BRIDGING EUROPEAN GAPS: thriving healthcare innovation in emerging regions

EIT Health
RIS Innovation Call 2019-2021
EIT Health InnoStars supports the transformation of healthcare in Central, Eastern and Southern Europe. One of our key programmes, the EIT Health RIS Innovation Call, is a perfect example of how we fulfil our mission of stimulating the creation of new start-ups, boosting regional co-operation and bridging the innovation gap between Europe’s emerging regions and more advanced healthcare systems.

“The EIT Health RIS Innovation Call is a unique support programme for innovative proof-of-concept projects in emerging European regions. Each year, the quality of proposals applying for the Call is higher: in 2021, almost one third of eligible projects scored higher than 80, the excellent result of hard work and continuous development in the EIT Health RIS regions.”
MISSION

RESPONDING TO THE MOST PRESSING HEALTHCARE CHALLENGES facing European societies today: reforming care pathways, healthcare transformation, harnessing real-world data, bringing care home, health in the workplace, fostering healthier lives.

PROVIDING THE UNIQUE PROOF OF CONCEPT funding in European emerging regions.

SCOUTING THE BEST EARLY-STAGE INNOVATION PROJECTS in Central, Eastern and Southern Europe, which can bring value for patients in whole Europe.

STRENGTHENING REGIONAL CO-OPERATION by creating consortia of business, academia, research institutes and healthcare institutions.
EIT HEALTH RIS INNOVATION CALL is a unique programme supporting the development of local innovative healthcare projects located in moderately-progressing European regions. Its aim is to bridge the funding gap in EIT RIS regions and to support the proof-of-concept phase of local innovation projects, as well as to help these teams in their EIT Health innovation journey. Projects are supported by funding, mentoring and training services, and further strengthened by networking opportunities; additionally, participants are given the chance to be matched with EIT Health partners, to apply to the EIT Health Amplifier Programme and to prepare teams to be scouted for EIT Health Business Plan Innovation Calls.

The EIT Health RIS Innovation Call aims at funding high-quality projects targeting EIT Health’s six Focus Areas to be developed by local actors, including business and academic / research / healthcare institutions in collaboration with EIT Health Hubs.
ABOUT THE CALL

GENERAL INFORMATION

PARTNERSHIPS
OF BUSINESS + ACADEMIC / RESEARCH / HEALTHCARE INSTITUTES

SMART FUNDING
UP TO €75 000 / PROJECT TEAM

TRAINING & MENTORING
PROVIDED BY TOP-QUALITY EXPERTS

NETWORKING OPPORTUNITIES
TO FIND INVESTORS AND PROFESSIONAL PARTNERS
COUNTRIES WITH FUNDED PROJECTS ARE ELIGIBLE PROPOSALS

102 7 29%

29% OF ELIGIBLE PROPOSALS SCORED >80

29.7% GROWTH IN NUMBER OF ELIGIBLE PROJECTS FROM 2020 TO 2021

94% OF PROPOSALS ARE ELIGIBLE
EIT HEALTH GUIDES START-UPS AND RESEARCH TEAMS THROUGH ALL STAGES OF DEVELOPMENT.

There is a wide range of programmes through the journey. Some of them are dedicated exclusively to teams from emerging regions of Central, Eastern and Southern Europe (EIT RIS regions), and some are pan-European competitions and acceleration programmes available for teams from any EU member state.
EIT Health RIS Start-Up Journey

**About the Call**

**Core Programmes**
- EIT Health Innovation Days
- EIT Jumpstarter
- EIT Health RIS Innovation Call
- EIT Health InnoStars Awards

**Main Goals/Profile**
- Creating teams from talents
- Creating start-ups from teams
- Supporting POC and team-up of business

**Specialised Start-Up Programmes**
- Bootcamps Mentoring and Coaching Network

**Access to Knowledge**
- Wild Card

**Access to Stakeholders**
- EIT Health Catapult
- EIT Health Start-up Amplifier
- EIT Health Bridgehead

**Access to Markets and Finance**
- EIT Health Gold Track

**EIT Health RIS Programmes**
- ACCESS TO KNOWLEDGE
- ACCESS TO STAKEHOLDERS
- ACCESS TO MARKETS AND FINANCE
People from EIT Health look at your project as a whole: how comprehensive it is, how well it is designed from a scientific perspective, as well as how it will be disseminated; this is what we need to learn from other success stories, and from the feedback we received from EIT Health: to make an excellent plan, not just develop a plan, but also create a dissemination plan and commercial plan.

I have learned how we need to change our concept. We would all like to help patients; that’s not the question. The question is how to make it realistic, and how to make it successful. This is what we have learnt from EIT Health.

EDUARD MARON, CEO of DocuMental, a unique decision support system, which improves diagnostic and treatment reliability in mental health. Their solution received a grant in the 2019 EIT Health RIS Innovation Call.

We benefited significantly from the focus on product market fit. It was invaluable to make initial contacts with the entire European healthcare start-up ecosystem. There were companies from Lithuania, Spain, Romania and Hungary, so there was an international presence.

