Horizion 2020

Opportunities for funding Health Programmes

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Nemzeti Innovációs Hivatal
HORIZON 2020 is the new European Programme for funding Research & Innovation for the period 2014-2020, with a budget of 79.4 billion EUR.

It aims at:
• Responding to the economic crisis to invest in future jobs and growth
• Strengthening the EU’s global position in research, innovation and technology
• Improving the quality of life of European citizens

http://ec.europa.eu/research/horizon2020
What’s new?

• A single programme bringing together three separate programmes/initiatives
• Coupling research to innovation – from research to retail, all forms of innovation
• Focus on societal challenges facing European society e.g. health and ageing, clean energy and transport
• Simplified access, for all companies, universities, institutes in all EU countries and beyond
Three priorities

HORIZON 2020 BUDGET (EUR 78.6 billion, current prices)

- Industrial Leadership: EUR 17.0 billion
- Societal Challenges: EUR 29.7 billion
- European Institute of Innovation and Technology: EUR 2.7 billion
- Euratom: EUR 1.6 billion
- Other: EUR 3.2 billion
- Excellent Science: EUR 24.4 billion
Three priorities

• **Excellence Science:**
High-level scientific research & world-class research infrastructure in order to attract the best scientists of the EU in the world

• **Industrial Leadership:**
Strategic funding in key-enabling technologies to attract private investment in research and innovation (i.e. ICT, nanotechnologies, materials, biotechnology, manufacturing, space)

• **Societal Challenges:**
Addressing key societal challenges (climate, environment, energy, transport etc.) through multi-disciplinary applied research including social sciences & humanities
Three priorities

Excellent Science (24.4 B €)
- European Research Council (13.1 B €)
- Future and Emerging Technologies (2.7 B €)
- Marie Skłodowska-Curie Actions (6.1 B €)
- Research Infrastructures (2.5 B €)

Industrial Leadership (17 B €)
- LEIT = Leadership in enabling and industrial technologies
  - ICT
  - Nano, new materials
  - Biotechnology
  - Space (13.5 B €)
- Access to Risk Finance (2.9 B €)
- Innovation in SMEs (0.6 B €)

Societal Challenges (29.7 B €)
- Health (7.5 B €)
- Food (3.9 B €)
- Energy (6 B €)
- Transport (6.3 B €)
- Climate (3 B €)
- Inclusive Societies (1.3 B €)
- Security (1.7 B €)

Spreading Excellence (0.8 B €)

Science for Society (0.5 B €)
- EIT (2.7 B €)
- JRC (1.9 B €)
- Euratom (1.6 B €)
More opportunities for SMEs

- Integrated approach - around 20% of the total budget for societal challenges to go to SMEs
- Simplification of particular benefit to SMEs (e.g. single entry point)
- A new SME instrument will be used across all societal challenges
- 'Access to risk finance' will have a strong SME focus (debt and equity facility)
The challenges

• Ageing population
• Increased disease burden
• Unsustainable and unequal health & care systems
• Health & care sector under pressure to reform
A new approach

- Challenge-driven
- Broad topics
- Less prescriptive topic texts
- Two-year work programme: 2014-2015: 1,2 billion EUR of EU funding for health research and innovation
- Stronger focus on end users
- Translation science to benefit citizens
7 Focus Areas

- Understanding health, ageing & disease
- Effective health promotion, disease prevention, preparedness and screening
- Improving diagnosis
- Innovative treatments and technologies
- Advancing active and healthy ageing
- Integrated, sustainable, citizen-centred care
- Improving health information, data exploitation and providing an evidence base for health policies and regulation
Understanding the call topics: example

PHC 2 – 2015: Understanding diseases: systems biology

Specific challenge: The development of new and improved understanding of the often very complex (bio)medicine approaches have the potential to inform a variety of biological and medical research disciplines. A collaborative approach is required to assemble the tools of biology, medicine, mathematics, computational biology, and medicine approaches.

Scope: Proposals should focus on new avenues to describe phenotypes in multifactorial diseases and/or development/optimisation and/or application of systems biology tools to produce or refine computational and mathematical approaches. The tools should be validated in well-phenotyped patient cohorts, taking potential thoroughly investigated.

