European Commission

EU support to innovators during the pandemic

by the European Innovation Council and the European Institute of Innovation and Technology

MARCH 2021

The COVID-19 pandemic has created unprecedented challenges that require innovative ideas. The rapid investments to innovative startups and projects through the European Innovation Council and the European Institute of Innovation and Technology have unlocked a range of breakthrough ideas to tackle the coronavirus crisis and to speed up European and global recovery.

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth

Globally, as of 1 March 2021, there have been 113,695,296 confirmed cases of COVID-19, including 2,526,007 deaths, reported to WHO. Since the start, the European Union has been at the forefront of providing research and innovation support (R&I), mobilising its different programmes and spurring innovation to tackle the pandemic and its impact.

MOBILISATION OF FUNDS FOR INNOVATION

In total, more than €1 billion has been pledged by the European Union to support R&I projects to tackle many aspects of the pandemic, and more than €400 million pledged through financial instruments. To date, €819 million has been awarded to support R&I projects.

The **European Innovation Council (EIC)** and The **European Institute for Innovation and Technology (EIT)** supported innovators and entrepreneurs throughout the pandemic and one year on we now take stock of their impact.

Research and Innovation

FAST TRACK CALLS AND INNOVATIVE WAYS OF FUNDING

The EIC invested **€166 million** within three months to 36 start-ups and SMEs with innovative solutions to tackle the coronavirus. They also coordinated the **#EUvsVirus Hackathon** in spring 2020. This resulted in 120 new innovative solutions to develop for coronavirus-related challenges. Solutions were invited to the **'Matchathon'** in May 2020. As follow-up the EIC COVID19 challenge Platform was created where innovators, companies, researchers can forward their solutions and sponsors have the possibility to pledge their support.

The EIC in cooperation with the European Investment Bank (EIB) pledged additional financing to COVID19 actions under the InnovFin financial instruments of around €400 million, of which nearly 200 million mobilised.

As Europe's largest innovation network, the EIT mobilised its multi-disciplinary innovation community and launched the **'EIT Crisis Response Initiative'** to support innovators powering high-impact solutions in an array of sectors to tackle the COVID-19 pandemic and its multifaceted challenges. **€60 million** of additional funding was mobilised for the 'EIT Crisis Response Initiative', leveraging further funding from EIT Community-partners. This investment has helped tackle the unprecedented social and economic challenge in the field of health, climate change, digitisation, food, energy, urban mobility, manufacturing and raw materials.

Bringing together 212 partners from 25 countries, the EIT investment supported 62 new innovation projects that are developing solutions directly tackling COVID-19 related challenges as 'Pandemic Response Projects'. The EIT's 'Venture Support Instrument' provided support to 145 highly innovative start-ups, scale-ups and SMEs from 23 countries that are crucial to the European's economy's fast recovery.

Prevention and response

Entremo (HUNGARY) – Project **Discover** – **€0.5 million**

Entremo is led by the team who won the **#EUvsVirus hackathon** healthcare category with their smart monitoring device. The smart wristband, currently deployed to hospitals and nursing homes, allows care givers to remotely monitor the vital signs of patients in non-intensive units. Entremo is supported by EIT Digital.

Digital Control Centre for COVID-19 (SPAIN, NETHERLANDS AND BELGIUM) – **€0.55 million**

This joint project saw the creation of a virtual management centre for hospitalised COVID-19 patients. Through the AI tool, medical experts can assess and personalise the patient treatment plan to support optimal outcomes and target most seriously ill patients to be prioritised for specialist supervision. The project has demonstrated a 50% reduction in mortality rate as published in *Clinical Infectious Diseases Journal*. The project is supported by EIT Health.

ViruShield (GERMANY) – **€0.31 million**

Project ViruShield has developed an alternative high-performance personal protective equipment (PPE) fabric. The project start-up, Impact Products launched the Upper Hand Mask, a reusable, self- disinfecting PPE that removes 95% of particles and droplets. This project is supported by EIT Health.

Remedy Biologics Limited (IRELAND) – Project **RapCo-19** – **€2.5 million**

The company develops a long term pandemic response platform to protect Europe from future pandemics, as well as enabling development of our advanced passive therapy for COVID-19. Research focuses on the identification of the optimal antibodies of COVID-19-infected patients for which to create therapeutic vaccines.

