



#HorizonEU

## THE EU RESEARCH & INNOVATION PROGRAMME

2021 - 2027

Cyprus National Info Day: Cluster 1: "Health"

**Work Programme 2023-24** 

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Research and Innovation

## Horizon Europe

aims of the Commission's € 100 billion research and innovation funding programme for seven years (2021-2027)



to strengthen the EU's scientific and technological bases



to boost Europe's innovation capacity, competitiveness and jobs



to deliver on citizens' priorities and sustain our socio-economic model and values

Additional € 4.1 billion are allocated for defence research, in a separate proposal for a European Defence Fund



## **Health in Horizon Europe**



#### **HORIZON EUROPE**

#### **EURATOM**

**Fusion** 

**Fission** 

Joint Research

Center

(JRC)

#### SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

**Development** actions

#### SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

Exclusive focus on civil applications



**European Research Council** 

Marie Skłodowska-Curie

**Research Infrastructures** 



Clusters

Pillar II - €58.9 billion GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Health – €8.25 billion

 Culture, Creativity & Inclusive Society

- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

**Joint Research Centre** 



European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology\*

#### WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme





## **Horizon Europe – funding modalities**

- Grants to individual researchers/fellows, teams, infrastructures, innovators under Pillar 1 (ERC, MSCA) and Pillar 3 (EIC)
   → bottom-up open competition
- Grants to collaborative R&I projects (Pillar 2, incl. Cluster 1 'Health')
   → top-down open competition by multi/international consortia proposing projects on specific topics in response to calls for proposals
- Grants to contracting authorities/entities (Pillar 2, incl. Cluster 1 'Health')

  → for pre-commercial procurement of R&I services and procurement of innovative solutions
- Missions driven by inspirational goals for impact (Pillar 2, incl. mission on cancer)
- Synergies with EU4Health, Digital Europe Programme, InvestEU, other

## Horizon Europe – 49 European Partnerships

### **Partnerships**

- Strategic Plan identifies 49 co-programmed and co-funded partnerships:
  - public-public;
  - public-private;
  - global initiatives.
- EC proposals for 10 institutionalised partnerships based on Art 185/187 (23 Feb 2021)
- HE partnerships website:

https://research-and-innovation.ec.europa.eu/funding/fundingopportunities/funding-programmes-and-open-calls/horizoneurope/european-partnerships-horizon-europe\_en

#### **CLUSTER 1: Health**

Innovative Health Initiative

Global Health Partnership

Transformation of health systems\*

Chemicals risk assessment\*

**ERA for Health\*** 

Rare diseases\*\*

One-Health Anti Microbial Resistance\*\*

Personalised Medicine\*\*

Pandemic Preparedness\*\*
Co-funded or co-programmed

Institutionalised Partnerships (Art 185/7)

Institutionalised Partnerships / EIT KICs

Co-Programmed

Co-Funded

Calls with opening dates in 2021-22

\*\* Calls with opening dates in 2023-24



## **Horizon Europe – 5 Missions Areas**











Adaptation to climate change, including societal transformation

**Cancer** 

Healthy oceans, seas, coastal & inland waters

Climateneutral & smart cities Soil health & food

### **Mission on Cancer**

• 5 intervention areas (+ cross-cutting actions)

Understanding

Prevention

Diagnostic and Treatment

Quality of Life

**Equitable Access** 

Goal: by 2030, more than 3 million lives

saved, living longer and better

Cross-Cutting
Actions



## Synergies with other Union programmes

#### **HORIZON EUROPE** Other Union Programmes, including Common ESF+ **Innovation Fund** InvestEU **Agricultural Policy Digital Internal Security External Instrument** LIFE **Europe Fund and** Instrument for **Maritime & Border Space EU4Health Fisheries Fund Programme** Management Connecting **Single Market ERASMUS+ ERDF Europe Facility Programme** Creative **Just Transition Recovery and Mechanism Resilience Facility** Europe

### **Enhanced synergies**

#### **COMPATIBILITY**

Harmonisation of funding rules; flexible co-funding schemes; pooling resources at EU level

## COHERENCE & COMPLEMENTARITY

Alignment of strategic priorities in support of a common vision



## HORIZON EUROPE WP 2023-2024 SYNERGIES WITH THE EU4HEALTH PROGRAMME



Disease Prevention & Health Promotion



Non-Communicable Diseases



Digital Health







Health Systems



Mental Health



### Structure of the WP 2023-2024

Work programme 2023-2024 - Cluster 1 ,Health'



KEY
STRATEGIC
ORIENTATIONS
FOR R&I

KSO A: Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains KSO D: Creating a more resilient, inclusive and democratic European society

