

Какие конкурсы открыты в 2017 году?

Тренинг
«Как принять участие в Рамочной Программе ЕС Горизонт 2020:
от идеи к заявке»

26 мая 2016 года, МНОЦ МГУ



Health, Demographic Change and Wellbeing

Здравоохранение, демографические изменения и качество жизни

<http://ec.europa.eu/programmes/horizon2020/en/h2020-section/health-demographic-change-and-wellbeing>

Научные исследования нацелены на долголетие, на продление активного и здорового образа жизни и разработку новых, безопасных и эффективных методов терапии

Personalised Medicine (PM)

Coordination activities (HCO)

The programme will implement several research priorities: personalised medicine, rare diseases, human bio-monitoring, mental health, comparative effectiveness research, advanced technologies, e/m-health, robotics, patient empowerment, active and healthy ageing, data security, big data, valorisation, anti-microbial resistance, infectious diseases including vaccines, maternal and child health



Work Programme 2016-2017



EN

Horizon 2020

Work Programme 2016 - 2017

8. Health, demographic change and well-being

Important notice on the second Horizon 2020 Work Programme

This Work Programme covers 2016 and 2017. The parts of the Work Programme that relate to 2017 are provided at this stage on an indicative basis. Such Work Programme parts will be decided during 2016.

(European Commission Decision C (2015)6776 of 13 October 2015)

**Adoption of
work
programme**

13 October 2015

**Submission
deadlines for
your proposals**

One-stage: 31 January 2017

(1 call)

14 March 2017

(3 calls)

11 April 2017

(5 calls)

Two-stage: 04 October 2016

http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html#h2020-work-programmes-2016-17

Deadline 31 January 2017

- SC1-PM-15-2017

Deadline 14 March 2017

- SC1-PM-16-2017
- SC1-PM-17-2017
- SC1-PM-19-2017

Deadline 11 April 2017

- SC1-PM-03-2017
- SC1-PM-20-2017
- SC1-HCO-03-2017
- SC1-HCO-07-2017
- SC1-HCO-08-2017

Deadline

1st stage 04 October 2016

2nd stage 11 April 2017

- SC1-PM-02-2017
- SC1-PM-07-2017
- SC1-PM-08-2017
- SC1-PM-10-2017



SC1-PM-02-2017:**New concepts in patient stratification**

- Proposals should deliver novel concepts for disease-mechanism based patient stratification to address the needs for stratified or personalised therapeutic interventions. The proposals should integrate multidimensional and longitudinal data and harness the power of -omics, including pharmacogenomics, systems biomedicine approaches, network analysis and of computational modelling. The new concepts of stratification should be validated in pre-clinical and clinical studies taking into account sex and gender differences. Applicants are encouraged to actively involve patient associations. The proposals should consider regulatory aspects of clinical practice and commercialisation opportunities. Proposals should focus on complex diseases having high prevalence and high economic impact.
- Expected Impact:
 - New models for patient stratification to inform clinical decision making.
 - Accelerate the translation of biomedical and clinical research results to medical use.
 - Increased cost-effectiveness of the novel concepts in comparison to already established practices.



SC1-PM-03–2017:

Diagnostic characterisation of rare diseases

- The **aim** of this research should be to apply genomics and/or other –omics and/or other high-throughput approaches for the molecular characterisation of rare diseases in view of developing molecular diagnoses for a large number of undiagnosed rare diseases. Undiagnosed rare diseases may range from a group of unnamed disorders with common characteristics to a phenotypically well described disease or group of diseases with an unknown molecular basis. Genetic variability due to geographical distribution and/or different ethnicity should be taken into account as well as genotype-phenotype correlation whenever applicable. In addition, age, sex and gender aspects should be included where appropriate. This large-scale proposal should promote common standards and terminologies for rare disease classification and support appropriate bioinformatics tools and incentives to facilitate data sharing. Existing resources should be used for depositing data generated by this proposal. Molecular and/or functional characterisation may be part of the proposal to confirm diagnosis. The proposal should enable and foster scientific exchange between stakeholders from countries and regions with different practices and strategies of rare disease diagnostics.
- The selected proposal shall contribute to the objectives of, and follow the guidelines and policies of the International Rare Diseases Research Consortium IRDiRC (www.irdirc.org).
- **Expected Impact:**
 - Providing better and faster means of high quality and clinical utility for the correct diagnosis of undiagnosed rare diseases for which there is no or unsatisfactory diagnosis available.



