

Coronavirus research and innovation projects

Outcome of 2nd emergency funding action for coronavirus SARS-CoV-2 outbreak: 24 projects

On 19 May 2020, the European Commission launched [a 2nd request for expressions of interest](#) (SC1-PHE-CORONAVIRUS-2020-2) for *innovative and rapid health-related approaches to respond to COVID-19 and to deliver quick results for society for a higher level of preparedness of health systems*, through Horizon 2020, the EU's research and innovation programme, as part of its €1.4 billion pledge to the Coronavirus Global Response.



On 11 August 2020, the EC announced that 23 projects were short-listed for funding and in March 2021 a 24th project was added from the reserve list, with total funding of €133.4 million. The 24 projects involve 354 research teams from 39 countries in Europe and beyond, which are addressing:

- **Rapid Repurposing of manufacturing for vital medical supplies and equipment** (€22.1 million). For instance, using injection moulding and additive manufacturing (3D printing); adaptive and resilient production and supply chain methods; and repurposing manufacturing as a service network for fast reaction.
- **Medical technologies, Digital tools and Artificial Intelligence analytics to improve surveillance and care at high Technology Readiness Levels** (€55.2 million). This includes the development of new devices for faster, cheaper and easier diagnosis, often using AI; telemedicine and AI to diagnose and treat people more safely and remotely; new technologies to protect healthcare workers; intensive care and telemedicine; innovation hubs with open call to address and test rapidly emerging ideas.
- **Behavioural, social and economic impacts of the outbreak responses** (€33.2 million), for instance in depth analysis of responses at the levels of government, public health, community, and information and communications and evaluation of promising approaches; and by examining the dynamics of the outbreak to map and analyse unintended impacts, including on mental health, develop solutions and inclusive guidance for policymakers and health authorities and enhance Europe's preparedness for future similar events.
- **Pan-European COVID-19 cohorts** (€19.9 million). A major investment will be made for the creation of a new pan-European cohort built on existing and new large-scale population cohorts in European and non-European countries, comprising both infected and non-infected individuals, in order to significantly improve responsiveness to SARS-CoV-2 and provide a model for responsiveness for new public health threats.
- **Collaboration of existing EU and international cohorts of relevance to COVID-19** (€3 million) will be enhanced through a coordination and support action to network research institutions collecting data on the provision of care to patients across Europe and internationally, which will enable studies into patient's characteristics, risk factors, safety and effectiveness of treatments and potential strategies in real settings.

24 Horizon 2020 research projects on coronavirus short-listed for funding

Acronym	Title	Coordinating institution	Partners
RAPID REPURPOSING OF MANUFACTURING FOR VITAL MEDICAL SUPPLIES & EQUIPMENT – Total EU funding: € 22.1m			
<u>imPURE</u>	Injection Moulding Repurposing for Medical Supplies enabled by Additive Manufacturing	National Technical University of Athens (EL) <u>Project website</u>	19 partners: BE, EL(4), ES(2), FR, IT(6), NO, SI, UK(3)
<u>CO-VERSATILE</u>	Adaptive and resilient production and supply chain methods and solutions for urgent need of vital medical supplies and equipment	SZTAKI - Institute for Computer Science and Control (HU) <u>Project website</u>	21 partners: AT, CH, DE(4), ES(3), HU(2), IL, IT(5), NL, UK(3)
<u>RESERVIST</u>	Repurposing manufacturing lines for providing medical and other products and services in case of spiking demand times	Centre Scientifique & Technique de l'Industrie Textile Belge (BE) <u>Project website</u>	17 partners: BE(5), EL, ES(4), FI(3), FR, IT(2), NL
<u>Eur3ka</u>	EUropean Vital Medical Supplies and Equipment Resilient and Reliable Repurposing Manufacturing as a Service Network for Fast PAndemic Reaction	Engineering Ingegneria Informatica Spa (IT) <u>Project website</u>	24 partners: CH, DK(2), DE(4), ES(3), FI, IL, IT(6), LU, NL, NO, PT, RO



