One year research fellowship grant - Looking for companies producing diagnostic kits

Summary

An Italian research group has developed the expertise in biotechnological production of Human Elastine-Like Polypeptides (HELPS). They are looking for research collaborations with companies focused on innovative diagnostic tools for medical and clinical research. In particular, companies producing and commercializing diagnostic kits for screening and research. A regional grant can support the co-development of the research results by paying the costs of one year research fellowship.

Creation Date	06 December 2016
Last Update	17 March 2017
Expiration Date	19 December 2017
Reference	RDIT20161206001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/56571096-e93b-4d51-afdf-2cebbfd72f6e

Details

Description

In the lab the research group has set up the production of a highly reproducible and easy to standardize biomimetic elastin biomaterial, produced by biotechnological methodology. This material can take on the characteristics of a hydrogel matrix that is selectively degraded in the presence of elastolytic activity. This 3D set up allows the detection of elastolytic activity and can be used to produce diagnostic devices useful to monitor different conditions where this specific proteolytic activity is present and indicates the presence of a pathologic state as infection, inflammation and so on. As examples, this system is suitable for the screening of clinical isolates of P. aeruginosa, as well as to detect or monitor latent inflammatory diseases of different origin. Moreover, a future advancement can be represented by the development of smart devices based on this material that release a therapeutic compound in the site of infection or inflammation, exploiting the elastolytic stimulus. Last but not least, this system represents a new biomimetic tool to investigate if, how and to what extent the presence of elastolytic activity due to infections or inflammation can affect the elastic tissue integrity. The research group is looking for research collaboration with companies interested in applying the system to diagnostic kits. There is a regional grant that could pay for a one year fellowship to co-develop the system if there is a collaboration research-industry ongoing. Deadline of this regional call is the end of May, 2017 so the expressions of interest should arrive before the 10th of April.

Advantages and Innovations

The search for substrates (that allow quick and specific identification of the elastolytic activity and of its capability to degrade human tissue elastin) represents an approach directed to the improvement of the evaluation of the risk of elastin tissue damage in several pathologic

conditions.
The currently used substrates to detect elastolytic activity are based on proteins such as casein and gelatin that are not correlated with elastin or are based on the bovine homologue.
The HELP 3D system mimic human elastin and is suitable for exoproteolytic activity detection.
The HELP 3D biomimetic system properly resembles the behavior of tissue elastin in vivo, allowing a reliable detection of the elastolytic activity compared to the currently used commercial substrates as, for example, elastin-congo red, that resulted more susceptible to the attack of the bacterial exoproteases.
This is due to the feature of the HELP 3D system that better mimic the hydrophobic and extensively cross-linked nature of the intact tissue elastin and its high stability and resistance to proteolytic degradation.
This biomimetic system represents a relevant option to evidence isolates endowed with potential for elastin tissue damage.
As well, this biomimetic system is very useful to better elucidate the mechanism of injury of elastin in tissues.
HELP matrix represents indeed an interesting choice to analyze and study the elastolytic activity in vitro, using standard equipment and low-cost reagents.

Stage of Development

Under development/lab tested

IPR Status

Patents granted

Comment Regarding IPR status

EU

Keywords

Technology

06001005	Diagnostics, Diagnosis
06002003	Enzyme Technology
06002004	Protein Engineering
06002007	In vitro Testing, Trials

Market

05001002	In-vitro diagnostics

NACE

P.85.4.1	Post-secondary non-tertiary education

Network Contact

Issuing Partner

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Open for EOI : Yes

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

Yes

Languages Spoken

English
Italian

Client Country

Italy

Partner Sought

Type and Role of Partner Sought

An expression of interest and both technical and industrial cooperation with SMEs and companies interested in application, development or commercialization of products based on our biomimetic tools are sought. In particular, companies interested in development and commercialization of
-diagnostic kits for screening and research
- medical devices for smart release
A regional grant can support the co-development of the research results by paying the costs of

a one year research fellowship.

