Nicole Wyss National Contact Point (NCP) for Health Euresearch Network Office

Horizon Europe

Health



Swiss guide to European research and innovation



Horizon Europe – 9th Framework Programme for R&I (2021-2027)



Pillar I

Excellent Science

European Research Council (ERC)

Marie Skłodowska-Curie Actions (MSCA)

Research Infrastructures

Pillar II

Global Challenges and European Industrial Competitiveness

Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Non-nuclear direct actions of the Joint Research Centre (JRC)

Pillar III

Innovative Europe

European Innovation Council (EIC)

European Innovation Ecosystems (EIE)

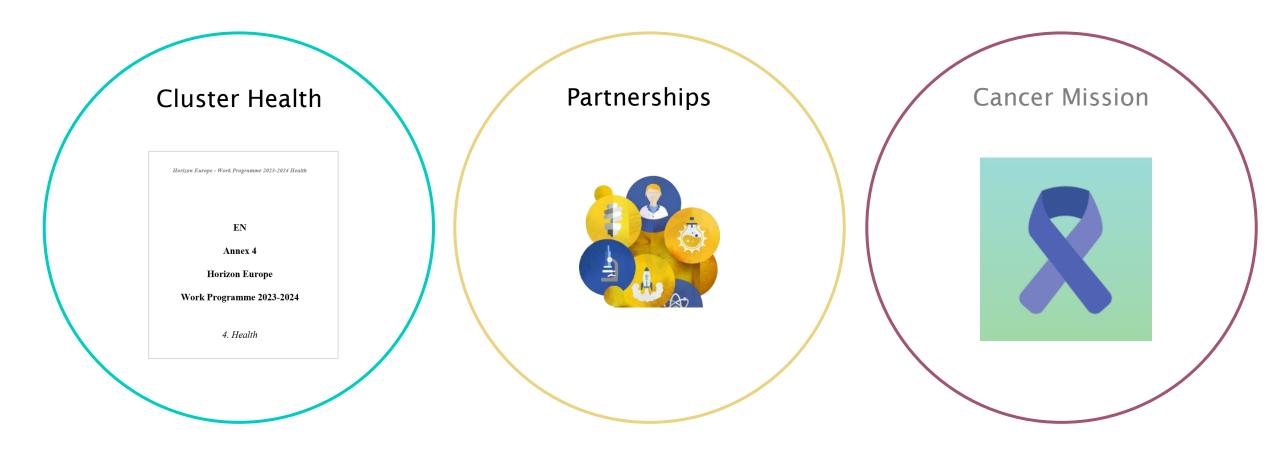
European Institute of Innovation and Technology (EIT)

Part: Widening participation and strengthening the European Research Area

Widening participation and spreading excellence Reforming and enhancing the European Research and Innovation system









Cluster Health

Horizon Europe - Work Programme 2023-2024 Health

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Annex 4

Horizon Europe

Work Programme 2023-2024

4. Health

Health-Related Destinations



1

Staying healthy in a rapidly changing society

2

Living & working in a healthpromoting environment 3

Tackling diseases & reducing disease burden

4

Ensuring access to innovative, sustainable & high-quality Healthcare

5

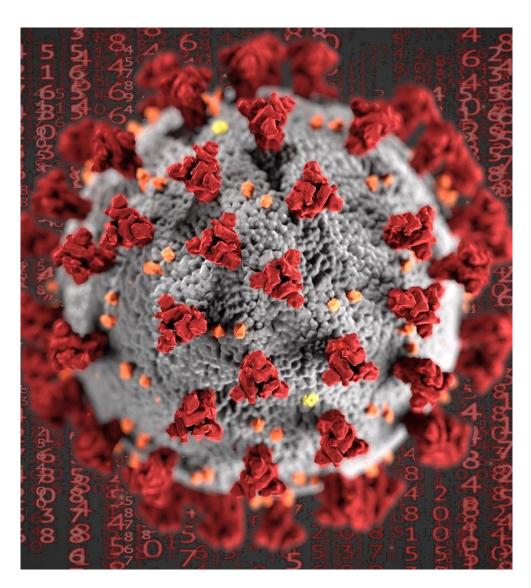
Unlocking the full potential of new tools, technologies & digital solutions for a healthy society

6

Maintaining an innovative, sustainable & globally competitive health industry







- Support to partnership on pandemic preparedness
- Host-pathogen interaction, anti-viral therapeutics
- OH-AMR partnership

Maintaining the European partnership for pandemic preparedness HORIZON-HLTH-2024-DISEASE-08-12