IMPACT AREAS Competitive and secure data-economy

High quality digital services for all

A resilient EU prepared for emerging threats

Good health and high-quality accessible healthcare



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## EXPECTED IMPACTS

- Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
- Maintaining an innovative, sustainable and globally competitive health-related industry
- Staying healthy in a rapidly changing society
- Living and working in a healthpromoting environment
- Tackling diseases and reducing their burden
- Ensuring access to innovative, sustainable & high-quality health care



# How will Cluster 1 of Horizon Europe make a difference?



## Horizon Europe – Cluster 1 ,Health'

### Strategic Plan 2021-24 → 6 Expected Impacts

= 6 "Destinations" of :

### Work Programme 2023-24

- 1. Staying healthy in a rapidly changing society
- 2. Living and working in a health-promoting environment
- 3. Tackling diseases & reducing disease burden
- Ensuring access to innovative, sustainable
   high-quality healthcare
- Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
- 6. Maintaining an innovative, sustainable & globally competitive health industry

### → Topics (Calls)

Focus on outcomes contributing to the impacts specified per Destination

#### Project proposals should

- make a clear case (value proposition)
- supported by a convincing trajectory (pathway to impact) for the project proposal to deliver the output, promote the outcome described in the topic, and contribute to the impact expected under that destination.



## Destination 1: Staying healthy in a rapidly changing society

Call – Staying Healthy (Single stage - 2023) - (€40 million-RIA)



• The Silver Deal - Person-centred health and care in European regions

Call – Staying Healthy (Two stage - 2024) – (€80 million)



- Towards a holistic support to children and adolescents' health and care provisions in an increasingly digital society (€30 million - RIA)
- Personalised prevention of non communicable diseases addressing areas of unmet needs using multiple data sources (€50 million- RIA)



## Destination 2: Living and working in a health-promoting environment

Call – Environment and health (Single stage - 2023) – (€103 million)

- Planetary health: understanding the links between environmental degradation and health impacts -(€30 million –RIA)
- Evidence-based interventions for promotion of mental and physical health in changing working environments (post-pandemic workplaces) - (€30 million - RIA)
- Health impacts of endocrine-disrupting chemicals: bridging science-policy gaps by addressing persistent scientific uncertainties - (€40 million-RIA)
- Global coordination of exposome research (€3 million CSA)



4 topics

## Destination 2: Living and working in a health-promoting environment

Call – Environment and health (Two stage - 2024) – (€60 million - RIA)



• The role of environmental pollution in non-communicable diseases: air, noise and light and hazardous waste pollution



### Destination 3: Tackling diseases & reducing disease burden

Call – Tackling diseases (Single stage - 2023) - (€224 million)



- Novel approaches for palliative and end-of life care for non-cancer patients (€50 million -RIA)
- Interventions in city environments to reduce risk of non-communicable disease (Global Alliance for Chronic Diseases - GACD) (€20 million - RIA)
- <u>Pandemic preparedness and response: Broad spectrum anti-viral therapeutics for infectious diseases with epidemic potential (</u>€50 million RIA)
- Pandemic preparedness and response: Sustaining established coordination mechanisms for European adaptive platform trials and/or for cohort networks (€3 million - CSA)
- Towards structuring brain health research in Europe (€1 million CSA)
- Relationship between infections and noncommunicable diseases (€30 million RIA)
- Pandemic preparedness and response: Understanding vaccine induced-immunity (€20 million RIA)
- Pandemic preparedness and response: Immunogenicity of viral proteins of viruses with epidemic and pandemic potential (€50 million -RIA)

## Destination 3: Tackling diseases & reducing disease burden

Call – Tackling diseases (Two stage - 2024) (€125 million)



- Comparative effectiveness research for healthcare interventions in areas of high public health need (€45 million-RIA)
- Pandemic preparedness and response: Adaptive platform trials for pandemic preparedness (€30 million -RIA)
- Validation of fluid-derived biomarkers for the prediction and prevention of brain disorders (€25 million -RIA)
- Tackling high-burden for patients, under-researched medical conditions (€25 million RIA)

#### Call – Tackling diseases (Single stage - 2024) (€52 million)



- Pandemic preparedness and response: Maintaining the European partnership for pandemic preparedness (€2 million - CSA)
- Pandemic preparedness and response: Hostpathogen interactions of infectious diseases with epidemic potential (€50 million - RIA)



## Destination 3: Tackling diseases & reducing disease burden

#### Call – Partnerships in Health (2023) - (€50 million- COFUND)

European Partnership on Rare Diseases

#### Partnerships in Health (2024) (€100 million - COFUND)

• European Partnership : One Health Antimicrobial Resistance

#### Scope:

- Contribute to the priorities set in the European One Health Action plan fight AMR



## Destination 4: Ensuring access to innovative, sustainable & high-quality healthcare



Call - Ensuring access to innovative, sustainable & high-quality healthcare (Single stage – 2023) - (€60 million)