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MEDICAL TECHNOLOGIES, DIGITAL TOOLS AND ARTIFICIAL INTELLIGENCE – Total EU funding: € 55.2 million Project summaries			
ESSENCE	Empathic platform to personally monitor, Stimulate, enrich, and aSsist Elders aNd Children in their Environment	Politecnico di Milano (IT) Project website	9 partners: CY, ES, FR, IL, IT(4), SI
PyXy.AI	Telehealth-ready AI-powered multi-parametric system for surveillance of COVID-19 and cardio-pulmonary chronic patients	Bat-Call Ltd (IL)	7 partners: DE(3), IL(2), NO(2)
Icovid	AI-based chest CT analysis enabling rapid COVID diagnosis and prognosis	Icometrix NV (BE)	9 partners: BE(5), DE, NL, UK(2)
VASCOVID	Portable platform for the assessment of microvascular health in covid-19 patients at the intensive care	Fundacio Institut de Ciències Fotòniques (ES) Project website	7 partners: ES(4), IE, IT, NL
PORSAB	Controlling viral aerosols in COVID-19 and beyond	Pintail Ltd (IE) Project website	5 partners: FR, IE(3), PL
CleanAir	Lab to Fab development of air decontamination system for protecting health practitioners against COVID19	Villinger GmbH (AT)	7 partners: AT(4), DE, IL, IT
ICU4Covid	Cyber-Physical Intensive Care Medical System for Covid-19	UNINOVA - Instituto de Desenvolvimento de Novas Tecnologias (PT)	19 partners: AT(3), DE(7), EL(2), LU, NL, PT(5)
ENVISION	Intelligent plug-and-play digital tool for real-time surveillance of COVID-19 patients and smart decision making in Intensive Care Units	Johann Wolfgang Goethe Universität Frankfurt am Main (DE)	19 partners: BE, DE(4), CH, ES, FI, HU(2), IT(2), LT, NL, PT, RO, SI(2), UK
COVID-X	COVID eXponential Programme	F6S Network Ltd (IE) Project website	10 partners: CY, ES(4), IE, IT, LU, LT, SE
INNO4COV-19	Boosting Innovation for COVID-19 Diagnostic, Prevention and Surveillance	Laboratório Ibérico Int. de Nanotecnologia (PT) Project website	11 partners: AT, BE(2), DE, IE, ES(3), IT, PT(2)
IRIS-COV	Market Release of a Portable Device for COVID-19 at the Point-of-Care; a Global Diagnostics Approach	Idryma Tecnologias Kai Erevnas (EL)	8 partners: BE, CH, EL(3), FR, UK, ZA
COVIRNA	A diagnostic test to improve surveillance and care of COVID-19 patients	Luxembourg Institute of Health (LU)	15 partners: BE, DE(2), ES, FR, HU, IT, LU(2), NL, PT, SI, BA, UK(2)
CorDial-S	Portable and fast surface plasmon resonance point-of-care test for COVID-19	Université de Lille (FR) Project website	7 partners: BE, FR(4), IE, IL

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BEHAVIOURAL, SOCIAL AND ECONOMIC IMPACTS OF THE OUTBREAK RESPONSES – Total EU funding: € 33.2 million			
<u>COVINFORM</u>	CORonavirus Vulnerabilities and INfOrmation dynamics Research and Modelling	Synyo GmbH (AT) <u>Project website</u>	16 partners: AT(2), BE, DE, EL, ES(2), IL, IT(2), PT, RO, SE, UK(3)
<u>PERISCOPE</u>	Pan-European Response to the ImpactS of COVID-19 and future Pandemics and Epidemics	Università di Pavia (IT) <u>Project website</u>	32 partners: AT, BE(7), CH, CZ, DE(2), ES(2), FR(3), IT(7), NL, PL, PT, RO, RS, SE(2), UK
<u>SHARE-COVID19</u>	Non-intended health, economic and social effects of the COVID-19 epidemic control decisions: Lessons from SHARE	Max-Planck-Gesellschaft zur Förderung der Wissenschaften (DE)	15 partners: CZ, DE(3), DK, EL, ES, FR, HR, IL, IT(2), NL, PL, SE
<u>RESPOND</u>	Improving the Preparedness of Health Systems to Reduce Mental Health and Psychosocial Concerns resulting from the COVID-19 Pandemic	Stichting VU (NL)	14 partners: AU, BE, DE(2), ES(2), FR, IT(3), NL(2), SE, UK
<u>RESISTIRE</u>	REsponding to outbreaks through co-creaTive sustainable inclusive equality stRatEgies	European Science Foundation (FR)	10 partners: BE(2), CZ, ES, FR, IE, IT, SE, TR, UK
PAN-EUROPEAN COVID-19 COHORTS – Total EU funding: € 19.9 million			
<u>ORCHESTRA</u>	Connecting European Cohorts to Increase Common and Effective Response to SARS-CoV-2 Pandemic	Università di Verona (IT) <u>Project website</u>	26 partners: AR, BE, CG, DE(6), ES(3), FR(3), GA, IT(6), LU, NL, RO, SK
COLLABORATION OF EXISTING EU AND INTERNATIONAL COHORTS – Total EU funding: € 3 million			
<u>unCoVer</u>	Unravelling Data for Rapid Evidence-Based Response to COVID-19	Institute of Tropical Medicine - ITM (BE) <u>Project website</u>	29 partners: BA, BE(2), BR, CO, EL, ES(5), HR(2), IE(2), IT(2), KR, LU, NO, PT(3), RO(2), SK, TR, UK, US



[Information on EC support for coronavirus-related research](#)

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