Scope

- Provide an **efficient secretariat** for the partnership
- Provide administrative and organisational support to the Members in the partnership
- Provide strong scientific support on topics requested by the GloPID-R Chairs, scientific advisors or (working) groups

Expected Outcome

 Research funders, policymakers and the research community are aligned towards common objectives and have a common understanding of the long-term SRIA

Type of Action: CSA

Budget: € 2 million /project

Deadline: 11 April 2024

Host pathogen interaction of infectious diseases with epidemic potential HORIZON-HLTH-2024-DISEASE-08-20



Scope

- Characterise host-pathogen interactions to inhibit viral replication and exit strategies, and to develop therapeutic antibodies and vaccines
- Target viruses: Hendra and Nipah virus, Lassa virus, Crimean Congo haemorrhagic fever virus, Rift Valley fever virus, Ebola and Marburg virus, Dengue virus, Yellow Fever virus, Zika virus, West Nile fever virus and Chikungunya virus
- Identify receptor and ligand (sub)units that could be targeted by preventive or therapeutic intervention

Expected Outcome

- Novel approaches for the prevention and treatment for emerging and re-emerging infections
- Diverse and robust development pipeline of vaccine candidates and candidates that inhibit cellular uptake of viruses

Type of Action: RIA

Budget: € 7-8 million /project

Deadline: 11 April 2024

European Partnership: One Health Anti-Microbial Resistance HORIZON-HLTH-2024-DISEASE-09-01



Scope

 Support excellent OH AMR research and development of new prevention methods, interventions, treatments and diagnostics through annual joint transnational research calls and research network calls

Expected Outcome

 EU and national agencies, policymakers and funders enhance their collaboration and coordination for a strengthened 'One Health (OH) approach to fight antimicrobial resistance (AMR)'

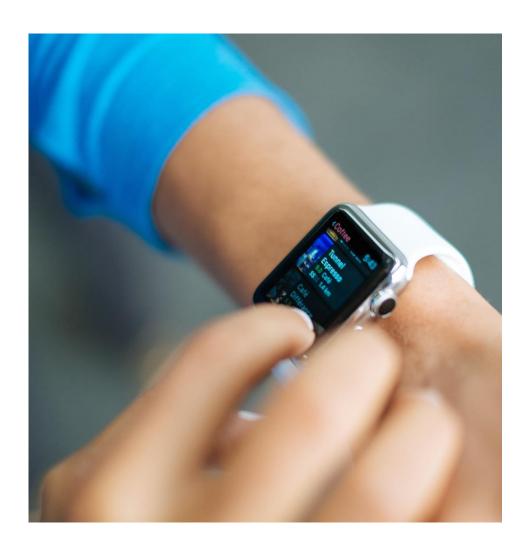
Type of Action: COFUND

Budget: € 100 million /project

Deadline: 11 April 2024



5. Unlocking the full Potential of new Tools, Technologies & Digital Solutions for a Healthy Society



Bio-printing, regenerative medicine, tissue engineering

Bio-printing of living cells for regenerative medicine HORIZON-HLTH-2024-TOOL-11-02



Scope

- **Multidisciplinary teams** of engineers, biomedical scientists, cell biologists and medical doctors
- Design the best bio-printing strategy for at least one type of tissue. Cover all steps of the bio-printing suite at target site.
- Scale-up the chosen bio-printing technology to a GMP-conform manufacturing process

Expected Outcome

- Larger-scale bio-printed tissues available for industry and academia
- Healthcare providers dispose of tools enabling them to treat conditions of unmet medical need
- Fully functional synthetic constructs of complex tissues or organs

Type of Action: RIA

Budget: € 6-8 million /project

Deadline: 11 April 2024



6. Maintaining an Innovative, Sustainable & Globally Competitive Health Industry



Harmonisation of methodologies for assessing digital health technologies



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) HORIZON-HLTH-2024-IND-06-08

Scope

- Develop a framework for a life-cycle approach to evaluation of high-risk and innovative medical devices and IVDs
- For medical devices, **a pilot** to support development of **common specifications**

Expected Outcome

- Regulators have access to sound scientific resources for clinical/performance evaluation guidance and development of common specifications
- Health technology developers understand evidence needed to demonstrate that devices meet MDR clinical requirements throughout their lifetime

Type of Action: RIA

Budget: € 8-10 million /project

Deadline: 11 April 2024

Features Calls 2024





Entities established in the US are eligible to receive EU funding

Deadline 11.04.2024

Health Partnerships



Nine Health Partnerships



Co-funded

- Partnership for the Assessment of Risk from Chemicals
- OneHealth/AMR

Co-funded

- Transforming Health and Care Systems (THCS)
- ERA4Health
- Pandemic preparedness
- Personalised Medicine
- Rare Diseases