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. The proposals should aim at increasing resilience and mitigating the impact of biological, psychosocial and environmental risk factors. The target group should include young up to 25 years (or a subgroup there of), which is an age limit often used as many severe disorders start in this period. The research design should be developed by means of a multidisciplinary approach and involve the young themselves and other relevant stakeholders. Innovative approaches in involving the young and gathering their inputs for the design of the intervention should be considered. The interventions should use a holistic approach, taking gender and health inequality aspects into account, in increasing resilience and empowering the young. The interventions to be developed should reflect the diversity of the different countries and regions in Europe and beyond. The research should pay particular attention to ethical issues. The interventions should be assessed for mental well-being outcomes as well as the economic and social benefits and impact on reducing inequalities. These analyses of impact and effectiveness should be presented in quantitative as well as qualitative terms, in a gender disaggregated way where relevant. The results should be disseminated throughout Europe and beyond in order that the evidence generated is fully exploited.

Expected Impact:

- Improved mental well-being in the targeted group of young people.
- Improved societal benefits.
- Real effect of reducing the occurrence of mental disorders and co-morbidities associated with mental disorders later in life.



SC1-PM-08–2017: New therapies for rare diseases

- Support will be provided to clinical trials on substances where orphan designation has been given by the European Commission, where the proposed clinical trial design takes into account recommendations from protocol assistance given by the European Medicines Agency, and where a clear patient recruitment strategy is presented. Clinical trials may focus on a range of interventions with an orphan designation, from small molecule to gene or cell therapy, may include novel interventions and/or repurposing of existing and known interventions. The intervention must have been granted the EU orphan designation at the latest on the date of the full proposal call closure. A concise feasibility assessment justified by available published and preliminary preclinical or clinical results and supporting data shall also be provided. Appropriate plans to engage with patient organisations, Member States health authorities and considerations of efficacy/potential clinical benefit as well as early indication on health economics should be integrated in the application. In addition to the clinical trial, proposals may also include limited elements of late stage preclinical research and/or experimental evaluation of potential risks which must be complementary/contribute to the clinical trial(s) carried out within the proposal. The centre of gravity must clearly be the clinical trial(s). The participation of SMEs is encouraged.
- Selected proposals shall contribute to the objectives of, and follow the guidelines and policies of the International Rare Diseases Research Consortium, IRDiRC (www.irdirc.org).
- **Expected Impact:**
 - proposals shall contribute to advance the development of new therapeutic options with concrete benefits for patients living with rare diseases.
 - Rapid progress in orphan drug development due to well-prepared clinical trials and a multinational multicentre clinical trial with an appropriate number of patients.



SC1-PM-10–2017:

Comparing the effectiveness of existing healthcare interventions in the adult population

- Proposals should compare the use of currently available preventative or therapeutic (pharmacological as well as non-pharmacological) healthcare interventions in adults. While there is no restriction on the diseases or interventions to be the focus of proposals, preference will be given to proposals focusing on interventions with high public health relevance and socio-economic impact, i.e. interventions addressing conditions that are particularly frequent, may lead to co-morbidities, have a high negative impact on the quality of life of the individual and/or are associated with significant costs or where savings can be achieved. A cost effectiveness analysis must be included. Given the focus on existing interventions, proposals will aim to contribute to improve interventions, take decisions about the discontinuation of interventions that are less effective or less cost-effective than others, and make recommendations on the most effective and cost-effective approaches. A comprehensive array of clinical and safety parameters, as well as health and socio-economic outcomes (e.g. quality of life, patient mortality, morbidity, costs, and performance of the health systems) for chosen populations should be assessed. Where relevant the study population should address gender as well as socio-economic differentials in health and/or any other factors that affect health equity.
- **Expected Impact:**
 - more effective and safer interventions at individual and population level;
 - the use of health technology assessment methodology in this target group.



