Contributions of SSH to Clusters: Health

Impact of Social Sciences and Humanities for a European Research Agenda – Valuation of SSH in mission-oriented research
Vienna, 28-29 November 2018

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European Commission
From FP7 to Horizon Europe

FP7 – Cooperation Programme: Theme 8 ‘Socio-economic Sciences and Humanities’

Horizon 2020 – No self-standing SSH programme: SSH is embedded as a cross-cutting issue

Horizon Europe – SSH will be fully integrated across all clusters, including specific and dedicated activities.
SSH disciplines in health R&I

sociology
psychology
anthropology
behavioural science
cultural studies
demography
education
religion

history
economics
administration
political science
regulatory
philosophy
ethics
law
Some project examples in Societal challenge
Health, demographic change and well-being

<table>
<thead>
<tr>
<th>Project</th>
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<tbody>
<tr>
<td>Lifepath</td>
<td><a href="https://www.lifepathproject.eu/">https://www.lifepathproject.eu/</a></td>
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<td>INHERIT</td>
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<td><a href="https://bluehealth2020.eu/">https://bluehealth2020.eu/</a></td>
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<td>eboDAC</td>
<td><a href="https://www.ebovac.org/ebodac/">https://www.ebovac.org/ebodac/</a></td>
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Life-course biological pathways underlying social differences in healthy ageing

- Understand the determinants of diverging ageing pathways among individuals belonging to different socioeconomic groups;
  - Examine the impact of the ‘recent’ economic downturn on health outcomes and biological markers of ageing in Italy, Portugal and Ireland – comparison with New York City
  - **Europe has been more resilient than US to the financial crisis, a study on mortality found**

- The poorer you are, the slower you walk, the worse you age!
  - Men aged 60 with lower economic status (e.g. working in manual occupations) had the same walking speed as men aged 66.6 with a higher economic status (e.g. working in non-manual occupations)
Randomized, Comparison Of Risk-Stratified versus Standard Breast Cancer Screening In European Women Aged 40-74

- Quantification of the long-term benefits, harms and cost-effectiveness of risk-based screening scenario
- Sociological, ethical and psychological assessments
- Among the participants: Independent Cancer patient’s voice
Ebola vaccine deployment, acceptance and compliance

During their first visit, vaccinees are registered with biometric and phone number.

Mobile phone messages are sent to remind of upcoming visits and to promote engagement.

At each vaccination, recognition with biometric ensures the right person is vaccinated at the right time.

Reporting allows for compliance tracking and follow-up with those who missed their vaccination.
SC1 Projects in call 2017

Societal challenge 1 ‘Health, demographic change and well-being’
- Use of key words when drafting call topics that could ‘attract’ SSH elements;
- Use of expert evaluators with SSH competence;

→ 32 projects (call 2017) out of 45 (SSH flagged) have SSH components
Example 1, 2017 SSH flagged Call topic

SC1-PM-07-2017: Promoting mental health and well-being in the young

“Proposals should develop population-oriented primary prevention interventions to promote mental well-being of young people and assess them for their effectiveness. The interventions should build on but may go beyond existing state-of-the art knowledge on biological, psychological and social determinants of mental well-being such as societal, cultural, work life, lifestyle, epidemiological, economic and environmental perspectives.”

5 projects with tasks on psychosocial and behavioural science, evaluation of cultural differences, education, economics
Example 2, 2017 SSH flagged Call topic

SC1-PM-07-2017 - Personalised coaching for well-being and care of people as they age

“Proposals should address relevant ethics and gender aspects and should also assess related legal and regulatory questions such as ownership of data, data protection/privacy, liability and consumer protection. It is crucial that users are involved and drive the innovation at all stages of design and development, including user acceptability, satisfaction and impact in realistic settings”

8 projects with tasks on psychosocial and socio-economic factors that underpin effective behaviour changes, legal, ethics, gender, cultural aspects
H2020: ICT and Social Sciences/Humanities

**ELSIification**
- Monitoring economic, legal, and social issues related to technological developments
- Mitigating risks and inconveniences and optimising benefits as well as the chance of success / uptake of technological developments

**Reformulation**
- Reframing concepts, meanings, and expectations arising from the deployment of ICTs pro-actively
- Exploring how society treats technology and what that means for innovation.
H2020: Societal Relevance in SC1

“Interdisciplinary integration of knowledge, methodologies, data, concepts and perspectives from SSH and non-SSH disciplines”
Project example

- IN LIFE: Personalised ICT services for home activities, communication, health maintenance, travel, mobility and socialization.