Type and Size of Partner Sought

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

Type of Partnership Considered

Research cooperation agreement

Horizon 2020: E-commerce and logistics for local markets and shops

Summary

An Italian company - a beneficiary of an SME instrument Phase 1 project in Horizon 2020 - has developed an online platform that supports grocery shopping in traditional markets and is looking for partners with whom to prepare and submit a Phase 2 project proposal. The company is interested in finding partners working in the fields of logistics, packaging, paying systems, Internet of Things solutions applied to logistics interested in joining the proposal.

Creation Date	14 March 2017
Last Update	29 March 2017
Expiration Date	29 March 2018
Reference	RDIT20170314001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/948f94be-e454-4fe3-83d3-5ebc81035d1a

Details

Description

An Italian company has developed an online platform to facilitate grocery shopping from traditional markets, local shops and artisanal producers, through a network of “Neighborhood Shoppers” that take care of orders pick-up and delivery in 1-3 hours (within urban area).
The company is interested in exporting the business model and in finding suitable partners/institutions/associations willing to adopt the same methodology in their geographical area. They are also seeking partners that could enrich the proposal by developing or co-developing innovative elements concerning logistics, packaging, payment systems, as well as solutions from Internet of Things that could facilitate the above and help develop the platform further.
Ideally the company would like to submit a project proposal by October 2017 (deadline 18 October 2017), and is interested in suitable private and public partners/institutions/associations, willing to adopt the same solution in a different geographical area (joint expression of interest from several integrated organisation in a same geographical are are welcome).
Deadline of the call: 18 October 2017.
Deadline for EOIs: 30 July 2017.

Technical Specification or Expertise Sought

The company is interested in:
- delivery systems for fresh food;
- internet of things solutions applied to logistics;

- mobile payment solutions;
- innovative packaging solutions for food products.

Stage of Development

Proposal under development

Keywords

Technology

01003006	Computer Software
01003011	Electronic Commerce, Electronic Payment & Signature

Market

05009001	Food & feed ingredients
07003	Food and Beverages
07003002	Health food

NACE

J.62	Computer programming, consultancy and related activities
J.62.0.1	Computer programming activities
J.62.0.2	Computer consultancy activities

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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Open for EOI : Yes

Dissemination

Send to Sector Group

ICT Industry and Services

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2013

Turnover

<1M

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
Italian

Client Country

Italy

Partner Sought

Type and Role of Partner Sought

The Italian start up is looking for private companies as well as local stakeholders working in:
- delivery systems for fresh food;
- internet of things solutions applied to logistics;
- mobile payment solutions;
- innovative packaging solutions for food products.

The Italian company is ideally looking for the above solution providers integrated in a same geographical area, interested in adopting the business model.

Type and Size of Partner Sought

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

Type of Partnership Considered

Research cooperation agreement

H2020 ICT14–2016-2017: Looking for a company that designs and/or manufacture consumer goods: sport products, apparel, etc.

Summary

A Spanish technology institute is preparing a proposal for H2020 ICT14–2016-2017 call and they look for a company with access to the 3D body scans of customers and/or able to scan customers during the project, and with expertise in the use of 3D body scans to design or customize products. The aim of this project is to create an infrastructure for the exchange and utilization of digital personal biometric data for human-oriented product design.

Creation Date	16 March 2017
Last Update	22 March 2017
Expiration Date	22 March 2018
Reference	RDES20170316001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/fd51608a-7616-4d6b-a9b5-b7df3d2b9bc8

Details

Description

3D body data are personal data currently collected and used for different purposes within sectorial "silos" and integrated in vertical pipelines specifically designed for one service.

Moreover the collection of high quality data with the additional manual annotations is an expensive process which limits the sizes of the individual datasets and limits the applications.

At the same time the free exchange of biometric information between the different institutions is restricted to privacy/medical/financial reasons.

Enabling the secure and controlled circulation of this data across sectors to offer new services will open new opportunities to substantially grow the creation of new business.

However the lack of agreed standards and formats of the 3D body models and derived statistical data, and the lack of secure environments where SMEs can test innovative services and product ideas using secure communication protocols to assure the control of the personal data of the customer is a barrier to wide spread new businesses.

