

This UK-based biotechnology SME specialises in diagnostics and pharmacogenomics. Fully compliant with Good Clinical Laboratory Practices (GCLP) and with ISO 13485 accreditation the company provides biotechnology and pharmaceutical companies with biomarker and personalised medicine information to support their drug development programmes. The client SME also has a molecular diagnostics platform that has been developed for point-of-care use, especially in resource limited settings.

The SME wants to further develop its technology and is interested in working with companies that have expertise, technology and products that will enable plasma separation of blood samples without using centrifugation in the process. Ideally the partner company will also be able to provide fluidic volume control and volume delivery. The client SME is looking for technology and products that can achieve non-centrifugation plasma separation in a short time period and that can be used in resource limited settings. Such technologies must also be able to provide plasma samples that are compatible with downstream analysis including gene expression analysis techniques such as microarray and quantitative polymerase chain reaction (PCR).

The SME is seeking to incorporate the plasma separation technology into its existing offerings and workflows to improve their efficiency, especially in resource limited settings. To this end it would like to enter into commercial manufacturing or licensing agreements with a partner to supply the SME with this technology. In either case technical assistance would also be required from the partner to enable the SME to fully incorporate the technology. The SME would also consider a joint venture

agreement should the incorporation of the plasma separation technology warrant it.

### **Technical Specification or Expertise Sought**

The technology or product must be able to separate plasma from blood samples without using centrifugation. The technology must also ensure that the plasma samples generated using it are compatible with later gene expression analysis techniques such as PCR and microarray. It should also be able to generate plasma samples within a short time frame and be capable of being used in a resource limited setting.

### **Stage of Development**

Already on the market

### **IPR Status**

Patent(s) applied for but not yet granted, Patents granted

### **Comment Regarding IPR status**

The IPR status refers to the technology being requested.

### Keywords

_				
Tec	h	$\sim$	$\sim$	~~/
166		ıo	w	uv

06001005 Diagnostics, Diagnosis

06002002 Cellular and Molecular Biology

06002007 In vitro Testing, Trials

Market

05001005 Molecular diagnosis

**NACE** 

M.72.1.1 Research and experimental development on biotechnology
 M.74.9.0 Other professional, scientific and technical activities n.e.c.

Q.86.9.0 Other human health activities

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### **Dissemination**

**Send to Sector Group** 

Healthcare

### Client

Type and Size of Organisation Behind the Profile

Industry SME 50-249

Year Established

0

**Already Engaged in Trans-National Cooperation** 

Yes

**Certification Standards** 

ISO 13485

**Languages Spoken** 

**English** 

**Client Country** 

United Kingdom

### **Partner Sought**

### Type and Role of Partner Sought

The client SME is looking for an industrial partner. The partner would be required to provide products or technology that would allow the client SME to generate plasma samples from blood without using

centrifugation. The partner would also be expected to provide expertise in the use of this product or technology.

### **Type of Partnership Considered**

License agreement Manufacturing agreement Commercial agreement with technical assistance Joint venture agreement



### Technology Request: Looking for disposable Electroencephalography (EEG) electrode patch expertise

### **Summary**

A Dutch SME developing a novel Electroencephalography (EEG) based medical device is looking for outstanding expertise on disposable "peel-stick" type EEG Electrode design patch. A specialised healthcare company active in disposable EEG electrode design patch with technical knowledge on design and hydrogels is sought, for technical cooperation.

Creation Date13 July 2015Last Update29 July 2015Expiration Date28 July 2016

Reference TRNL20150626002

### **Details**

### **Description**

This Dutch SME has a wide experience in both development and market entry of new medical products. In the past this company has worked with both research (Medical Universities) and investors in both business development and assessing market possibilities of new products.

The company is now developing a novel EEG (brain activity) based medical monitoring device and is looking for outstanding expertise on disposable EEG electrode design. A disposable "peel-stick" type of EEG Electrode design patch to measure brain activity on patients will be part of the monitoring device. This disposable "peel-stick" patch will include 3 pre-gelled electrodes. The patch needs to be disposable to ensure signal quality and prevent cross-contamination from patient to patient.

The company is now looking for a partner specialised in disposable EEG electrode design patch with technical knowledge of design and hydrogels for technical cooperation.

