

Alliance for Biomedical Research in Europe

Position Paper

Horizon 2020: Addressing the Health Challenge

Brussels, January 2012

To sustain a healthy and productive European population, the Alliance for Biomedical Research in Europe calls upon the European Institutions to:

- 1. Boost biomedical and clinical research with appropriate resourcing at the EU level***
- 2. Implement structured consultation with the biomedical researchers to ensure proper targeting and priority-setting for funding***
- 3. Create an interconnected and coherent EU biomedical research programme, including the creation of a “European Council for Health Research”***
- 4. Enhance international cooperation and global initiatives***

The Alliance for Biomedical Research in Europe (BioMed Alliance) is a unique initiative representing 17 leading research-oriented medical societies that include more than 200.000 researchers across Europe. The BioMed Alliance has as a mission to advance and strengthen biomedical research, in particular translational research, which is crucial for innovation. Success in biomedical research requires a long-term investment as well as sustainable infrastructures. It is estimated that three-quarters of its return on investment of medical research come from its “spill over” effects and value creation to the broader economy¹. The cumulative economic benefit comes from both the increased contributions of a healthy population as well as by the wealth generated by the health care sector.² Furthermore, the Innovation Union Strategy 2020 identified “health and ageing” as one of the major societal challenges of the 21st century.

¹ <http://www.nature.com/news/2010/100609/pdf/465682a.pdf>

² http://ec.europa.eu/health/ph_overview/Documents/health_economy_en.pdf

1. Boost biomedical and clinical research with appropriate resourcing at the EU level

RECOMMENDATION: The funding directed to biomedical research should correspond to at least 20% of the total funding in Horizon 2020.

EU funding for health research represents today a mere 10% of the overall EU research funding budget (€6.1 billion out of €53.2 billion). To compare, in the US, the NIH invests on average 3.5 times more (\$31.2 billion = €21.5 billion) than the EU (€6.1 billion) in health research. This represents a striking disproportion between the burden represented by disease and the EU health investment. For instance, according to the World Health Organization (WHO), the major non-communicable diseases – cardiovascular diseases, cancer, mental health problems, diabetes mellitus and chronic respiratory disease – are the cause of 86% of deaths and 77% of the disease burden in the WHO European Region¹, but are largely preventable and are linked by common risk factors, underlying determinants and opportunities for intervention through research advancements and research-informed policies. Estimates indicate that non-communicable diseases worldwide will cause an output loss of 47 trillion dollars over the next two decades².

Providing a credible funding level by increasing the overall research funding budget would go a long way in tackling the new health-related challenges that Europe and the world face today. The scale and complexity of the scientific challenges require a strengthened cooperative approach to biomedical research and innovation at the European level. This is essential in order to capitalize on progress to date, to encourage new breakthroughs and to get research results from the clinic to market. There is also a crucial need for dedicated European funding for European-wide studies – many of the biomedical challenges will only be better understood through highly multidisciplinary and large-scale / multinational research. For this to happen, common European-wide strategic planning of biomedical research is essential. Tackling the enormous medical costs and loss of labour in the forthcoming decades requires action now. The significant return on investment in medical research – estimated at nearly 40% according to the analysis on cardiovascular diseases in the UK MRC Report 2008³ – can counter the growing economic burdens Europe faces. Moreover, promoting Europe as a knowledge-based society can provide us with a major competitive edge. Thus, the concept of 'health is wealth' must be at the forefront of the EU Horizon 2020. The biomedical research and development sector is a leading area of innovation and economic growth across the globe that can provide significant solutions by ensuring a healthy and active population and by promoting employment through its endeavors. The European Research Area (ERA) can provide the necessary complementarities and critical mass for the strategic and multidisciplinary approach that is needed in biomedical sciences.

¹ <http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/what-are-noncommunicable-diseases>

² http://www3.weforum.org/docs/WEF_Harvard_HE_GlobalEconomicBurdenNonCommunicableDiseases_2011.pdf

³ http://www.wellcome.ac.uk/stellent/groups/corporatesite/@sitestudioobjects/documents/web_document/wtx052110.pdf

2. Implement structured consultation with the biomedical researchers to ensure proper targeting and priority-setting for funding

RECOMMENDATION: The EU funding strategy and research priorities must be defined in close cooperation with the biomedical community.

