



# Horizon 2020 'Health, demographic change and wellbeing'

Russian National Contact Point "Health"

Horizon 2020

## INFO LETTER

December 2016

### News

**01.12.2016**

Vladimir Putin signed Executive Order on the **Scientific and Technological Development Strategy of the Russian Federation**.

The Strategy sets out the goal and the main objectives of Russia's scientific and technological development, the principles, priorities and main areas and measures for implementing the state policy in this sphere, as well as the expected results of the Strategy's implementation, namely Russia's sustainable, dynamic and balanced scientific and technological development in the long term.

The Strategy is designed to provide scientific and technological support to the attainment of Russia's national goals and priorities as set out in strategic planning documents.

The Strategy provides for creating technologies, products and services that will improve the quality of life in Russia and will be marketable around the world. The goal of Russia's scientific and technological development as set out in the Strategy is to ensure the country's independence and competitiveness by creating an efficient system for building up and using the nation's intellectual potential.

<http://en.kremlin.ru/acts/news/53383>

## Open Calls



### Russian Science Foundation and Helmholtz Association announce a competition of research projects conducted by international research teams

In order to increase the scientific cooperation between Helmholtz Research Centres and Russian Research Institutions, the Helmholtz Association and the Russian Science Foundation announce the opening of a first call for applications for Helmholtz-RSF Joint Research Groups.

The aim of this joint funding programme is to identify mutual scientific interests between researchers of the Helmholtz Research Centres and Russian Research Institution / Universities. A focus of this programme lies in the support and encouragement of early stage researchers in both countries to pursue a career in science and establish new international links and exchange of knowledge on the basis of excellent research projects.

The first call for Helmholtz-RSF Joint Research Groups is open for applications in the two research areas “**Biomedicine**” and “**Information and Data science**” lasting **from 15 December 2016 until 31st March 2017**.

Helmholz

Association:

[https://www.helmholtz.de/ru/o\\_nas/novosti\\_i\\_mediateka/novosti\\_filiala\\_v\\_rf/artikel/4/31643/](https://www.helmholtz.de/ru/o_nas/novosti_i_mediateka/novosti_filiala_v_rf/artikel/4/31643/)



[Russian Science Foundation and Austrian Science Fund announce a competition of research projects conducted by international research teams](#)

Public competition is conducted in cooperation with the Austrian Science Fund (FWF).

The grants shall be allocated for scientific and technical programmes and projects, basic scientific research and exploratory scientific research in 2018-2020 for the following branches of knowledge:

01 Mathematics, computer science and systems sciences

02 Physics and space sciences

03 Chemistry and materials science

**04 Biology and life sciences**

**05 Basic research for medicine**

06 Agricultural sciences

07 Earth sciences

08 Humanities and Social Sciences

09 Engineering.

Projects conducted by international research teams each of which consists of a Russian research team and a foreign research team may take part in the competition.

The necessary condition for the provision of a grant by the Foundation shall be the receipt by the foreign research team of a grant from the FWF to implement the project.

Proposals should be submitted with electronic submission system <http://grant.rscf.ru>.

Hard copies of the applications should be submitted to the Foundation **no later than 12:00 a.m. (Moscow time) 28 February 2017.**

RSF:

[http://rscf.ru/sites/default/files/docfiles/Competition%20documentation%200019\\_0.pdf](http://rscf.ru/sites/default/files/docfiles/Competition%20documentation%200019_0.pdf)



[Joint competitions of the Russian Foundation for Basic research \(RFBR\) and Bulgarian Science Fund \(FWF\)](#)

The objective of this competition is to welcome projects on basic scientific research and to grant financial support for prospective research projects that are conducted by individuals from Russia and Austria in the field of "Biology and medical sciences".

Project duration - 3 years.

Russian participants and Austrian parties should agree on the content and the name of the studies, and submit their projects **by February 1, 2017**.

[http://www.rfbr.ru/rffi/eng/contests\\_international\\_announcement/o\\_1896348m](http://www.rfbr.ru/rffi/eng/contests_international_announcement/o_1896348m)



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**Joint Russian-French initiative research projects  
competition of the Russian Foundation for Basic research  
(RFBR) and Centre National de la Recherche Scientifique  
(CNRS)**

The aim of the competition is to grant financial support for initiative research projects being conducted by Russian and French scientists.