Special focus on multilingual and multicultural environments. Involvement of psychologists, social scientists, anthropologists (also economy, policy).
Societal challenge Health, demographic change and well-being: some take-out

- Some areas are ‘naturally’ targeted to include SSH (e.g. public health, mental health, migration, digital transformation of health and care, assistive technology)
- The contribution of expert evaluators with SSH knowledge is essential
- Despite the broadness of topics description, some key words may help to better integrate SSH expertise
Where do we stand with Horizon Europe?

BLOG POST | By Carlos Moedas | 2 May 2018

From Horizon 2020 to Horizon Europe

€100-billion budget proposed for Europe’s next big research programme

Initial funding plans for the seven-year Horizon Europe science initiative get a lukewarm reception.

Annual R&I budget (bn €) 1983 - 2027

FP1
FP2
FP3
FP4
FP5
FP6
FP7

Horizon 2020
Horizon Europe
Horizon Europe
Horizon Europe: evolution not revolution

Specific objectives of the Programme

- Support the creation and diffusion of high-quality knowledge
- Strengthen the impact of R&I in supporting EU policies
- Foster all forms of innovation and strengthen market deployment

Optimise the Programme’s delivery for impact in a strengthened ERA

Pillar 1
Open Science
- European Research Council
- Marie Skłodowska-Curie Actions
- Research Infrastructures

Pillar 2
Global Challenges and Industrial Competitiveness
- Health
- Inclusive and Secure Society
- Digital and Industry
- Climate, Energy and Mobility
- Food and natural resources
- Joint Research Centre

Clusters

Pillar 3
Open Innovation
- European Innovation Council
- European innovation ecosystems
- European Institute of Innovation and Technology

Strengthening the European Research Area
- Sharing excellence
- Reforming and Enhancing the European R&I system

European Commission
Budget: €100 billion* (2021-2027)

* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.
### Pillar 2

**Global Challenges & Industrial Competitiveness:**
boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals

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<tr>
<th>Clusters</th>
<th>Budget (€ billion)</th>
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<tbody>
<tr>
<td>Health</td>
<td>€ 7.7</td>
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<tr>
<td>Inclusive and Secure Societies</td>
<td>€ 2.8</td>
</tr>
<tr>
<td>Digital and Industry</td>
<td>€ 15</td>
</tr>
<tr>
<td>Climate, Energy and Mobility</td>
<td>€ 15</td>
</tr>
<tr>
<td>Food and Natural Resources</td>
<td>€ 10</td>
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**Joint Research Centre**
supports European policies with independent scientific evidence & technical support throughout the policy cycle

€ 2.2
Lessons Learned from Horizon 2020 Interim Evaluation

- Support breakthrough innovation
- Create more impact through mission-orientation and citizens' involvement
- Strengthen international cooperation
- Reinforce openness
- Rationalise the funding landscape

Key Novelties in Horizon Europe

- European Innovation Council
- R&I Missions
- Extended association possibilities
- Open science policy
- New approach to Partnerships
R&I Missions: what do we want to achieve?

- Prioritise investments on global **challenges** where the EU adds most value
- Focus on areas with **transformative potential** for science, technology, industry or society
- Induce **collaboration** cross-sector and cross-discipline, including SSH
- Stimulate **demand** for innovative solutions by involving civil society
- Highlight the **contribution** of R&I to solving challenges
- **Inspire** and mobilise **citizens** around clear time-bound goals
- **Set the direction** for public and private R&I in Europe, leverage further investments, improve societal uptake of results
Stakeholders support a mission-oriented approach

- Stakeholders support missions:
  - with potential **societal relevance**
  - to improve the **impact and visibility** of EU R&I
- Missions should be **limited in number**, easy to communicate, with a concrete budget and timeline, offering breakthrough potential and a clear EU added value
- **Cross-disciplinary**, non-prescriptive calls, citizen involvement

Impact Assessment annex 8-2
Six main areas of intervention

Health throughout the Life Course

Environmental and Social Health Determinants

Non-communicable and Rare Diseases

Infectious diseases

Tools, Technologies and Digital Solutions for Health and Care

Health Care Systems
People in vulnerable stages of life have specific health needs, that require better understanding and tailored solutions.

