



## Boosting the Social Impact of Innovative Cancer Research



Cancer is one of the leading health problems worldwide. In the European Union (EU) alone, the number of new cancer patients will increase annually from 2,6 million in 2012 to 3,3 million in 2030. During the same period, the cancer deaths will increase from 1,28 million to 1,67 million. A major problem for the health care organisations is the increasing number of patients living with a cancer diagnosis, a rise of still higher magnitude. The epidemiological figures for the EU, however, are not unique, as the trends are somewhat similar all over the world. Altogether, this tendency implies that current strategies for research, care, and prevention need to be revisited to balance the increasing cancer burden.

During the last 15 years, the cancer community and policy makers have been trying to develop strategies to bridge the gap between basic/preclinical and clinical research. As a result of these continuous and coordinated efforts, a patient-centred European consortium for therapeutics – Cancer Core Europe – connecting six major European cancer centres, most of them Comprehensive Cancer Centres (CCCs), was established in 2014 using a bottom-up approach. The virtual cancer centre/infrastructure has recently become a legal structure & currently comprises seven centres having the critical mass of multidisciplinary expertise, resources, patients, and data that is necessary to innovate in cancer research. By relying on CCCs, institutions linking therapeutics and prevention with research and education and that link research with the healthcare system, the virtual centre can connect research with the health care systems in each Member State.

Cancer Core Europe has provided an exceptional example of how to build communities, stimulate collaboration, foster knowledge, and create societal and economic added value across Europe. Inspired by Cancer Core Europe, a similar consortium addressing cancer prevention – Cancer Prevention Europe – was established early in 2017. The alliance, which links nine European cancer research centres, aims at integrating the prevention research continuum to innovative within this area. Currently, Cancer Core Europe and Cancer Prevention Europe are in the process of integrating therapeutics and prevention strategies to address in partnership the increasing cancer problem. By offering innovative approaches for cancer research, links to the healthcare systems, development of quality-assured multidisciplinary cancer care, as well as the assessment of long-term outcomes, the infrastructure is expected to serve as a hub to connect with other centres across Europe as well as on other continents.

At present, innovation has become a political issue in Europe, and research, the engine that fuels innovation, is under scrutiny. Both politicians and decision makers would like to see research resulting in innovations, and the general opinion is that the research input is good, but the impact on society is disappointing. As a result, the Commissioner for Research, Science and Innovation Carlos Moedas following the recommendations of the Lamy report “Investing in the European future we want”, decided to move from a challenge-driven to a mission-oriented approach to tackle global challenges. This development prompted Julio E. Celis and Dainius Pavalkis – members of the RISE High-level Group that advice Commissioner Moedas – to propose a mission in cancer (A mission-oriented approach to cancer in Europe: a joint mission/vision 2030; <http://onlinelibrary.wiley.com/doi/10.1002/1878-0261.12143/full>) based on the activities and objectives of Cancer Core Europe and Cancer Prevention Europe. The mission stated that “by combining innovative prevention and treatment strategies in a sustainable state-of-the-art virtual European cancer centre/infrastructure, it will be possible by 2030 to achieve long-term survival of 3 out of 4 cancer patients in countries with well-developed healthcare systems. Furthermore, the concerted actions will pave the way to handling the economic and social inequalities in countries with less-developed systems”. The Cancer Mission was recently discussed at the first Gago Conference on European Science Policy that took place at the i3S in Porto, Portugal on February 14, 2018. Closing the Conference, Commissioner Carlos Moedas confirmed his strong support for a mission-oriented approach to cancer in Horizon Europe.

In addition to addressing implementation issues, the Conference will address the social impact of cancer research, as well as the engagement of other continents (Open to the World/Science Diplomacy).