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ERC actions on Covid-19

Background

The European Research Council, set up by the EU in 2007, is the premier European funding organisation for excellent frontier research. The ERC operates through an 'investigatordriven', 'bottom-up' approach, which allows researchers to identify new opportunities in any field of research. Scientific excellence is the sole selection criterion in its competitions. There are no pre-defined research priorities, and applicants, of any nationality, are free to come forward with proposals on any subject in any scientific domain.

Action taken by the ERC to address the COVID-19 pandemic

Whilst the ERC is fully bottom-up, the research carried out by grantees actually addresses a wide range of issues that have significant societal, economic and policy relevance. Over 50 ongoing or completed ERC projects supported for a total value of about EUR 100 million are contributing to the response to the COVID-19 pandemic by providing insights from several different scientific fields: virology, epidemiology, immunology, paths for new diagnostics and treatments, public health, medical devices, artificial intelligence, social behaviour, crisis management. These ERC projects form part of the EU's broader response to the COVID-19 pandemic as regards research and innovation.

In addition, as stated on its website in reaction to the COVID-19 crisis, the ERC grants "offer grantees the flexibility to adjust their research project". This is an efficient measure because several ERC grantees already enquired about the possibility of addressing COVID-19 related research in their ongoing ERC project.

All this information is publicly available on this ERC website, which also includes testimonies from funded ERC grantees on how bottom-up frontier research is critical to deliver new – and sometimes unexpected – insights relevant for better understanding and fighting the COVID-19 pandemic, as well as for providing social behaviour and crisis management related solutions.

Examples

The project '<u>ReservoirDOCS</u>' shows how viral evolutionary analysis could be useful to study the origin of the SARS-CoV-2, and in this context contributed to recent findings based on comparative analysis of coronaviruses genomic data. Other ERC projects ('<u>ANTIVIR</u>', '<u>REGMAMKID</u>', '<u>Trep-AB</u>') contribute to the characterisation, development or repurposing of antivirals and drugs (such as hydroxychloroquine) against the SARS-CoV-2. In the area of artificial intelligence, the project '<u>EAR</u>' just launched a new mobile phone 'COVID-19 Sounds App' (now available for Android phones on the Google Play Store) collecting data to develop machine learning algorithms that could automatically detect whether a person is suffering from COVID-19 based on the sound of their voice, their breathing and coughing. In the area of social sciences, the project <u>'HEY BABY</u>' recently produced six sheets of 'tips' addressing one-on-one time, positive instructions and praise, structures and routines, preventing and responding to problem behaviours, managing stress and talking about COVID-19 (translated into 55 languages). Finally, the project <u>'COMPROP</u>' portrays how to behave to prevent untrustworthy information from circulating regarding the COVID-19 pandemic.

Further information

• List of ERC projects related to COVID-19