The Competition supports basic research projects being conducted by joint Russian and French scientific teams in the area of Biology and Medical Sciences. The Competition supports research being conducted by Russian and French scientists in the research areas of mutual interest.

Russian and French scientists, supervisors of the joint project, must agree in advance on the name and content of their applications and submit the applications to RFBR (Russian) and CNRS (French). The duration of the joint initiative research project is 1, 2 or 3 years.

**Call deadline - 01.03.2017**

[http://www.rfbr.ru/rffi/eng/contests\\_international\\_announcement/o\\_1782797](http://www.rfbr.ru/rffi/eng/contests_international_announcement/o_1782797)



**Joint initiative research projects competition of the  
Russian Foundation for Basic research (RFBR) and the  
German Research Foundation (DFG)**

Competition objectives: Financial support for both Russian and German researchers in their joint initiative scientific activities.

The Competition supports basic research projects being conducted by joint Russian and German scientific teams in the area of Biology and Medical Sciences.

Russian and German scientists, supervisors of the joint project, must agree in advance on the name and content of their applications and submit the applications to RFBR (Russian) and DFG (German Research Foundation).

Russian scientists submit the application after the registration of German team's project in DFG. The number of German application must be sent to RFBR.

The duration of the joint initiative research project is 1, 2 or 3 years.

The name of the project must be the same for both Russian and German application.

Applicants are welcome to submit their applications till **January 11, 2017**.

[http://www.rfbr.ru/rffi/ru/international\\_announcement/o\\_1930304](http://www.rfbr.ru/rffi/ru/international_announcement/o_1930304)

## Work Programme 2016-17 Highlights

### One-stage calls

Call deadline – January 31, 2017

#### **SC1-PM-15-2017: Personalised coaching for well-being and care of people as they age**

Proposals should develop a proof of concept of radically new solutions for a personalised "virtual coach", building upon intelligent ICT environments, access to relevant physiological and behavioural data, new forms of accessible interaction based on tangible user interaction concepts, open platforms and emotional computing. Usability and ease of user interaction should be essential design elements of the "coach".

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).

Solutions should build on and apply multi-disciplinary research and include intelligent algorithms beyond state-of-the-art capable of reasoning, autonomous learning and adaptation to personal needs, emotional and behavioural patterns, conditions and preferences as well as the users' living environment and their social connections. Solutions should be integrated seamlessly in existing every-day activities and provide desired information in fast and efficient manner. Attention theft by ICT (consuming too much of the user's time) should be avoided.

Call deadline – March 14, 2017

#### **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). Virtual populations of individual patients will be built for simple or composite diseases, for example, from the patient-specific models by variations of different parameters and will allow simulating the action of the products and predicting the treatments outcomes in order to develop a personalised medicine approach. The proposed in-silico trials will be the result of a multidisciplinary effort (e.g. within the fields of computational modelling, systems biology, tissue mechanics, biology, pharmaceuticals, medicine) and will also explore and inform of the reasons of fails and suggest improvements. To help establishing such computer simulated trials, measures for validation (human trials, animal studies, validation in cell cultures) of the in-silico models shall also be included in the proposed projects. The benefit for human health, environment and animal welfare should be analysed and quantified. Contact with regulators and consideration of the regulatory framework issues are highly recommended.

### **SC1-PM-17–2017: Personalised computer models and in-silico systems for well-being**

Proposals should aim at the development of new integrative dynamic computer-models and simulation systems of acceptable validity, with the potential to being reused, build on open service platforms and with application in well-being, health and disease. The projects have to support computer modelling and simulations able to aggregate various information sets e.g. molecular, biochemical, medical imaging, social, lifestyle, economic, occupational, microbiome, environmental, developmental, psychological, gender etc. into robust predictors for resilience in coping with and overcoming challenges and stresses and for recovery after challenges and illness. They will process and apply individual/patient-specific information in a multi-scale approach required for integrating information at a certain biological level within a wider context (at least one biological level from molecule to entire body). Proposals will focus on multi-disciplinary research in medicine, SSH and ICT and should take advantage when relevant of existing large databases in clinical medicine, biomedical or occupational research, environmental sciences, Social Sciences and Humanities (SSH), so enabling and facilitating the accumulation and relinking of complex and heterogeneous data collections. The models integrated in these multi-scale and multi-disciplinary approaches will have their predictive capability validated by state-of-the-art clinical and/or laboratorial studies and/or against large health registries. Whenever relevant, proposals will integrate data collected over time in order to inform on individual trajectories with periods of well-being and periods of illness and on the heterogeneity of resilience and recovery that can be different during the individual lifetime.