It is necessary to break these barriers and to foster exchange, linking and re-use, as well as to integrate data assets from multiple sectors and across languages and formats and to create and stimulate a safe environment for experiments where not only data assets but also knowledge and technologies can be shared.

A Spanish technology institute is preparing a project aimed to create an infrastructure for the exchange and utilization of digital personal biometric data. So that standardised, simplified and processed body metric information can be securely exchanged between entities that have/generate biometric data (research organisations, hospitals, companies, etc.) and entities that need those biometric data for human-oriented product design.

In order to complete the consortium, they look for a company with experience in using 3D body scans to design or customize products and having access to 3D body scans of customers and/or capable to make them. Their role in the project will be demonstration tasks.

EoIs deadline: 18th April
Call deadline: 25th April

Stage of Development

Proposal under development

IPR Status

Secret Know-how

Keywords

Technology

02001001	3D printing
03010	Household Goods & Appliances
09001005	Mechanical Technology related to measurements
09005	Reference Materials
09006002	Technical Standards

Market

07001004	Sporting goods, hobby equipment and athletics clothes
07002002	Clothing and shoe stores
07004001	Clothing, shoes and accessories (including jewellery)
07004008	Other consumer products
09004008	Other manufacturing (not elsewhere classified)

NACE

M.70.2.2	Business and other management consultancy activities
M.71.2.0	Technical testing and analysis
M.72.1.9	Other research and experimental development on natural sciences and engineering
M.72.2.0	Research and experimental development on social sciences and humanities
Q.86.9.0	Other human health activities

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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Open for EOI : Yes

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
Spanish

Client Country

Spain

Partner Sought

Type and Role of Partner Sought

The company sought should have experience in the use of 3D body scans to design or customize products.

The main role of the company will be demonstration tasks. The company should have access to the 3D body scans of customers and/or scan customers during the project.

Type and Size of Partner Sought

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

Type of Partnership Considered

Research cooperation agreement

H2020-IoT-03-2017 - Integration & platforms: industrial partners sought for an innovative prototypal suspension system for vehicles

Summary

Large Italian international company committed to the design and production of hi-tech systems and components for the automotive sector is looking for industrial partners for a H2020- IoT--03-2017 integration & platforms project whose goal is to develop an innovative prototypal suspension system for vehicles, able to perform the functions of continuous damping control, suspension height adjustment, and regeneration of the kinetic energy of the suspension into electric energy.

Creation Date	15 March 2017
Last Update	16 March 2017
Expiration Date	16 March 2018
Reference	RDIT20170315001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/34b621e6-e7f1-46a0-bada-4e6d7092f230

Details

Description

The goal of this project is to develop an innovative prototypal suspension system for vehicles, able to perform the functions of continuous damping control, suspension height adjustment, and regeneration of the kinetic energy of the suspension into electric energy. The project aims at designing, manufacturing and testing into a demo vehicle the whole prototypal system, composed by suspension actuators, sensors integrated in those actuators, dedicated control electronics for damping and height control and energy recuperation, intermediate energy storage devices at 48 V, DC/DC converters to manage the energy flow to the vehicle battery.
In addition, the project aim includes also vision systems, and HMI for the customization and tuning of suspensions control. ADAS systems are more and more used in automotive to assist the driver in performing his tasks, and their diffusion will further increase in the context of the Autonomous Driving. Vision systems, such as cameras or radars, are the main sensors used to recognize the driving scenario by means of the identification of the environment around the vehicle.
Moreover, many authors in literature believe that Autonomous Vehicle will require the use of semi-active suspensions (electronic shock absorbers) or active suspensions, since the main requirement for such vehicles will be the passengers comfort. In fact, when the driver will not have any more the task of drive the vehicle, during travels he will be allowed to do other things, like work at computer, read books, rest, etc., and so the requirement of comfort will be more stringent than today.
On the other hand, especially for certain typologies of sporty oriented vehicles and users, it is still very appreciated the possibility for the driver and the passengers to interact with the main systems controlling vehicle dynamics, by customizing and tuning their way of intervention.