The Commission considers that proposals requesting a maximum of EUR 4 and 6 million would allow this specific challenge to be addressed. Nonetheless, this does not preclude submission of proposals requesting larger amounts.

Expected impact: This will provide:
- Leverage of existing investments in Europe
- New directions for better disease detection
- Systems medicine tools and approaches that represent an improvement over current approaches.

Type of action: Research and Innovation actions
Personalizing health care PHC 2015 calls

- Effective health promotion, disease prevention, preparedness and screening: PHC 9

<table>
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<tr>
<th>Topic</th>
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<th>Type</th>
<th>Budget</th>
<th>Budget/application</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>PHC 9</td>
<td>Vaccine development for poverty-related and neglected infectious diseases: HIV/AIDS</td>
<td>Research and Innovation Action</td>
<td>21 million EUR</td>
<td>4-6 million EUR</td>
<td>24/02/2015</td>
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• **Improving diagnosis: PHC 12**

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| PHC 12 | Clinical research for the validation of biomarkers and/or diagnostic devices | SME instrument (100% funding) | 45 million EUR | 1-5 million EUR | Phase 1: 18/03/2015 16/06/2015  
  Phase 2: 18/03/2015 16/06/2015 |
### Innovative treatments and technologies: PHC 15

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<tr>
<td>PHC 15</td>
<td>Clinical research on regenerative medicine</td>
<td>Research and innovation action</td>
<td>37 million EUR</td>
<td>4-6 million EUR</td>
<td>24/02/2015</td>
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## Personalizing health care PHC 2015 calls

- **Advancing active and healthy ageing: PHC 21**

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<tr>
<td>PHC 21</td>
<td>Advancing active and healthy ageing with ICT</td>
<td>Research and Innovation action</td>
<td>20 million EUR</td>
<td>3-4 million EUR</td>
<td>21/04/2015</td>
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Personalizing health care PHC 2015 calls

- **Integrated, sustainable, citizen-centred care: PHC 25, PHC 27, PHC 28, PHC 29**

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<tr>
<td>PHC 25</td>
<td>Advanced ICT systems and services for Integrated Care</td>
<td>Research and innovation action</td>
<td>20 million EUR</td>
<td>3-5 million EUR</td>
<td>21/04/2015</td>
</tr>
<tr>
<td>PHC 27</td>
<td>Self-management of health and disease and patient empowerment supported by ICT</td>
<td>Pre-commercial procurement</td>
<td>15 million EUR</td>
<td>3-5 million EUR</td>
<td>21/04/2015</td>
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<tr>
<td>PHC 28</td>
<td>Self-management of health and disease and decision support systems based on predictive computer modelling used by the patient him or herself</td>
<td>Research and innovation action</td>
<td>19.5 million EUR</td>
<td>3-5 million EUR</td>
<td>21/04/2015</td>
</tr>
<tr>
<td>PHC 29</td>
<td>Public procurement of innovative eHealth services</td>
<td>Public procurement of innovative solutions</td>
<td>10 million EUR</td>
<td>1-5 million EUR</td>
<td>21/04/2015</td>
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Personalizing health care PHC 2015 calls

- Improving health information, data exploitation and providing an evidence base for health policies and regulation: **PHC 30, PHC 33**

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<th>Deadline</th>
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<tr>
<td>PHC 30</td>
<td>Digital representation of health data to improve disease diagnosis and treatment</td>
<td>Research and innovation action</td>
<td>20 million EUR</td>
<td>3-5 million EUR</td>
<td>21/04/2015</td>
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<tr>
<td>PHC 33</td>
<td>New approaches to improve predictive human safety testing</td>
<td>Research and innovation action</td>
<td>30 million EUR</td>
<td>10-30 million EUR</td>
<td>24/02/2015</td>
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Type of actions

Research & Innovation Action:

• 100% reimbursement

• Collaborative research projects with clearly defined scientific and technological objectives & expected results carried out by project consortia

• At least three legal entities independent of each other and each established in a different Member State or an Associated Country, participants from USA can be funded

• Industry, academia, SMEs or others
Type of actions

SME instrument:

- **Phase 1**: Concept & Feasibility Assessment
  - Feasibility of concept
  - Risk assessment
  - IP regime
  - Partner search
  - Design study

- **Phase 2**: Innovation R&D activities
  - Development, prototype, test
  - Miniaturisation/design
  - Clinical trials
  - Etc.