### **Technical Specification or Expertise Sought**

Specialized knowledge of disposable EEG electrode design and technical knowledge of hydrogels in relation to medical patches (to measure brain activity) is sought. Detailed knowledge on design, hydrogels, patches with several electrodes integrated, testing/measurement techniques for validation, and production is requested.

### **Stage of Development**

Under development/lab tested

### **Keywords**

**Technology** 

01002003 Electronic engineering
01004001 Applications for Health
06001012 Medical Research

Market

02007012 Medical/health software

05004001 Electromedical and medical equipment

**NACE** 

C.32.5.0 Manufacture of medical and dental instruments and supplies

Q.86.9.0 Other human health activities

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### **Dissemination**

**Send to Sector Group** 

Healthcare

### Client

### Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

0

**Already Engaged in Trans-National Cooperation** 

No.

**Languages Spoken** 

English Dutch

**Client Country** 

Netherlands

### **Partner Sought**

### Type and Role of Partner Sought

A specialised healthcare company active in disposable EEG electrode design patch with technical knowledge on design and hydrogels is sought, for technical cooperation

Type and Size of Partner Sought

SME 11-50,SME <10,SME 51-250

Type of Partnership Considered

Technical cooperation agreement



### Technology Request: Looking for collaboration with a research team specialized in cancers biotargeting with nanoparticles and phototherapy equipment

### Summary

A French biotech SME is looking for a joint venture with a biotech company or a research team having a phototherapy equipment and/or skills for one and two-photon irradiations. The company develops new glyco and nanovectors for the therapeutic targeting of lysosomal rare disorders and cancers. The team wants to produce a nanoparticules prototype in order to treat small size cancers for which radiotherapy or chemotherapy are not applicable. Joint venture and/or manufacturing agreement are sought.

Creation Date 12 December 2013

Last Update 20 July 2015 Expiration Date 19 July 2016

Reference TRFR20131203001

### **Details**

### **Description**

This French pharmaceutical SME develops treatments for rare diseases.

New patented vectors and nanoparticules are developed to target orphan diseases such as lysosomal diseases or for a focal therapy of several types of cancers.

The company develops new glycovectors for lectin receptor targeting lysosomal rare disorders and cancers.

Studies on the efficacy and biosafety of nanoparticles and the development of standards for evaluation are in progress through collaboration with academic teams.

The technology looked for is a phototherapy equipment for one and two-photon irradiations. The company wants to use this equipment to be able to develop new drugs to treat lysosomal diseases and some types of cancers.

So it is looking for a joint venture or a manufacturing agreement with a biotech company or a research team having these equipments.

### **Technical Specification or Expertise Sought**

Phototherapy equipments for one and two-photon irradiations.



### **Stage of Development**

Project already started

**IPR Status** 

Granted patent or patent application essential

**Comment Regarding IPR status** 

Worldwide patents

### **Keywords**

**Technology** 

06001003 Cytology, Cancerology, Oncology

06001012 Medical Research

06002002 Cellular and Molecular Biology

06002003 Enzyme Technology

06004 Micro- and Nanotechnology related to Biological sciences

Market

04001003 Medical genetic engineering applications

04003 Gene Splicing and Manufacturing Equipment

04017 Micro- and Nanotechnology related to Biological sciences

05003005 Drug delivery and other equipment 05007002 Pharmaceuticals/fine chemicals

03007

**NACE** 

Q.86.9.0 Other human health activities

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### Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2012

**Turnover** 

<1M

**Already Engaged in Trans-National Cooperation** 

Yes

### **Experience Comments**

National and international innovation awards (MESR concours Emergence 2010, Création/développement 2011, CTI start-up 2010, Bern) The company's team has a high expertise in the biological characterization of multifunctional nanoparticles for one and two-photon therapy of cancers.

### Languages Spoken

**English** 

French

Arabic

Spanish

Italian

### **Client Country**

France

### **Partner Sought**

Type and Role of Partner Sought



Biotech company or a research team having these know-how and/or equipment:

- Biotargeting of nanoparticles for cancer diagnosis and therapy
- Phototherapy equipments for one and two-photon irradiations

### Type and Size of Partner Sought

SME 11-50, University, R&D Institution, SME 51-250

### **Type of Partnership Considered**

Manufacturing agreement Joint venture agreement