### **SC1-PM-19–2017: PPI for uptake of standards for the exchange of digitalised healthcare records**

Proposals should address as primary aim public procurement of innovative solutions (PPI) to facilitate the deployment of an eHealth infrastructure taking into consideration the European eHealth Interoperability Framework and EU guidelines adopted by the eHealth Network. The PPI(s), and any accompanying innovation activities in particular by participating procurers themselves to facilitate the uptake of newly developed solutions, should focus on clear target outcomes such as allowing the sharing of health information, the use of semantically interoperable Electronic Health Records (EHRs) for safety alerts, decision support, care pathways or care coordination. The scope of the PPI(s) is to specify, purchase and deploy innovative ICT based solutions which can deliver sustainable, new or improved healthcare services across organisational boundaries while implementing eHealth interoperability standards and/or specifications (e.g. EN13606, HL7, Continua Alliance, IHE...).

**Call deadline – April 11, 2017**

### **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](http://www.irdirc.org)).

### **SC1-PM-20-2017: Development of new methods and measures for improved economic evaluation and efficiency measures in the health sector**

### **SC1-HCO-03–2017: Implementing the Strategic Research Agenda on Personalised Medicine**

Proposals should pool the necessary financial resources from the participating national (or regional) research programmes with a view to implementing a joint call for proposals resulting in grants to third parties with co-funding in this area. This call should aim at implementing a key area of the PerMed Strategic Research Agenda and be complementary with other funding programmes and activities at European and international level. Proposers are encouraged to include other joint activities including additional joint calls without EU co-funding. This work should be informed by the output of the coordination and support action envisaged in topic SC1-HCO-05-2016 - Coordinating personalised medicine research, without duplicating any of its work.

The proposed ERA-NET should demonstrate the expected impact on national and transnational programmes as well as the leverage effect on European research and competitiveness, and should plan the development of key indicators for supporting this. Participation of international partners is highly encouraged.

### **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**


Any type of activities that can help less performing countries and regions to build capacities and exploit opportunities to eventually increase their participation in EU funded collaborative projects can be supported. Beneficiaries of the activities should be low performing Member States/regions that have identified health R&I as a priority in their Research and Innovation Strategies for Smart Specialisation (RIS3). Applicants shall seek synergies with European Structural and Investment Funds, the operational programmes and support from managing authorities.

The proposals will propose concrete measures for tackling structural barriers to health research and innovation, including those related to capacity, skills, policy, regulatory environment, and economic and socio-cultural factors including gender equality issues and gender dimension in research content.



## Events

17–20 января, 2017 года



XI Международный конгресс  
**ПО РЕПРОДУКТИВНОЙ  
МЕДИЦИНЕ**



г. Москва, Площадь Европы, 2, «Рэдиссон Славянская» Гостиница и Деловой Центр

### [XI International congress on reproductive medicine](http://reproductive-congress.ru/english.php)

Date: 17-20 January 2017

Location: Moscow, Russia

Web-site: <http://reproductive-congress.ru/english.php>

Expocentre Fairgrounds

27th International Exhibition



Health Care,  
Medical Engineering  
and Pharmaceuticals

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### [Russian Health care Week](http://www.zdravo-expo.ru/en/)

Date: 04-08 December 2017

Location: Moscow, Russia

Web-site: <http://www.zdravo-expo.ru/en/>

## Research Cooperation



### [P. Herzen Moscow Oncology Research Institute](http://www.mnioi.ru)

Homepage: <http://www.mnioi.ru/eng/>

P. Herzen Moscow Oncology Research Institute was founded on February 12, 1898. It became the oldest scientific and practical institution in Europe and the first oncology institution in Russia, where the foundations were laid for the Russian science and oncology services. The Institute has formed a scientific and clinical school, which was completed by many now leading oncologists in Russia and other countries. From 1922 to 1933 the director of the Institute was an outstanding scientist, surgeon, a founder of the Moscow School of Oncology P.A. Hertsen. For his significant contribution to the development of the Institute and oncological science in Russia Central Scientific Research Oncological Institute of the RSFSR People's Commissariat of Health was named after him in 1947.