- Maintaining access to regular health and care services in case of cross-border emergencies (€20 million -RIA)
- Resilience and mental wellbeing of the health and care workforce (€20 million -RIA)
- Environmentally sustainable and climate neutral health and care systems (€20 million -RIA)



## Destination 4: Ensuring access to innovative, sustainable & high-quality healthcare

Call – Partnerships in Health (2023) - (€100 million -COFUND)

European Partnership on Personalised Medicine

Call - Ensuring access to innovative, sustainable & high-quality healthcare -Two stage – 2024 (€30 million - RIA)



Access to health and care services for people in vulnerable situations



## Destination 5: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society

Call – Tools and technologies for a healthy society (Single stage - 2023) – (€214 million)

6 topics

- Clinical trials of combined Advanced Therapy Medicinal Products (ATMPs) (€50 million -RIA)
- Integrated, multi-scale computational models of patient patho-physiology ('virtual twins') for personalized disease management (€50 million RIA)
- <u>Better integration and use of health-related real world and research data, including genomics, for improved clinical outcomes</u> (€35 million RIA)
- Harnessing the potential of real-time data analysis and secure Point-of-Care computing for the benefit of person-centred health and care delivery (€35 million - IA)
- Pandemic preparedness and response: In vitro diagnostic devices to tackle cross-border health threats
   (€40 million IA)
- Developing a Data Quality and Utility Label for the European Health Data Space (€4 million CSA)



## Destination 5: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society

Call – Tools and technologies for a healthy society (Single stage - 2024) – (€25 million -RIA)

1 topic

Bio-printing of living cells for regenerative medicine

Call – Tools and technologies for a healthy society (Two stage - 2024) – (€25 million -RIA)

1 topic

• Innovative non-animal human-based tools and strategies for biomedical research



# Destination 6: Maintaining an innovative, sustainable & globally competitive health industry

Call - A competitive health-related industry (Single stage - 2023) - (€56 million)

- Supporting the uptake of innovative Health Technology Assessment (HTA) methodology and advancing HTA expertise across EU (€5 million -CSA)
- Expanding the European Electronic Health Record exchange Format to improve interoperability within the European Health Data Space (€8 million -RIA)
- Modelling and simulation to address regulatory needs in the development of orphan and paediatric medicines (€25 million - RIA)
- Mapping the hurdles for the clinical applications of Advanced Therapy Medicinal Products (ATMPs) (€3 million -CSA)
- Development and harmonisation of methodologies for assessing digital health technologies in Europe (€15 million - RIA)

# Destination 6: Maintaining an innovative, sustainable & globally competitive health industry

Call - A competitive health-related industry (Single stage - 2024) – (€12 million)

- <u>Developing EU methodological frameworks for clinical/performance evaluation and post-market clinical/performance follow-up of medical devices and in vitro diagnostic medical devices (IVDs)</u>
   (€10 million -RIA)
- Gaining experience and confidence in New Approach Methodologies (NAM) for regulatory safety
   and efficacy testing coordinated training and experience exchange for regulators (€2 million CSA)



## Horizon Europe – Cluster 1 ,Health'

Timelines for calls WP 2023-2024: Topics/Calls in 2023)

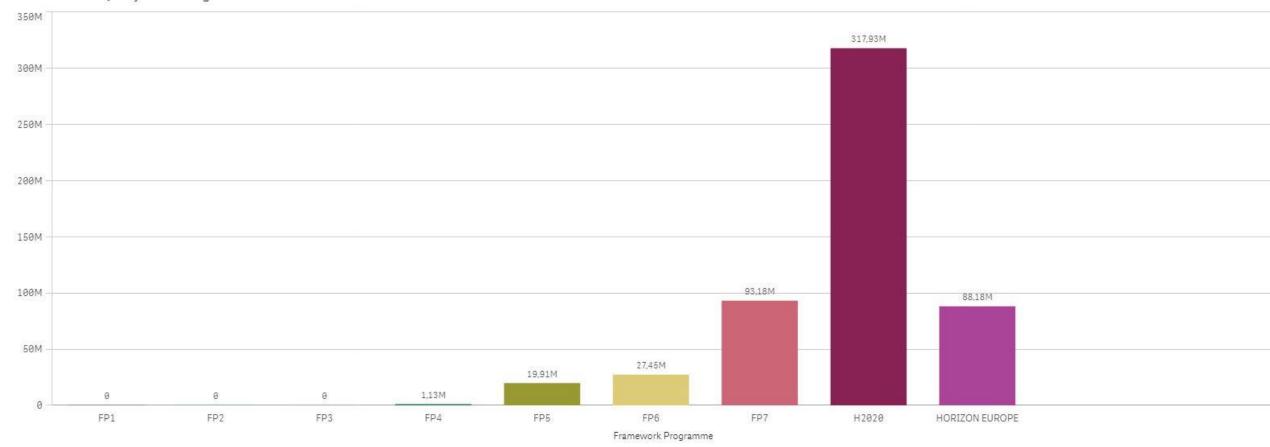
- Opening of calls: 12 January 2023
- Closure of calls (deadline) : 13 April 2023 (1)
- Informing applicants of shortlisted proposals: early August 2023

