



Preventing insults to the brain: what are the benefits for Europe and the world

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**~ 6,1 billion EUR for
excellent health
research & innovation**

The FP7 Health Programme

- The largest supra-national fund
- To fund unique international consortia, public-private partnerships and global cooperation
- Involving leading players from Europe and across the globe
- To deliver excellent research and innovation
- To tackle key challenges which are too big for any one country alone

FP7-supported research on epilepsy

- Funding in the FP7 Cooperation (collaborative) programme, mainly through the Health theme, ICT programme, mobility programme (Marie Curie), ERC programme
- Support of about EUR 50 million for research on epilepsy since 2007
- Research on epilepsy was defined as a priority in the last FP7 'Health' Call for proposals published on 10 July 2012

Last call FP7 in Health theme

Patho-physiology and therapy of epilepsy and epileptiform disorders

- Basic, preclinical and/or clinical research
- To better understand the complex patho-physiology of epilepsy in order to develop novel preventative strategies in at-risk patients, improve diagnostic methods, achieve better patient stratification and develop more effective therapeutics
- Up to EUR 12.0 million
- 15% of EU contribution to SMEs

European Month of the Brain

To provide a framework to raise awareness on brain (disorders) research and healthcare issues

- To showcase EU-supported achievements in the area of brain research and healthcare
- To mobilise policy makers in Member States and Associated Countries to better coordinate and optimise resources allocated to brain research and healthcare
- Reach the public and raise awareness, including for lifting taboos associated with brain health issues



Conference '*European Brain Research: Successes and Next Challenges*'

- Organised on 14 May 2013
- Location: Brussels, CHARLEMAGNE building
- Objectives:
 - ✓ To showcase and raise awareness about benefits, added value and impact of EU-supported brain research
 - ✓ To outline and discuss the emerging and future scientific challenges in this field

Think early! Preventing brain diseases

This session focused on how research can help to effectively prevent brain diseases and improve mental health and well-being (Chair: Norman Sartorius)

- Successes: Aarno Palotie & António Dourado
- Challenges for the next decade: Norman Sartorius

EPILEPSIAE: EEG-portable device for the prevention and management of epileptic crises

- Development of an intelligent alarming system, transportable by the patient, measuring the brain dynamical activity, capable of predicting the seizures, allowing the patient to assess the risk of his actual situation and improving his safety
- Tested in ambulatory, hardware being commercialized by Micromed
- Important for refractory epilepsies
- About EUR 3.0 million EU contribution
- Coordinator: University Coimbra

Think early! Preventing brain diseases

- By cumulating application of the different prevention types, brain disorders could be prevented by 40%, resulting impairments by 36% and disability by 12%
- Need for collaboration to understand the genetic x environment background of complex diseases
- Further research but effective preventive action is possible and necessary immediately
- Action against stigma and discrimination, which are main hurdles in the prevention against brain disease



**Proposed budget:
€80 billion**

Setting sail for Horizon 2020

Europe needs cutting edge research and innovation

Essential to ensure competitiveness, growth and jobs

Vital to tackle pressing societal challenges

3% of GDP invested in R&D: headline target of Europe 2020

A graphic for "Horizon 2020" featuring a glowing blue background with a central globe of Earth. The word "HORIZON 2020" is written in white, uppercase letters, with the globe acting as the letter "O".

HORIZON 2020

After FP7: Horizon 2020

Commission proposal: €80 billion

- A single programme
- More innovation – “from research to retail”
- Focus on societal challenges
- Simplified & broader access

- Proposal approved by the Commission on 30 November 2011
- Currently discussed at the European Council and European Parliament

Structure proposed for Horizon 2020



Where research on epilepsy ?

- In all three main pillars
- Within the societal challenges: in particular under the **“Health, demographic change and well-being”** (about **EUR 8.5 bil**)

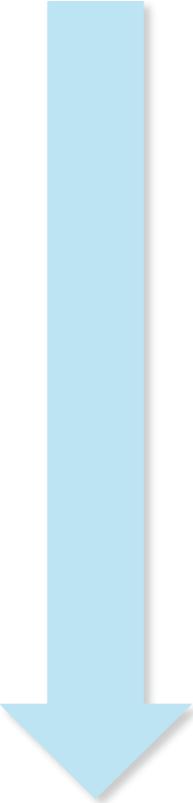
Priorities for Health Research (1)

- Understanding the determinants of health, improving health promotion and disease prevention
- Developing effective screening programmes and improving the assessment of disease susceptibility
- Understanding disease
- Developing better preventive vaccines
- Improving diagnosis
- Using in-silico medicine for improving disease management and prediction
- Treating diseases

Priorities for Health Research (2)

- Transferring knowledge to clinical practice and scalable innovation actions
- Better use of health data
- Improving scientific tools and methods to support policy making and regulatory needs
- Promoting integrated care
- Optimising the efficiency and effectiveness of healthcare systems and reducing inequalities

Horizon 2020 timelines

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- **From 30/11** Parliament and Council negotiations on the basis of the Commission proposals
 - **Ongoing** Parliament and Council negotiations on EU budget 2014-20 (including Horizon 2020)
 - **Mid 2012** Final FP7 calls
 - **By end 2013** Adoption of legislative acts by Parliament and Council on Horizon 2020
 - **January 2014** Horizon 2020 starts; launch of first calls



**Thank you for your
attention**

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