

CECM

Centre for New Methods in Computational Diagnostics and Personalized Therapy

<http://dice.cyfronet.pl/projects/details/CECM>

On 4-5 September 2017, the Department of Computer Science AGH University of Science and Technology will host an international working meeting which kicks off a unique EU-funded project, bringing together ACC Cyfronet AGH and five international partners. This will be the only project in Małopolska, and one of only three in Poland, to be carried out under the umbrella of Horizon 2020 *Teaming for Excellence*.

The aim of the project is to develop a detailed business plan for a proposed Centre of Excellence in the area of innovative medical diagnostics and personalized therapy, aided by advanced computer simulations. The plan will be submitted for the second stage of the Teaming competition in November 2018. If approved, the European Commission will allocate 15 million Euro to fund the Centre over a period of 7 years, with a similar amount contributed by public and private institutions in Poland.

The mission of the Centre will be to:

- introduce novel diagnostic and therapeutic solutions based on computer simulations to everyday medical practice,
- develop new computational methods, algorithms, models and technologies supporting personalized medicine,
- stimulate the creation and development of small and medium enterprises which deal with novel diagnostic and therapeutic solutions.

The new Centre of Excellence will be located in Kraków – a national and European hotbed of scientific and business activity. The city's universities train a large number of future medical and IT specialists, its teaching hospitals are highly regarded by the scientific community and the number of local life science enterprises is on the increase.

The Centre will directly expand the regional research potential by fostering new scientific collaborations, offering world-class postgraduate training opportunities and facilitating knowledge transfer to newly emerging high-tech SMEs. The Centre's impact will also be felt beyond Małopolska through advances in modern medicine and the corresponding improvements in healthcare quality.

The Centre will operate in accordance with the Polish Intelligent Specialization Strategy, with the goal of bringing together international research and business communities. Principal KPIs will include the number of new solutions based on computational models introduced to clinical practice, the number of new innovative marketable products and services, as well as the number of frequently cited scientific publications, patents and grants obtained by the Centre.

The Centre's business plan will be co-developed by:

- ACC Cyfronet AGH – experts in simulations and provisioning IT infrastructures for science,
- Klaster LifeScience Kraków – Key National Cluster,
- University of Sheffield and Insigneo Institute – experts in *in silico* modeling in clinical practice,
- Forschungszentrum Jülich – experts in high-performance computing and large-scale data analysis for science and the industry,
- Fraunhofer ISI – experts in systemic solutions and medical innovations,
- National Centre for Research and Development



The project is funded in the framework of H2020-WIDESPREAD-2016-2017 TEAMING PHASE 1: CSA. The Project Coordinator is the National Centre for Research and Development. In Phase II the project will be coordinated by ACC CYFRONET AGH.