(1) Except: "HORIZON-HLTH-2023-DISEASE-07-01: European Partnership on Rare Diseases", closing on 19 September 2023



## **Cyprus participation**

#### EU Contribution (EUR) across Programmes

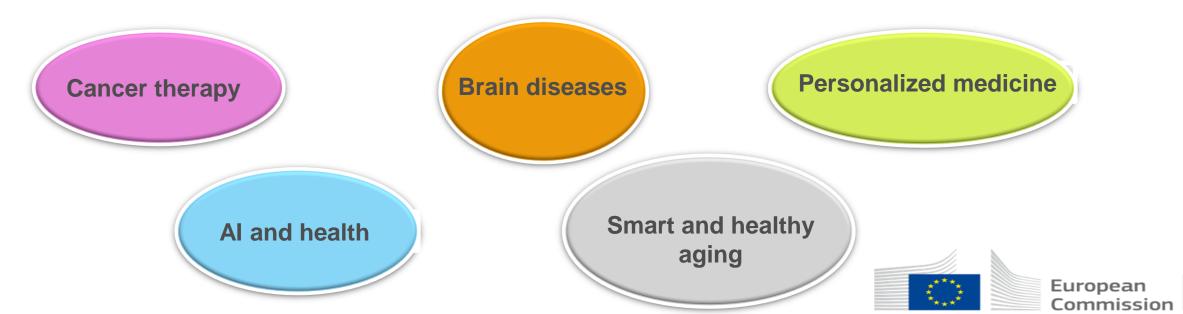


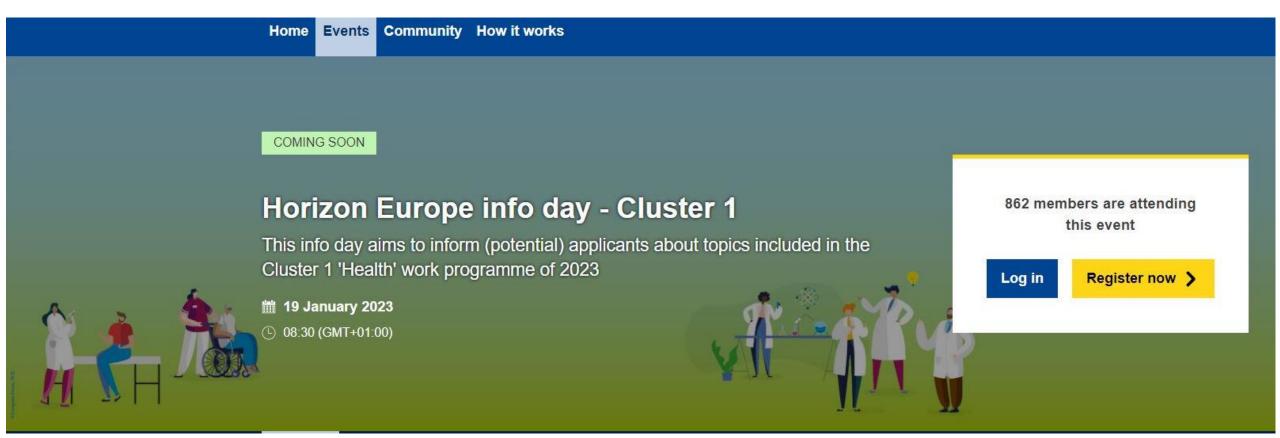


## Cyprus participation – Cluster 1 "Health"

	No projects	Sum of Participant Requested EU Contrib
HORIZON 2020	51	15.639.418,04
HORIZON EUROPE	23	6.275.291,26
Total	74	21.914.709,30

### Thematic areas





#### **Ask questions**

Questions can be <u>submitted via Slido</u>, under the corresponding destination by using #CL1INFODAY. All of the questions submitted will be answered live during the event.





20 January 2023

CLUSTER Health - Horizon Europe Brokerage Event 2023

Don't miss the opportunity to get involved in the next Horizon Europe 2023 Health proposals! Friday, 20th January 2023 | 09:30 - 17:30 CET

This international partnering event will help you to build your consortium for the upcoming 2023 calls of the 2023-2024 Health and Mission Cancer Work Programmes.





## Thank you!

### #HorizonEU

http://ec.europa.eu/horizon-europe