Only if experts across the health continuum are involved from the very beginning of the strategic setting of research funds can it truly address the challenges faced by science and society in its entirety. The current configuration of EU research programmes has not allowed for a correct, transparent and systematically organised involvement of researchers in the conception, development and evaluation of the European biomedical research strategy. It is crucial that the funding strategy and priorities for biomedical research are defined together with the biomedical community. A more systematic involvement of the research community, including academia and industry, in the process of defining the scientific challenges as well as strengthening the peer review system that evaluates projects would bring the promise of excellence and innovation closer.

The BioMed Alliance is committed to the concept of 'science for society' and we are willing to work with decision-makers to promote a science-friendly society and communicate the role, value and economic benefits of research. As the unified voice for the biomedical research community in Europe, we can help to raise awareness about issues that hinder the translation of basic discoveries into clinical application. Such bottom-up approaches can shape and feed key political decisions through evidence-based advice and insight.

3. Create an interconnected and coherent EU biomedical research programme, including the creation of a "European Council for Health Research"

RECOMMENDATION: Creation of a truly European interconnected research programme for biomedical research and of a dedicated infrastructure, e.g. a "European Council for Health Research".

EU Member States have provided substantial national budgets to establish infrastructures in the area of biomedical research. However, none of these centres or national networks alone can keep pace with the rapidly expanding innovations in the biomedical field. Large-scale partnerships between European countries can provide significant added value and spearhead key advances to tackle the major societal challenges of our future.

A number of factors need to be addressed to accelerate progress in the biomedical field in Europe. Deeper and longer-term collaborative projects or infrastructures allowing for sustainable networks are key to produce groundbreaking discoveries and innovations. The current piecemeal funding for EU collaborations have only a limited impact and it is time to move towards more sustainable solutions. There is a major need to facilitate the sustainability of successful research projects, so that after the research is conducted, it can be applied to policy-

making and continue to make an impact. Cross-fertilization and improved coordination of research can foster innovation and guarantee optimal efforts with patients' interests at the core. The current fragmented research landscape in Europe needs more support for consolidated and concrete infrastructures to promote integration of the various research agendas, and ensure excellent research advances are not lost.

Europe needs a truly European interconnected research programme for biomedical research, and with it a dedicated infrastructure e.g. a "European Council for Health Research", which would represent a single dedicated agency for biomedical research with strong input from the biomedical community. This 'Council' could truly foster innovation at EU level and accelerate our competitiveness. Biomedical research at EU-level is supported across many different initiatives ranging from the Framework Programmes (such as FP7), the European Institute of Innovation and Technology (EIT), the European Research Council (ERC), the Innovative Medicines Initiative (IMI) and the Joint Programming Initiatives (JPIs). Moreover, the innovation cycle in biomedical research is long (about 10 years), expensive and prone to error, and one funding instrument cannot cover the full innovation cycle from developing ideas into novel concepts, translating these into clinical practice, taking findings to the market, evaluating treatment strategies and monitoring outcomes. The full innovation cycle could be supported by a single dedicated biomedical research strategy and operationally through a specific research programme for biomedical research at EU level. This long-term funding strategy and priorities for biomedical research should be developed in collaboration with key research stakeholders and should include medical scientific societies as represented through this Alliance.

4. Enhance international cooperation and global initiatives

RECOMMENDATION: Create international partnerships for biomedical research to increase the EU's competitiveness in global science.

Considering the major challenges facing society, no country or even continent can work in isolation. All available scientific expertise must be harnessed and exploited in order for innovative and multidisciplinary solutions and breakthrough discoveries to occur. Partnering and knowledge-sharing on a global level is therefore essential. Networking between a wide range of experts and gaining insights into the newest scientific and clinical research, patient management and practice, and opportunities for international multidisciplinary stakeholders in science to come together to share knowledge and ideas should be encouraged. However, to date, international cooperation remains sub-optimal and collaborations in clinical and basic research lack a strong framework. For Europe it will be important to establish joint large infrastructures and to focus more strongly on developing collaborative international research networks.