What I realised after seeing other start-ups is that the business side of a start-up is really important, especially when we talk about financing, either from an angel investor or from a grant: it is very important to have something that makes sense from a business perspective.

MARIUS RUS, co-founder and CEO of Tully, a wearable device for emotion-monitoring and control for children diagnosed with ADHD (Attention-Deficit/Hyperactivity Disorder) supported by the EIT Health RIS Innovation Call 2020.

We are researchers, and so what was extremely challenging to learn was how the business world operates, and to learn how we can bring the research into business, how to communicate it, how to find distributors, how to engage customers and how to bring the solution to the market, which is the ultimate goal. You can have great innovation, but if you do not have a clear pathway for how to bring it to the market, it is always very hard to succeed.

EIT Health is boosting the environment and creating an ecosystem, helping all partners benefit from the knowledge of the others.

MATEJ BUZGO, CEO of Inocure. The InoCure team received funding in the EIT Health RIS Innovation Call 2020 for HepaMatrix, an active 3D cell culture system for primary hepatocytes.
Funded solutions 2019-2021

- 2019
- 2020
- 2021
- ∑2019-21

The number of AI-based + Big Data solutions 2019-2021*

- 2019
- 2020
- 2021

External investment gathered 2019-2020**

- 2019
- 2020

* It is the percentage of winning proposals related to AI and Big Data
** Grants, EIT Health additional support, VC funding
**Project: STEMI**  
**Country:** Slovakia  
**Problem and solution:** Cardiovascular diseases (CVDs) cause 1.8 million deaths in the EU each year. Time-to-treatment – the time between the symptom onset and the start of hospital treatment – is a major factor in both short and long-term mortality & morbidity of STEMI (STElevation Myocardial Infarction), stroke and severe trauma patients. This project aims to save critical time diagnosing these diseases in the pre-hospital phase by virtually connecting the paramedic-doctor-dispatch operator using a software solution.

**Successes:**  
- Funds / Investment attracted: €92 000
- Achievements: the communication platform has been enhanced by a COVID19 early warning system to protect hospital staff from COVID19 infection from patients.

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**Project: Patches for psoriasis treatment**  
**Country:** Lithuania  
**Problem and solution:** Psoriasis is a long-term autoimmune skin disease, and it should be treated continuously (throughout life). Current treatments are inefficient and time-consuming. The solution offered here is devices that look like flexible patches of various sizes with integrated UVB LEDs. This innovation solves two main problems: it enables patients to be treated at home and makes this treatment much more convenient compared to current methods.

**Successes:**  
- Nominations: HIA – 2nd place; SVIC (Silicon Valley Innovation Challenge) – 2nd place; Health for all (Lithuania) – 1st place; STARTUP FAIR pitch challenge – special prize
- Funds / Investment attracted: EU structure fund, €100 000.
Stuey, an mHealth solution for people with a stammer (PWS). With Stuey connected to their phone as an extension of their headphones, a PWS can pre-record the required voice lines in a non-stuttering environment of choice, make a phone call and simply communicate by playing the recorded lines, combining them with their direct speech in any way they like. The recorded lines are closely merged with the immediate environmental sounds and transmitted to the call, ensuring a much higher level of direct speech reality.

FRoom is an all-in-one rehabilitation mHealth solution for home physiotherapy exercise programmes, combined with innovative technologies and expert design. Using this, and with the pre-designed and efficient instructional videos, a physiotherapist will quickly and easily be able to build a home exercise programme.
Remote monitoring of patients with cardiovascular diseases and SARS-CoV-2

Country of origin: Slovakia

An eHealth solution tele-monitoring patients with hypertension, dyslipidemia, obesity, high cardiovascular risk and those who are SARS-CoV-2 positive, in connection with polymorbidity. This aims to help doctors facilitate medical practice, resulting in fewer telephone calls from patients, improved continuous monitoring, increased data availability, and access to more medically-relevant data based on objective indicators. In addition, the solution aims to reduce the number of interventions, and could mean fewer GP calls or visits to the doctor, a reduction in stressful situations during SARS-CoV-2, remote adjustment of treatment, and shorter on-premise visits.

O2-CPAP add-on

Country of origin: Latvia

An add-on medical device, which help solve the problems of people suffering from sleeping disorders. Obstructive sleep apnoea (OSA) is a widespread condition that requires supplemental oxygen or non-invasive positive pressure ventilation machines. A CPAP device delivers a continuous supply of oxygen to the body during sleep. The add-on module for CPAP devices aims to solve three key issues: it controls the concentration of oxygen supplied to the body; it enables oxygen supplies to be adjusted, according to blood oxygen saturation, or as defined by a clinician; the device also monitors the rate of O2 desaturation for proper patient surveillance, by using non-invasive pulse oxymetrie. With the use of a built-in cellular module, clinicians will be able to monitor patient health status dynamically and receive alarms when breathing issues occur.
The Otitest thermometer is a non-invasive medical device that evaluates the colour of the inner ear and eardrum, using an RGB sensor. The device includes two optical fibres (one for illuminating the ear and the other for returning reflected light) and an electronic unit capable of linearly changing the light emitted, as well as its colour. The light received is also measured independently, enabling any changes in colour and texture associated with inflammation of the ear to be determined. Corresponding iOS and Android mobile apps are also in the development phase, capable of managing a complete set of features and different types of measurements for the entire family / household, to keep a historical record.

