A New Horizon for European Obesity Research? – a Short Introduction to the EU's Next Framework Programme*

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Obesity research in Europe has gained considerably from being stimulated and supported by the European Union through the Framework Programmes (... 5th, 6th, 7th). Strong and large-scale studies have been conducted and have established connections between many research groups focusing on obesity and related aspects. As the European Commission is preparing the first draft of the next Framework Programme (FP) and new ideas of potentially paramount importance for European obesity research are developed, research groups should harness their collaborative strengths across borders and academic disciplines to prepare for the future FP. This article provides a short introduction to the core ideas of the next FP and offers reflections on how the research community could engage with the next FPs key concept of Grand societal challenges.

*The European Association for the Study of Obesity (EASO) is very well aware of the challenges and is taking actions to ensure that European obesity research is put in a proper position in Horizon 2020. In close collaboration with its national member countries and the Scientific Advisory Board (SAB), EASO is pursuing this goal through various actions on behalf of the European obesity research community. EASO is supporting nationally hosted obesity research workshops during 2011 and will organise an obesity research strategic conference in 2012 together with the European Commission, where the position of obesity and its impact upon health will be addressed. The SAB has begun identifying the key research priorities and collaborative opportunities that will lead to a clear strategy, later to be published in OBESITY FACTS after having been discussed in various relevant fora, including the workshops and the conference. To initiate our endeavour to properly position obesity research within Horizon 2020 EASO has invited the EU adviser Mattias Anderson to provide the readership of OBESITY FACTS with a synopsis of this upcoming EU research programme.

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Horizon 2020 – More than Just a Change of Name

In 2013 the European Union's 7th Framework Programme for Research and Technological Development (FP7) is coming to an end, and preparations for the next FP are already well underway. Departing from the tradition of naming the FPs by their consecutive numbers FP5, FP6 and FP7, the next FP will be called 'Horizon 2020 – the Framework Programme for Research and Innovation'. The new name is intended to indicate a fresh start (but building on what is already working) for a new and more ambitious FP. It has increasingly been felt by politicians and policy makers that the FP7 has to some extent lacked a strategic focus; with the FP7's 50 billion EUR accounting for only approximately 5% of total public research funding in the EU member states, the money spent at the European level should have a clear strategic focus, and FP7 has only partly achieved that. The discussion can be boiled down to two points:

- i) Research priorities have not been properly aligned with the goals set by the European Commission's 10-year strategic plans (the Lisbon Agenda running from 2000 to 2010 and the EU2020 for 2010 to 2020).
- ii) The funding instruments for both research and innovation established to achieve those priorities have not been sufficiently coordinated, and as a consequence innovation output has suffered. In particular, innovation has been hampered by the fragmentation of research efforts and 'innovation gaps' in funding. This has been exacerbated by the lack of coordination between EU and national funding.

According to the European Commission, the ambition for Horizon 2020 is 'to maximise the contribution of EU funded research and innovation to sustainable growth and jobs and to tackling the grand challenges facing Europe – for example climate change, energy and food security, health and our

ageing population. This will be achieved by creating a coherent set of instruments, along the whole “innovation chain” starting from basic research, culminating in bringing innovative products and services to market; and also to support non-technological innovation, for example in design and marketing’ (http://ec.europa.eu/research/horizon2020/index_en.cfm).

The Structure of Horizon 2020

An important difference between FP7 and Horizon 2020 is that the latter will merge the FP with the Competitiveness and Innovation Programme (CIP – see <http://ec.europa.eu/cip/>) and the European Institute of Technology (EIT – see <http://eit.europa.eu/>) to create the ‘whole innovation chain’ approach. The European Commission will present a first formal draft of Horizon 2020 to the European Council on December 6, 2011, but preliminary sketches of the programme indicate a framework with three ‘specific programmes’:

Science for Society: Tackling Grand Societal Challenges

This programme is the ‘heir’ of the FP7 Cooperation Programme and will focus on the following six so called Grand Societal Challenges (for more details see below): i) health, demographic change and well being, ii) towards more inclusive, innovative and secure societies, iii) secure, clean and efficient energy, iv) smart, green and integrated transport, v) resource efficiency and climate action, vi) food security and bio-resources (for more info on potential content of each grand challenge see summary of Commission workshops at http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=workshops).