During its existence the domestic oncology has taken the leading position in the world, making an invaluable contribution to basic medical science. Specialized diagnostic and treatment methods have become available to the public, largely due to the outstanding professionals forming science of oncology within the Institute's walls, and to technological advances in medicine. Scientific research in the Institute is focused on the development of the diagnosis and treatment of malignant tumors in the experimental studies and the organization of cancer control.

The Institute is a recognized leader in providing high-tech medical care to patients with various types of cancer. The Institute performs a unique surgery, uses modern high-tech methods of diagnostics, comprehensive treatment and rehabilitation of patients.



### [Vavilov Institute of General Genetics](http://en.vigg.ru)

Homepage: <http://en.vigg.ru>

Institute of Genetics of the USSR Academy of Sciences (AS) was founded in 1934 and became the first specialized on genetics Institute of the Soviet AS. Because of substantial impact of N. I. Vavilov (1887-1943) into the formation of the genetics and other fields of biology, and because his name became the symbol of the adherence to science, in 1983 the

Institute of General Genetics was awarded the name of N. I. Vavilov.

At present, the Institute of General Genetics is a one of leading genetic scientific center in Russia. Currently, the Institute has 15 laboratories and 7 research groups. There is also Saint-Petersburg Branch of VIGG.

The Institute includes the Center for the Research and Training (RTC) and the Center for the Research and Education (REC).

The Institute is ready to cooperate in the following research fields:

- genetics and evolution of populations in relation to the biosphere's protection and the rational use of biological resources;
- study of structural and functional organization of the genome, and elucidation of the mechanisms of gene expression's regulation;
- human genetics;
- principles of genetic selection of animals, plants and microorganisms.



Federal State Budget Institution  
"Research Center for Obstetrics, Gynecology and Perinatology"  
Ministry of Healthcare of the Russian Federation

### [Research Center for Obstetrics, Gynecology and Perinatology](http://www.ncagip.ru/en/about/)

**Homepage:** <http://www.ncagip.ru/en/about/>

The Research Center for Obstetrics, Gynecology and Perinatology counts more than 200 years of history. The Center is named after academician of RAMS Vladimir Kulakov, the outstanding Russian physician and scientist, who had been heading the Center from 1986 to 2007.

The Research Center for Obstetrics, Gynecology and Perinatology is the leading scientific, medical and academic institution of Russia in the fields of obstetrics, gynecology, perinatology and reproductology.

The Center is the major basis for implementation of governmental programs on maternal and child healthcare. It's a coordinating federal institution, accumulating and spreading scientific achievements of domestic and foreign experts in the field of medical science and coordinating the work of regional centers.

The Center continuously contributes to development of the state reproductive healthcare strategy.

The Center is the leading institution for the implementation of federal programs and activities: the annual Scientific Forum "Mother and Child", international congresses, plenary sessions of the Scientific Council, conferences and seminars on prevention, diagnosis and treatment of gynecological diseases, endoscopic surgery in gynecology, as well as other topical issues of obstetrics, gynecology and perinatology.

The Center comprises 34 departments and 10 laboratories with around 1800 highly skilled employees, including 4 academicians of the Russian Academy of Sciences (RAS), and more than 40 professors, 10 Honored Masters of Science and 6 Honored Physicians of the

Russian Federation. Alongside with researchers, 250 obstetricians-gynecologists, neonatologists, therapists, anesthesiologists, including more than 100 physicians of the top qualification are involved in the medical activity of the Center.

The clinical base of the Center comprises 405 beds: 180 obstetrical, 170 gynecological and 55 neonatal including both outpatient and inpatient facilities.

The medical activity of the Center is characterized by constant implementation of new diagnostic and treatment technologies allowing to significantly improve the quality of medical aid at the Center.