- **Phase 3**: Commercialisation
  - Facilitate access to private finance
  - Support via networking, training, coaching, knowledge sharing, dissemination

**Lump sum:**
- ~ 50,000 €
- ~ 6 months

**Output-based payments:**
- 1 to 2,5 M€
- 12 to 24 months

**No direct funding**
SME instrument:

- Targeted at all types of innovative SMEs showing a strong ambition to develop, grow and internationalise
- Only SMEs will be allowed to apply for funding and support
- No obligation for applicants to sequentially cover all three phases; each phase open to all SMEs
- 100% funding in Health research (others 70%)
Clinical studies:

- Can be funded (phase 0 to phase 4)
- Focus on clinical trials: Topics 2015: PHC 12, PHC 15
- 2014/15: Over 300 EUR million of funding earmarked for clinical trials
- „Template for essential information to be provided for proposals including clinical trials / studies / investigations” is mandatory
- Unit costs can be reimbursed

How to apply

Calls and all necessary documentation are published on the Participant Portal
How to apply

Electronic Submission

Electronic Submission System accessed from the call page
• ECAS password
• PICs for all partners
• Prepare proposal,
• On-line for structured part - Part A
• Upload non-structured part – Part B - pdf file(s)
• Complete submission, before the 17h00 deadline
  (submission failure rate = + 1%)
• Part B page limit: 70 pages: Research and innovation actions
Evaluation criteria:

• Excellence
• Impact
• Implementation

• each criterion scored out of 5; individual threshold of 3; overall threshold of 10, can be specific in the call

• SME instrument: impact score is weighted by factor of 1.5
Strategic Initiatives

Innovative Medicines Initiative Initiative 2
www.imi.europa.eu

European Innovation Partnership on Active and Healthy Ageing
https://webgate.ec.europa.eu/eipaha

Active and Assisted Living 2
www.aal-europe.eu

European & Developing Countries Clinical Trials Partnership (EDCTP2)
www.edctp.org
Innovative Medicine Initiative Initiative (IMI) 2

• Public-Private Partnership between EU and EFPIA (European Federation of Pharmaceutical Industries and Associations)

• Goal: provide faster access to better medicines through identifying promising drug candidates with greater certainty at an earlier stage

• Budget: 3.3 million EUR for the period: 2014–2024
Open call:

Ebola and other filoviral haemorrhagic fevers

Call topics:

Topic 1: Vaccine development Phase I, II, and III
Topic 2: Manufacturing capability
Topic 3: Stability of vaccines during transport and storage
Topic 4: Deployment and compliance of vaccination regimens
Topic 5: Rapid diagnostic tests

Deadline: 1 December 2014
Future topics:

• Remote assessment for disease and relapse (RADAR), topic 1: central nervous system (CNS)
• Assessing risk and progression of prediabetes and type 2 diabetes to enable disease modification
• Linking clinical neuropsychiatry and quantitative neurobiology
• The consistency approach to quality control in vaccine manufacture
• Pertussis vaccination research
• Knowledge Repository to enable patient focused medicine development

http://www.imi.europa.eu/content/imi-2
AAL2: Ambient Assisted Joint Programme

Goals:
• to create better condition of life for the older adults
• to strengthen the industrial opportunities in Europe through the use of information and communication technology (ICT).

Budget: 600 million EUR from 22 EU countries + EU funding 150 million EUR
AAL 2 calls

Future calls: 2015

Topic: Living active and independently at home
The contribution of ICT/technologies to integrated solutions for supporting active and independent living of older adults in their home

Launch: February 2015
Deadline: May 2015

http://www.aal-europe.eu/
Information:

http://ec.europa.eu/programmes/horizon2020/

Partner search:

• Fit for Health
  http://www.fitforhealth.eu

• IMI
  https://cloud.imi.europa.eu/web/eimi-pst

• CORDIS
  https://cordis.europa.eu/partners/web/guest/home

Experts:

http://ec.europa.eu/research/participants/portal/page/experts
Thank you for your attention

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NCP

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