Science for Competitiveness: Creating Industrial Leadership and Competitive Framework

This programme will focus on funding for SMEs, access to risk finances as well as funding for enabling technologies such as nanotechnology, biotechnology, ICT and space research.

Science for Excellence: Excellence in the Science Base

This programme will include the popular ERC Grants, the Marie Curie Mobility Grants and funding for Priority Research Infrastructures.

The three programmes will either support or be supplemented by a number of specific funding schemes and initiatives such as Joint Programming, the European Innovation Partnerships and the Joint Technology Initiatives which are all intended to decrease the fragmentation of European research and innovation through better coordination with industry and member states. Coordination with countries outside the EU will also be strengthened.

The European Commission has proposed a total budget for Horizon 2020 of 80 billion EUR.

Grand Societal Challenges

It is the concept of Grand Societal Challenges that has attracted most attention in the debate so far along with the more general discussion of research vis-à-vis innovation. Embodying the new spirit of Horizon 2020, Grand Societal Challenges conveys the message the Commission wishes to send: that EU research funding is about solving major problems, not simply advancing our scientific knowledge in various fields.

Since the notion of Grand Societal Challenge was established as a key concept for the next FP at the Lund conference organised by the Swedish EU presidency in 2009, the concept has generated a lot of debate among stakeholders (the Lund declaration can be downloaded at www.vr.se/lunddeclaration). For instance, would the new approach lead to a radical departure from the principle of collaborative projects which have been the backbone of the FPs for years, and how will the emphasis on ‘bringing products to the market’ impact on funding for basic and translational research? It is still too early to tell which specific funding instruments the Commission has in mind for Horizon 2020. However, as bold political visions have faced the policy environment and lobby activities in Brussels, the grand challenge idea have come to look more familiar by now. A recent workshop held by the European Commission related to challenge 1: health, demographic change and well being testifies to this. A quick browse of the topics and areas discussed would present much that is familiar to those at home in the Cooperation Health Programme.

Nevertheless, the change in title does indicate a strong commitment from the EU to focus attention (and money) on addressing societal problems. And at least in theory, that means making hard choices about what to fund and what not to fund. Therefore, any academic or industrial stakeholder group either looking for funding from Horizon 2020 when the time comes or intending to influence the debate on Horizon 2020 should reflect on how their research can help tackle the grand challenges.

Take the example of obesity research. The obesity epidemic is surely a major societal challenge, and Europe boasts a number of excellent research groups in the field. But that is not the issue, because many research fields could make the same claim. What is needed are credible arguments demonstrating the relevance *and* ability of obesity research – be it basic or applied – to help tackle the obesity epidemic. Thus it is a question of identifying roadblocks and bottlenecks hampering progress in research and innovation *and* provide credible solutions to overcome these in collaboration with all stakeholders. For instance, this year the European Commission launched its European Innovation Partnership for Active and Healthy Ageing with the aim to add 2 healthy life years in Europe by 2020 (for more information see http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing and [pg=home](#)). Whether or not one agrees to these kinds of ‘demands’ as drivers for research, answering

the question ‘How does European obesity research help add healthy life years to Europe by 2020?’ could be a useful exercise. This includes identifying research results already delivered, which are ready for the next step toward implementation or commercialisation.

The emphasis on innovative solutions to pressing societal problems are neither entirely foreign to the obesity research field nor should it take away focus from important long-term basic and translational research. But the political commitment to use Horizon 2020 to create leverage for European public and private sectors to increase growth and competitiveness should be taken seriously. European politicians and policy makers are looking for new ideas that will turn the vision of a programme covering the whole innovation chain into reality. Anyone who can provide credible approaches to tackle the grand challenges facing Europe would undoubtedly be welcome.