In this complex context, this project proposes to develop an integration between controlled suspensions, like semi active or active suspensions, front vision systems, like Stereo Cameras or Radars, and user interfaces allowing the communication with suspensions control logics, like an App to be uploaded into a tablet or a smartphone.
A system able to scan the road surface in front of the vehicle will be used to recognize large and isolated obstacles on the road and use this information to pre-set in advance the suspensions control system. Nowadays, all the traditional suspension control systems, without vision means, can recognize the road obstacles only after the impact against them of the front wheels. Accordingly, the damping control of the front wheels is not very effective, because the control actions are typically taken with a certain delay, and that has negative effects on passengers comfort and road holding. As opposite, by means of front vision systems, the recognition of obstacles can be performed in advance, thus allowing to pre-set the control actions on suspensions and improve both passengers comfort and road holding. Further improvements are possible, for instance by exploiting the synergies between front vision systems and High Definition GPS Maps. Finally, when the accuracy and the resolution of front vision systems will be so high to allow the recognition of discontinuities with height in the order of magnitude of the millimeter, it will be possible to perform a fine scan of the road profile for the identification of its roughness. With such performance, front vision systems will allow to control suspensions without using other additional sensors, like the vertical accelerometers or the suspension stroke sensors typically used today; that will allow the reduction or even the elimination of these sensors, and thus a cost reduction.

Advantages and Innovations

Nowadays, a system able to integrate all these functions does not exist into the market: semi active shock absorbers for damping control, and lifting systems for height adjustment control, are already present into the market, but as independent and not integrated systems, while regenerative dampers, to convert suspensions energy into electricity, do not exist at all. An integrated system, as proposed, will allow to exploit the synergies between components to minimize weight and cost and optimize energy savings.

Estimates indicate that regenerative dampers can reduce the CO2 emission of cars up to 2.5 gr/km, while height adjustment can improve aerodynamics allowing a CO2 saving of 1 gr/km. Therefore, the impact of such an integrated system on the CO2 saving will be relevant.

Moreover, the integration of sensors inside the shock absorbers, like suspension stroke sensors or pressure sensors, will contribute to the evolution of such components toward smart actuators, able to send useful information to the vehicle communication network about the status of the actuator itself, or the status of the road the vehicle is moving on. Among the possible information which can be derived on the road status, we can mention the detection of isolated obstacles, like bumps or potholes, and the measurement of their dimensions, the identification of the average level of roughness of the road, a precise measure of body roll during cornering and body pitch during braking/accelerating, etc.. All these information can be used within the vehicle itself, for instance to optimize the intervention of other active control systems like the ABS or the EPS, or can be sent to other vehicles or to the road infrastructure, following a V2X communication scheme.

Stage of Development

Proposal under development

Keywords

Technology

01001001	Automation, Robotics Control Systems
01002004	Embedded Systems and Real Time Systems
01003025	Internet of Things
01006006	Radar
02008005	Road Transport

Market

01004002	Data communication components
06008	Energy Storage
06011	Energy for Transport

NACE

C.26.1.1	Manufacture of electronic components

Network Contact

Issuing Partner

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Open for EOI : Yes

Dissemination

Send to Sector Group

ICT Industry and Services

Client

Type and Size of Organisation Behind the Profile

Industry >500 MNE

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
Italian

Client Country

Italy

Partner Sought

Type and Role of Partner Sought

- Company specialized in design and manufacturing of hydraulic motors, possibly Gerotors, displacement of about 3.5 cc/rev;
- Company specialized in design and manufacturing of electric motors;
- Company specialized in the integration and test of systems onto vehicles;
- Company specialized in energy management at the level of the vehicle battery;
- Company specialized in design and manufacturing of sensors to identify obstacles and roughness of the road in front of the vehicle: Stereo Cameras, LIDAR, RADARS, etc.

Type and Size of Partner Sought

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

Type of Partnership Considered

Research cooperation agreement