

Significant EU-funding to HUS Helsinki University Hospital-led research project on long-term effects of COVID-19

The EU has awarded a 7 million EUR funding to a HUS Helsinki University Hospital-led consortium to examine the mechanisms behind the long-term effects of a COVID-19 infection. The objective is also to create a Decision support system for the prediction and management of Long Covid Syndrome (LCS)

The number of patients suffering from long-term effects of a COVID-19 infection is growing worldwide. It is therefore important to identify and understand the mechanisms behind the continuing symptoms and to use this improved understanding to provide adequate treatment to patients. This is what the HUS-led Long Covid-project aims to do. The research evidence created during the project will be simultaneously used to develop and improve the care of Long Covid patients.

“With the funding from the EU, the Long COVID research consortium, will have good opportunities to conduct more research on the mechanisms and biomarkers of long-term effects of COVID-19 infection and the rehabilitation methods. The findings of the four-year research consortium can be used in the treatment of patients both at HUS and internationally,” says Chief Physician **Mari Kanerva**.

The patient benefits directly from research on the causes and of improved treatment methods of the disease

The mechanism of the long-term effects is studied at HUS’s Outpatient Clinic for Long-term Effects of COVID-19. Studies will be conducted with the help of cohort and register studies, mechanistic studies as well as with intervention and monitoring studies of patients with long COVID. In the research work, advantage is taken of omics technology, which is used to identify the factors and biomarkers that predispose people to the development of long-term effects of COVID-19 infection.

“It is inspiring to have the opportunity to simultaneously examine both the causes and the treatment methods of the long-term effects in this project. Our understanding of this disease is developing fast, which directly benefits the patients,” explains Head Physician **Helena Liira** from the Outpatient Clinic for Long-Term Effects of COVID-19. It is possible that the study will also create new innovations for managing the long-term effects of possible future pandemics.

Apart from HUS, the Consortium consists of many leading EU research organizations, such as the University of Helsinki, the Institute for Molecular Medicine Finland (FIMM) and research groups from Switzerland, the Netherlands, Germany, Estonia, and Italy. A German company NEC specialized in artificial intelligence and machine learning is involved in the study and its methods are used in the interpretation of the diverse material. Other companies involved include Lipotype, Nuromedia and Steinbeis from Germany, Protobios from Estonia, and Chino from Italy.

“I am pleased that the systematic investments HUS has made in the preconditions for international research collaboration are now visible also as successful EU-applications like this one and very excited to start the work with this excellent Consortium,” says HUS EU Affairs lead **Suzan Ikävalko**. She was also involved in the proposal preparation and so was Innovation consultancy Spinverse who facilitated the preparation of the project, which is officially launched in June 2022.



The Long Covid Consortium: Coordinator HUS Helsinki University Hospital (Finland), University of Helsinki (Finland), University Medical Centre Groningen (Netherlands), University Hospital Basel (Switzerland), Protobios Ou (Estonia), Lipotype GmbH (Germany), University of Zurich (Switzerland), Nuromedia GmbH (Germany), NEC Laboratories Europe GmbH (Germany), Chino SRLS (Italy), Steinbeis 2i GmbH (Germany), Spinverse Oy (Finland).

Steinbeis 2i GmbH is the leader of WP8, being responsible for the Communication, Dissemination and Exploitation activities in the project.

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