Institutionalised

- Innovative Health Initiative (IHI)
- EU-Africa Global Health Partnership (EDCTP3)

NutriBrain_E4H











- Improve cognitive brain ageing through nutrition and other lifestyle factors
- Pilot test interventions
- Provide a public health approach
- Omics approach, brain imaging, biomarkers, digital health data use
- Mix of academia, clinical sector, companies, operational stakeholder
- At least 3 countries, max 5 partners
- Deadline for pre-proposal: 15.01.2024

Innovative Health Initiative (IHI)















Areas IHI Addresses



Treatments and diagnostics

Products and services with big data, Al

Integrate new products in care pathways



IHI Call 5: Open

- HORIZON-JU-IHI-2023-05; RIA; single stage; deadline: 16 January 2024
- 1: Accelerating the implementation of New Approach Methodologies and other innovative non-animal approaches for the development, testing and production of health technologies
- 2: Development and proof of principle of new clinical applications of theranostics solutions
- 3: Improved prediction, detection, and treatment approaches for comprehensive stroke management
- 4: Maximising the potential of synthetic data generation in healthcare applications

IHI Calls 6 & 7: Upcoming



IHI call 6 (two-stage)

- Support healthcare system resilience through a focus on persistency in the treatment of chronic diseases
- Development of practical guidance and recommendations for using real world data/real world evidence in healthcare decision-making

IHI call 7 (single-stage)

- <u>Improving clinical management of heart disease from early detection to treatment</u>
- User-centric technologies and optimised hospital workflows for a sustainable healthcare workforce
- <u>Clinical validation of biomarkers for diagnosis,</u> monitoring disease progression and treatment response



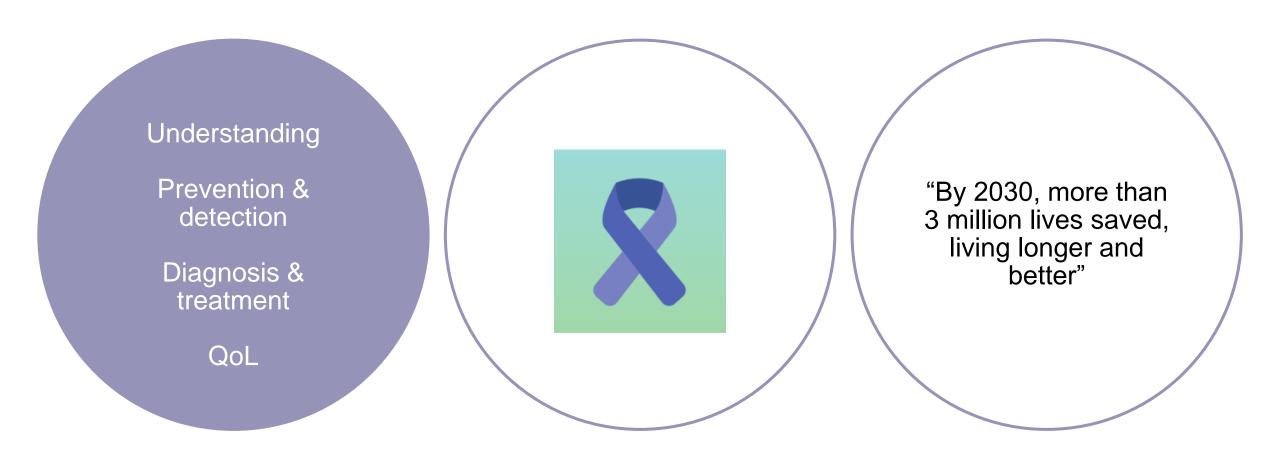
Future opportunities

We publish draft information on future calls ahead of publication to give applicants additional time to find or build a consortium and prepare a strong proposal.











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Advanced biomaterials for the Health Care (IA) HORIZON-CL4-2024-RESILIENCE-01-36



Scope

- Functional characteristics beyond biocompatibility, properties that can be used to control the physiological environment (shape-memory, self-healing properties) and induce a response
- Biomaterials with antibacterial properties

Expected Outcome

 Easy deliverability into the body, increased implantation precision, controllable release of therapeutic agents, antimicrobial properties and the possibility of monitoring or stimulating biological events

Type of Action: IA

Budget: € 6-8 million /project

Deadlines: 7 Feb 2024; 24 Sep 2024

National Contact Points for Health health@euresearch.ch www.euresearch.ch



Sasha Hugentobler



Nicole Wyss



The information provided by Euresearch is

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Swiss guide to European research and innovation