- Early development and the aging process
- Maternal and child health
- Health needs of adolescents
- People with disabilities and injuries
- Active life for the elderly
- Health education and digital health literacy
#2 Environmental and Social Health Determinants

We need to better understand how the social, economic and physical environment impacts our health and mitigate health risks and threats.

- Health hazards of chemicals, pollutants and environmental stressors
- Capacity and infrastructure to collect, share and combine exposure data with health and diseases
- Environmental, occupational, social and behavioural factors impacting physical and mental health
- Risk assessment, management and communication
- Health promotion and prevention
Non-communicable and Rare Diseases

Non-communicable diseases remain a major health and societal challenge requiring personalized approaches.

- Earlier and more accurate diagnoses
- Prevention and screening programmes
- Treatments and cures
- Palliative care
- Comparative effectiveness of interventions
- Scale up of health interventions
- Integrated solutions for self-monitoring, health promotion, disease prevention and management’
#4 Infectious Diseases

We must protect people in the world from the threats of infectious diseases and AMR.

- Drivers for the emergence and re-emergence of infectious diseases and their spread
- Prediction, early detection and surveillance of infectious diseases and AMR pathogens
- Vaccines, diagnostics, treatments and cures
- Emergency preparedness, response and recovery measures
- Uptake of medical interventions in clinical practice, health systems
- Specific challenges in low- and middle-income countries (LMICs)
#5 Tools, Technologies and Digital Solutions for Health and Care

New technologies are vital for public health and the competitiveness of European Health related industries.

- Tools and technologies for medical indications
- Integrated solutions for health incl. mobile and telehealth
- Piloting and large-scale deployment of healthcare technologies and tools in real-life settings
- Innovative processes for development, manufacturing and rapid delivery
- Safety, efficacy, quality and ethical and social impact
- Regulatory science
#6 Health Care Systems

Health systems are a key asset of the EU social system. We shall keep them accessible, resilient and sustainable and harness the potential of data-driven and digital innovation.

- Reforms in public health systems and policies
- New models for health and care and future workforce
- Improving health technology assessment
- Use of health data respecting security, privacy and interoperability
- Health systems resilience – crises and disruptive innovation
- Patient empowerment, self-monitoring, user-centered integrated care
High Level Group initiative

Action Plan on Childhood Obesity 2014-2020

**Aim:** contribute to halting the rise in childhood obesity by 2020 through voluntary actions at national level

**AREAS FOR ACTION**

1. Support a healthy start in life
2. Promote healthier environments, especially in schools and pre-schools
3. Make the healthy option the easier option
4. Restrict marketing and advertising to children
5. Inform and empower families
6. Encourage physical activity
7. Monitor and evaluate
8. Increase research
Midterm evaluation – an example
Promote healthier environments, especially in schools

- Improve school environment
- (Policies on) freely accessible fresh drinking water
- Policies on vending machines
- Policies on energy drinks
- Mandatory nutrition education in school
- Mandatory physical education in school
Vaccination

http://ec.europa.eu/avservices/video/player.cfm?sitelang=en&ref=I154315

EU citizens still die from vaccine preventable diseases! The threat continues
Putting people at the centre of health and care

Enabling secure access to health data across the EU

Data sharing for better research and personalised healthcare

Empowering patients with digital tools

#DigitalSingleMarket
#DigitalHealth
Horizon Europe: Goals, Missions

Policy alignment

Example:

*Digital tools for citizen empowerment and for person-centred care*

“Person-centred approaches to organising health and care can allow citizens to assume responsibility for their health, improve their well-being and the quality of care and contribute to sustainable health systems”
ARTIFICIAL INTELLIGENCE

AI is helping to solve some of the world's biggest challenges: from treating chronic diseases or reducing fatality rates in traffic accidents to fighting climate change or anticipating cybersecurity threats.
Resources

HubIT
TECHNOLOGY WITH AND FOR SOCIETY

CANDID
Checking Assumptions and promoting responsibility in smart Development projects

Ethics of Coding
Useful links

Find out more about H2020:

Funding opportunities 2019-2020:

Horizon Europe:
- http://ec.europa.eu/horizon-europe
Thank you for your attention!

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