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# EMRC

Ref: RB/JL/48-2012:

Members of the European Parliament

12 November 2012

#### Subject: Funding of medical research in Europe.

To all members of the European Parliament,

The European Medical Research Councils (EMRC) has been the membership organisation for all the medical research councils in Europe under the European Science Foundation (ESF) since 1971. The mission of EMRC has been to promote innovative medical research and its clinical application towards improved human health. EMRC has offered authoritative strategic advice for policy-making, research management, ethics and better health services. Through its activities, EMRC has served as a voice for its Member Organisations and the wider European scientific community and thus has played an important role in the development of medical research in Europe, working together with the European Commission, research funding organisations, research performing organisations, academies and learned societies, university networks and medical centres, both throughout Europe and internationally.

As one of the 5 scientific standing committees of ESF, EMRC has been actively involved in biomedical science policy over the past 41 years and a list of its publications can be found in attachment. During its last meeting EMRC prepared a letter regarding the discrepancy between public investment for health care and public support for biomedical health (broadly defined) research. We would like to use this document to inform the public at large and the medical world including the medical science organisations and the patient organisations, of the consequences of this situation. The final target for the letter is the European Parliament that has soon to decide about the budget for research in the new program called Horizon 2020.

EMRC indeed unanimously approved a motion, included in attachment that will be sent today to all Members of the European Parliament and in the coming days also to the major press offices in Europe. Indeed we think that Europe and especially the European Parliament are underfunding biomedical and health research. As briefly explained in this motion, a correction of this deplorable situation would create a multiple win-win situation for the European citizen because our plan would benefit patients, especially those who are most vulnerable, health care providers and the health care industry (large companies and probably even more small and medium sized companies (SMEs), and benefit science in general. Moreover it would, as a spin off, also create potential benefits for health care in less developed countries.

The motion is intended to be constructive and in no way wishes to interfere with the independent petition of many scientists to ask the EU Parliament to approve the 80 billion € budget for research. We actually fully support the funding of the Horizon 2020 project and argue that the present budget should even be increased to strengthen innovation in Europe as the basis for long-standing recovery. The EMRC has strong arguments in favour of an action that would fill a major gap in the European landscape for biomedical/medical/health research and strengthen innovation in an essential field of our societies.

For all these reasons, we hope that a large number of Members of the European Parliament will come up with and support a solution. A possible strategy would be to amend the Horizon 2020 project so that there is no less overall funding but an increase in the overall budget as to allow the new project for funding multinational health research.

Please do not hesitate to contact us if questions arise,

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European Medical Research Councils (EMRC)

# EMRC statement on medical research in the EU

Health and healthcare are highly appreciated in all societies and in Europe we collectively spend about 10% of the GDP on healthcare, corresponding to  $2730 \notin$  per person per year (Fig 1). Health research and health researchers are also highly esteemed by society. However, we spend in Europe only about  $40 \notin$  per person per year on the broad field of biomedical and health research (Fig 2). Spending per capita for alcoholic beverages and tobacco is about 20-fold higher. Through their research funding agencies most countries in Europe spend in the region of 25-35% of their global research budget on biomedical and health-related research. However, the European Framework Programmes have spent less than 15% on medical research and, in the new Horizon 2020 plans, only about 11% of the total budget of 80 billion  $\notin$  will be dedicated to biomedical and health-related research. In contrast, biomedical and clinical research generate more than 50% of the research output in Europe, as measured by number of publications and citations.

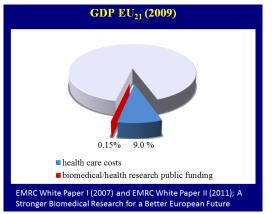


Figure 1: public spending for health care and health research in the  $EU_{21}$  (2009).

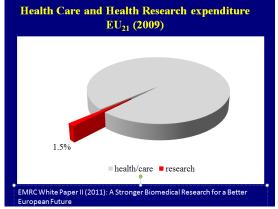


Figure 2: EU<sub>21</sub>: Austria-Belgium-Czech Republic-Denmark-Finland-France-Germany-Greece-Hungary-Ireland-Italy-Netherlands-Norway-Poland-Portugal-Slovakia-Spain-Slovenia-Sweden-UK

Both in absolute and relative (to GDP) terms, the US spends more on health care (about 6400  $\in$  at purchasing power parity exchange rates). Moreover, about 50% of all public US money for research is going to medical research and that translates to their public spending for biomedical research being about 3.5- fold higher per capita (143  $\in$  for 2009) than is the case in Europe.

This situation is far from optimal for the European citizen and societies as biomedical and healthrelated research generates multiple win-win situations:

- 1. First, patients (and this is sooner or later all of us) profit from better research as it improves their health and quality of life. There is indeed ample evidence for a very high societal impact of biomedical research (examples are the benefit of vaccination; imaging; drugs against infections; cardiovascular and metabolic disease, and major progress in survival of children with cancer with the large majority now surviving instead of dying from their disease). This also translates into an important economic benefit as amply demonstrated in a UK report (Wellcome Trust RAND publication, 'Medical Research: What's it worth?') indicating a return on investment of more than 30% per year for many years.
- 2. The health research community and the healthcare providers also profit from better understanding of diseases, from prevention, diagnosis to treatment as it allows better decisions and greater efficacy of their interventions.