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● **Affix Labs** (FINLAND) – **€0.2 million**

Si-Quat is an anti-viral clear coat developed by Affix Labs to kill viruses including the pathogen of COVID-19. The coating is able to resist thousands of touches and creates an active layer that is self-sanitizing within minutes. Si-Quat is supported by EIT Raw Materials.

● **CleanAIR** (GERMANY & AUSTRIA) – **€0.34 million**

CleanAIR upgrades the functionality of older air condition systems to clean the air and sanitise surfaces during off-hours to prevent the spread of infectious diseases such as COVID-19. This project is supported by EIT Manufacturing.

Treatments

■ **Xenothera** (FRANCE) – Project **BRIGHT** – **€2.1 million**

Through this project, the company has developed XAV-19 - a treatment for patients with moderate COVID-19.
It is currently in a clinical trial in France. Preliminary results confirmed the anti-viral efficacy in COVID19 treatments, including the new different variants. The product will be ready this summer.

■ **AW Technologies** (DENMARK) – Project **COVID ICU-CARE** – **€1.2 million**

The young entrepreneurs (early twenties) have developed a ground-breaking respiratory suctioning system that can cut healthcare costs and reduce COVID-19 spread between intensive care units (ICU) patients and staff.

■ **Advitos** (GERMANY) – Project **ADVOS COVID 19** – **€0.95 million**

With its blood purification therapy, the company works to increasing the survival of patients with severe COVID-19 infection by up to 30% through the removal of carbon dioxide, which reduces the need for ventilator support.

Vaccines

BioNTech (GERMANY) – **€100 million**

BioNTech signed with the European Investment Bank a €100 debt financing agreement to support the company's global development of COVID-19 vaccine programme, which was the first to receive marketing authorisation in the EU as part of the Pfizer-BioNTech vaccine, as well as scale-up of manufacturing capacity in Europe.

Curevac (GERMANY) – **€75 million**

CureVac signed with the European Investment Bank a €75 million loan agreement for the development and large-scale production of vaccines, including CureVac's mRNA vaccine candidate against SARS-CoV-2.

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Equipment and manufacturing

● **BlueSense Diagnostics** (DENMARK) – **€0.5 million**

BluSense Diagnostics developed an innovative nanotechnology-based point-of-care blood testing platform for the diagnosis of infectious diseases from a single drop of blood within a matter of minutes. This project received support by EIT Manufacturing.

■ **MeMed Diagnostics** (ISRAEL) – TESTING – through the support of the EIC project DECODE – **€2.5 million**

The company is working with hospitals to determine how its 15-minute protein measurement test may enhance COVID-19 care. Using a blood sample, the test takes a "snapshot" of the patient's immune system. Algorithms and sensors monitor the molecules to determine whether they are fighting bacteria or a virus, anywhere in the body. An extension of the technology is to move beyond diagnosis of a viral or bacterial infection to looking at potential severity of the infection – which individuals are going to suffer from a mild infection, and which may go on to require a stay in hospital.

● **PASS** (ITALY & SWEDEN) – **€0.67 million**

PASS combats the spread of viruses and bacteria in food products and processing. Their designed plasma-assisted sanitation system offers a more environmentally friendly alternative to the long-existing use of sanitizing chemical solutions. This project is supported by EIT Food.

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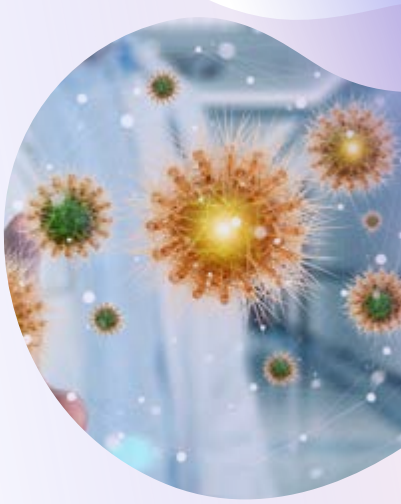

Coronavirus research and innovation

European Commission's Coronavirus response

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