ACTIVE AGEING AND SELF-MANAGEMENT OF HEALTH

SC1-PM-15-2017:

Personalised coaching for well-being and care of people as they age

- The "coach" should provide personalised advice, guidance and follow-up for key age related issues in daily life which impact the person's ability to remain active and independent, for example diet, physical activity, risk avoidance, preventive measures, lifestyle and activity management, leisure, social participation and overall wellness. The goal should be to preserve physical, cognitive, mental and social well-being for as long as possible and to facilitate interaction with carers (where relevant).
- **Expected Impact:**
 - Usefulness and effectiveness of personalized recommendations and follow-up in terms of the goals of preserving physical, cognitive, mental and social well-being for as long as possible;
 - Validation of non-obtrusive technology for physical, cognitive, social and mental well-being;
 - Potential cost-effectiveness due to enhanced self-care, life-style and care management

Пример успешного проекта



SC1-PM-16–2017:

In-silico trials for developing and assessing biomedical products

- Proposals will develop innovative in-silico trials for designing, developing and assessing drugs, radiation and other biomedical and bioactive products. They will build on comprehensive biological and biomedical knowledge management and advanced modelling paradigms in order to be able to simulate the individual human physiology and physiopathology at the biological levels relevant for the biomedical product under study (at the cell level, tissue level or organism level) and the interaction with the product, thus taking into account the variability among individuals (for example, molecular pathways, cellular microenvironments, microbiota, genetics, gender characteristics, behaviours, comorbidities, development, diet).
- **Expected Impact:**
 - Reducing the size and the duration of the human clinical trials
 - A more effective human clinical trials design
 - Leading to a significant reduction of animal testing
 - Innovative medical products on the market with lower development costs and/or shorter time-to-market
 - Improving prediction of human risks for new biomedical products including medical foods
 - Improving drug repositioning
 - Potential of re-use of the developed in-silico models in the chemical testing.
 - Setting standards for in-silico trials.
 - Providing libraries of virtual patients that can be re-used in pre- and post-competitive testing of biomedical products



COORDINATION ACTIVITIES

SC1-HCO-03–2017:

**Implementing the Strategic Research
Agenda on Personalised Medicine**

SC1-HCO-07–2017:

**Global Alliance for Chronic Diseases
(GACD)**

SC1-HCO-08–2017:

**Actions to bridge the divide in European
health research and innovation**



The challenge of the prize is to identify and bring to market innovative solutions preventing death and complications during pregnancy and childbirth.

The 'Birth Day' Prize is an initiative of the European Commission which has committed €1 million, with the Bill & Melinda Gates Foundation pledging another €1 million and a further €500 000 donated by the MSD for Mothers programme of Merck Sharp & Dohme Corporation.

Why this Prize?

Around the world, hundreds of thousands of women and babies die on the day of birth, and millions more are left with serious illness.

Thanks to global efforts, since 1990 maternal deaths have dropped worldwide by 44%. However, deaths and serious health effects for both mothers and their new babies are still unacceptably high, especially in low and middle income countries.

A recent WHO report estimates that 303 000 women died in 2015 from preventable causes related to pregnancy and childbirth

According to UNICEF, 5.9 million children per year die before their 5th birthday, of which 2.65 million are newborn babies

99% of maternal deaths occur in developing countries; most of these are due to preventable or treatable conditions (source: WHO factsheet)

European Commission

Horizon Prize
BIRTH DAY

Can you crack the challenge?

BIRTH DAY PRIZE
Develop solutions to reduce death and illness in mothers and babies during delivery.

COMPETE, INNOVATE & WIN
€ 1 million*
Apply by 6 September 2017

* Up to three prizes of a maximum of €1m will be awarded. The Birth Day Prize is brought to you in collaboration with:

BILL & MELINDA GATES Foundation
MSD
MSD for mothers
www.ec.europa.eu/horizonprize/birthday
#horizonprize

<https://ec.europa.eu/research/horizonprize/index.cfm?prize=birthday>