- 3. Industry is also highly dependent on public healthcare investment and research and so it is no surprise that the bigger public investments in biomedical research attract all large and medium sized (SME) pharmaceutical and biotechnology industries. In practice, private investment by pharmaceutical companies in the US is 2-fold higher than in Europe and the gap is growing. For biotech and SME companies the difference is even greater with more than 80% of the private investments being located in the US and thus 4-times greater than in Europe. Moreover, biomedical research is very dependent on innovation and biomedical and clinical research is, by itself an important driver of innovation and high quality employment.
- 4. Healthcare costs are rising rapidly around the world but a large percentage of these expenses are not productive (30% in the US according to a recent 2012 report in the New England Journal of Medicine and in the Journal of the American Medical Association, JAMA, and an unknown percentage in most European countries). Medical research could generate solutions to health problems so that health care €€€ are better invested and generate a better cost-benefit ratio.

## How much longer can we accept these obvious weaknesses in Europe? Quousque tandem .....??

At its meeting in Prague on 4-5 October 2012, the Standing Committee of the European Medical Research Councils (EMRC) wished to attract the attention of all parties involved. First, the public at large should be better informed about the funding shortfall in Europe compared to the US as they are not only the final tax payers but also the first losers by this undesirable and unfortunate situation of biomedical and health research. Secondly, we call upon all patient organisations, scientific societies and medical academies, to convince our policy-makers to urgently change this research situation.

Above all, we ask the European Commission and especially the Commissioners for Research and Health, and all members of the EU parliament to amend the Horizon 2020 proposal on research so as to substantially increase the total amount of European investments in biomedical and health research. We ask them to increase their investment in the field of biomedical and health research in general, so as to reach at least the same level as generated by the national or regional funding agencies (25-35%). With due respect to the subsidiary principle, EMRC proposes as top priority to invest this extra European budget into a new funding mechanism (along the principles of the very successful ERC) to support clinical or health research projects that require a multinational approach to be efficient such as clinical trials for rare diseases, for research on new aspects of medicine such as personalised medicine, and for health research where answers require large cohorts of patients with longitudinal follow-up over the life course. A funding mechanism such as the one we propose is virtually totally lacking on a European scale today. Such a European Clinical Research Fund should be largely working with a "bottom-up" approach so that the best projects with the best return on investment would be funded. A budget of 1 billion € per year, with gradual increase over time, seems most appropriate to allow the support of studies that can really matter for healthcare in Europe and, indeed the world. In addition we ask the EU Parliament and Commission to start the process of a scientist-led overall strategic planning of health-related research in Europe and Horizon 2020 in order to promote innovation and combat the major challenges facing Europe. .

EMRC ask all parties involved to support such an innovative European initiative that would fulfill a real gap in the European Research Area and would benefit all its citizens and the world community.

<u>Signed on behalf of</u> all members of the Standing Committee of the European Medical Research Councils (EMRC) of the European Science Foundation (ESF):

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EMRC core group member (2005-2012).
Emeritus Professor of Medicine, KU Leuven, Belgium

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<u>Approved and supported by</u> the Alliance for Biomedical Research in Europe (see <u>Annex 1</u>).



# **EMRC** call for funding

# List of supporting member societies

- European Association for the Study of Diabetes (EASD)
- European Atherosclerosis Society (EAS)
- European Association for the Study of the Liver (EASL)
- European CanCer Organisation (ECCO)
- European Federation of Neurological Societies (EFNS)
- European Renal Association European Dialysis and Transplant Association (ERA-EDTA)
- European Respiratory Society (ERS)
- European Society of Cardiology (ESC)
- European Society of Clinical Microbiology and Infectious Diseases (ESCMID)
- European Society of Hypertension (ESH)
- European Society of Human Reproduction and Embryology (ESHRE)
- European Society of Radiology (ESR)
- United European Gastroenterology (UEG)

SioMed Alliance

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#### Executive Committee:

## **References:**

### **ESF-EMRC White Paper I** Present Status and Future Strategy for Medical Research in Europe November 2007 <u>http://www.esf.org/research-areas/medical-sciences/publications.html</u>

ESF-EMRC White Paper II A Stronger Biomedical Research for a Better European Future September 2011 ISBN: 978-2-918428-35-0 http://www.esf.org/research-areas/medical-sciences/publications.html

Investigator-Driven Clinical Trials

ESF-EMRC Forward Look Report March 2009 ISBN: 2-912049-95-4 http://www.esf.org/research-areas/medical-sciences/publications.html

### Medical Research: What's it worth?

Estimating the economic benefits from medical research in the UK. Health Economics Research Group, Office of Health Economics, RAND Europe. London: UK Evaluation Forum; 2008 ISBN: 978-1-84128-080-5 http://www.wellcome.ac.uk/About-us/Publications/Reports/Biomedical-science/WTX052113.htm

### Eliminating Waste in US Health Care

Donald M Berwick, MD, MPP; Andrew D. Hackbarth, MPhil JAMA. 2012;307(14):1513-1513. Doi:10.1001/jama.2012.362 http://jama.jamanetwork.com/article.aspx?articleid=1148376

From an Ethics of Rationing to an Ethics of Waste Avoidance Howard Brody, MD. PhD *N Engl J Med* 2012; 366: 1949-1951, doi: 10.1056/NEJMp1203365 http://www.nejm.org/doi/full/10.1056/NEJMp1203365