Koatum has created a multiple-layer hybrid coating for medical implants with the facility of delivering the drug Koatum DDC. The coating has three layers: an isolation layer, which ensures 100% metal isolation and secure binding of the next layers; a bioactive and durable CaP layer, which is a coating created with substantially modified micro-arc oxidation methods, without the intense heat of plasma spray; and a third, drug-delivery layer: the drug, with antibacterial properties, is impregnated into the coating to further promote osseointegration and angiogenesis.
**Laboratory diagnostics from the patient’s home with a doctor’s consultation remotely**  
Country of origin: Slovenia

NYD and partners are developing an online diagnostic platform for testing sexually transmitted infections, based on biological samples taken by the consumers themselves (i.e. urine, swab, finger-prick blood) which are then shipped back for analysis (using molecular and serologic techniques). Consumers can easily order and perform the microbiological tests from the comfort of their own home. The whole clinical pathway is different from the standard one and has been designed to be as user-friendly as possible. Remote physician consultations are available for all patients who need them (for either positive or negative test results).

**Hermes**  
Country of origin: Italy

Hermes is a wearable device. It is an ergonomic system of individual protection for lowering the probability of exposure to contaminated droplets. It is a helmet, placed on the user’s shoulders, and then almost hermetically sealed around the neck; it is made of light, transparent, biocompatible material, which is also washable and UVC-sterilisable. A battery-powered filtering group, with high-performance filters which can be disinfected and reused, and which are in a casing that avoids potential contamination, promotes ventilation. Hermes can be used in a positive pressure environment, allowing considerable protection for the user, or in a negative pressure context, allowing for bio-containment, and aiming to avoid contamination of the external environment. The device allows the user to feed and hydrate, and for the inside of the helmet to be manipulated from the outside.

[List of projects from previous editions](https://eithealth.eu/project/eit-health-ris-innovation-call/)
Mindaux (MAX) is a digital therapeutics social platform for helping employees with mental health problems, using personalised electronic cognitive behavioural therapy (eCBT), data from connected devices, and remote communication with health professionals. The team have enabled employee issues to be personalised using an AI-generated therapy based on an empirically validated eCBT-Unified Protocol Treatment for Emotional Disorders, which is continuously updated with data reported by employees, or from devices. The eCBT protocol is further enhanced with social environment functionalities (e.g. bulletin boards, forums, chat), suggestions of peers with similar interests or area, and gamification for peer-support (e.g. a point systems for achievements, milestones, and goals), contributing to long-term effectiveness.

A single wearable device with two applications. The application consists of a wrist bracelet and a chest patch, which operate both in and outside the clinic with a seamless transition. It is easy to use for patients of all ages and facilitates continuous and synchronous monitoring of patients’ vital signs, paired with an individually-customised physician-facing portal and patient app augmented with artificial intelligence insights and alerts. The device, which is designed to provide time-synchronised 24-hour continuous remote monitoring, is suitable for monitoring the vital signs of patients with cardiorespiratory disease: cuffless blood pressure, heart rate, heart rate variability, respiratory rate, oxygen saturation (SpO2), skin temperature and activity tracking / recognition. It can be used over a 3- to 7-day period on a single charge.

Continuous “at home” monitoring for acute and chronic cardiorespiratory disease patients
Country of origin: Greece
The CryoHolder is a unique tool that enables quick, more efficient, and safe transfer of frozen cryovials. The tool is made out of aluminium, which enables working with liquid nitrogen as well as sterilising it in the autoclave at 121°C. It is also resistant to mechanical damage that may occur during the work process. The tool is compatible with all major cryovial types.
TRENDS

TOP EIT HEALTH RIS INNOVATION CALL TRENDS

WHAT'S NEXT? 2021-2030
Focus areas of winning projects 2019-2021*

Fostering Healthier Lives
- 36%

Bringing Care Home
- 46%

0%

There is a significant upward trend in 2021 regarding areas focused on:

- Creating the tools and incentives for patients that help protect their health, preventing early ageing and reducing disease and disability
- Providing innovative solutions that support healthcare delivery in the home and away from the hospital, improving health outcomes

*For more information, please visit: https://eithealth.eu/who-we-are/our-focus-areas/
Countries with funded proposals in 3 consecutive years

- Croatia
- Italy
- Slovenia

These are the only countries from where winning projects arrived in all 3 years of the programme.

Continuously increasing eligibility ratio of submitted proposals over the last 3 years:

- 81%
- 94%
WHAT'S NEXT?
2021-2030

> 100 ORGANISATIONS INVOLVED IN FUNDED PROJECTS

> 30% OF PROJECTS RECEIVING FURTHER SUPPORT FROM EIT HEALTH PROGRAMMES

> €25 M EXTERNAL INVESTMENT GATHERED
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