

New EU Research and Innovation Staff Exchange (RISE) Project DCPM: Personalized Diagnosis, Monitoring and Decision Support for Intensive Care

The consortium of researchers from academia and intensive care clinicians to focus on improving productivity and quality of intensive care

Budapest, 20 January 2020 – The tight collaboration of 6 European and 2 New Zealand partners of engineering research, clinical medicine and industry is looking to create, validate, and implement precision intensive care medicine using in-silico virtual patients and translating them to clinical use. Research focuses on three main areas - metabolic, cardiovascular and pulmonary diseases – which are the leading causes of ICU admission, mortality and cost. The project will run for a period of four years with a total budget of 929.200 €, of which 680.800 € are contributed by the EU H2020 research and innovation programme's Marie Skłodowska-Curie actions, and 248.400 € by the New Zealand partners.

Health consumes ~10% of GDP in the OECD, and grows an unsustainable 7-11% per year, and is ~1% of GDP for intensive care alone, driven by chronic diseases and aging populations. Limited funding leads to an 'equity gap' in health funding, where more people go untreated, less treated (rationing), and/or rely on private insurance and care, creating and exacerbating inequality.

This labour intensive sector has not made productivity gains, and increasing demographic demand for intensive care is multiplied by a growing need for personalized, precision solutions to care.

The aim of DCPM project is to reverse this trend by linking engineering, medicine, and industry to improve the quality, precision and productivity of intensive care, and create a template for other areas of care. Model-based methods and novel system identification technologies will be applied to create validated virtual patient models for use in personalizing care to enhance its quality and productivity. The project results will be translated to clinical use to provide precision, next-generation productive, intensive care solutions.

Project Key Facts Full Name: DCPM – Digitalized Clone for Personalized Medicine Start date: 01 January 2020 Duration: 48 months Budget: 929.200 € EU Contribution: 680.800 € Coordinator: Budapest University of Technology and Economics



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Press Release



Project Partners

Belgium University of Liége

Germany Furtwangen University

Hungary Budapest University of Technology and Economics University of Szeged Bekes County Central Hospital Evopro Innovation Ltd.

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