



**SENET-HUB**  
SINO-EUROPEAN HEALTH NETWORKING HUB

# Guide for health researchers from Europe and China through the funding landscape

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## Abbreviations and Acronyms

Abbreviation, Acronym	Description
AC	Associated Countries
AWP	Annual Work Programme
CAMS	Chinese Academy of Medical Sciences
CAS	Chinese Academy of Sciences
CECO	China-EU Science and Technology Cooperation Promotion Office
CFM	Co-Funding Mechanism
Chafea	European Commission Consumers, Health, Agriculture and Food Executive Agency
COSME	Competitiveness of Enterprises and SMEs
EC	European Commission
ECAS	European Commission Authentication System
EEN	Enterprise Europe Network
EFTA/EEA	European Free Trade Association / European Economic Area
EIT	European Institute of Innovation and Technology
ERC	European Research Council
EU	European Union
EUR	Euro
FP7	Seventh Framework Programme for Research
GACD	Global Alliance for Chronic Diseases
GERD	Gross Domestic Expenditure on R&D
H2020	Horizon 2020
HIV/AIDS	Human Immunodeficiency Virus
HBP	Human Brain Project
IA	Innovation Actions
IMI2	Innovative Medicines Initiative
ISM	Institute of Systems Medicine
MSCA	Marie Skłodowska-Curie Actions
MOE	Ministry of Education of the Republic of China
MOF	Ministry of Finance of the Republic of China
MOST	Ministry of Science and Technology of the Republic of China



Abbreviation, Acronym	Description
MS	Member States
NCP	National Contact Points
NDRC	National Development and Reform Commission
NMP	National Science and Technology Major Project
NSFC	National Natural Science Fund
PI	Principal Investigator
PIC	Participant Identification Code
PPI	Public Procurement of Innovative solutions
PSF	Policy Support Facility
PUMC	Peking Union Medical College
R&D	Research and Development
R&I	Research and Innovation
RD&I	Research, Development and Innovation
RIA	Research and Innovation Actions
SC1	Societal Challenge I
S&T	Science and Technology
SEDIA	Single Electronic Data Interchange Area
SMART	Systematic Medical Assessment, Referral and Treatment
SME	Small and Medium Enterprises
STI	Science, Technology and Innovation
STD	Sexually Transmitted Diseases
TYSP	Talented Young Scientist Program
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VC FoF	Venture Capital Fund-of-Funds

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## Executive Summary

This report “Guide for health researchers from Europe and China through the funding landscape” has been developed under the SENET project, funded by the European Union’s (EU) Horizon 2020 (H2020) research and innovation programme. The project aims to create a sustainable health networking and knowledge hub between Europe and China.

The guide provides a comprehensive understanding of the application process to health funded programmes from the EU and China, the latest developments of research and innovation (R&I) in the EU and China, as well as critical issues and recommendations for researchers. In particular, it provides information on how to apply to a set of different funding programmes, including details on the main objective of the programme, target group, eligibility criteria for application and the funding scheme applied. The funding programmes detailed in this report are the following: H2020, EU Health Programme, and the Human Brain Project at the EU level, and the National Natural Science Fund (NSFC), National Science and Technology Major Project (NMP) and Chinese Academy of Medical Sciences (CAMS) at the Chinese level.

On one hand, the report provides information on the current status of the supporting policies for Science and Technology (S&T) innovation, training programmes promoted at EU level and schemes and projects available within the EU for international collaboration. On the other hand, the report gives an overview of the current status of China in terms of targets and priorities from the national plan, the relevant funded projects and the future S&T plan, highlighting supporting policies for S&T innovation and recent developments as well as training programmes and support schemes for international cooperation.

Lastly, a set of critical issues and recommendations have been identified through the analysis developed in this document. The following critical issues should be considered for both European and Chinese researchers when applying for funding programmes:

- Language barrier;
- Policy and bureaucracy procedures;
- Reliable and credible partnerships;
- Lack of clarification for international cooperation in health-related calls.

Based on the analysis developed and on the critical issues identified above, the project team highlights the following recommendations to European and Chinese researchers:

- Build relationships between European and Chinese researchers and extend their S&T network;
- Keep track of the European and Chinese programme websites in order to obtain the most updated information on funding programmes;
- Understand the counterpart’s working culture and research environment;
- Promote international cooperation and highlighting the mutual benefits for Europeans and Chinese.

*The terms and provisions of the EU Grant Agreement (and its annexes) and the SENET Consortium Agreement will prevail in the event of any inconsistencies with recommendations and guidelines defined in this report.*

## 1. Introduction

This report “Guide for health researchers from Europe and China through the funding landscape” has been elaborated under Work Package 1 – Assessment of strategic health priorities and the health R&I landscape in Europe and China of the SENET project. It aims to provide a set of guidelines to health researchers from both the EU and China in order to be better informed about the funding landscape in these two regions. Within this context, the report describes the funding environment in the EU and China and provides information on how to apply to funding opportunities within a set of different programmes and schemes. This report also presents the latest developments in health R&I initiatives and actions in the EU and China. The information included in this document was based on the following:

- Desk research (literature and document analysis) to review the different agencies, schemes, programmes and actors in both Europe and China.
- Insights and experience from the European and Chinese SENET consortium partners to identify the main opportunities, funding and training programmes, policies, critical issues and recommendations for potential applicants.
- Outputs from the report “Map of the major funding agencies and stakeholders in Europe and China”, namely the main aspects concerning funding schemes and programmes in the EU and China.

In this sense, the report includes the following sections:

- **Guidelines for the Application to Health Funded Programmes:** This section provides a number of health R&I funded programmes in the EU and China. Section 2.1 includes, for the EU side, information on the health programmes available within H2020 and the EU Health Programme, and for the Chinese side, the National Natural Science Fund (NSFC), the National Science and Technology Major Project (NMP) and the Chinese Academy of Medical Sciences (CAMS). For each programme, the report outlines its main objectives and structure, eligibility criteria and examples for open opportunities. It also describes the steps needed for researchers to apply for funding in detail.
- **Latest Developments in R&I in the EU:** This section focuses on the recent history of the economic and financial environment as well as health R&I within the EU, including main targets, priorities and major funded projects in order to give an overview of the current status of these subjects within the EU and EU Member States (MS). More specifically, this section highlights policy supporting S&T innovation, training programmes and support schemes for international cooperation.
- **Latest Developments in R&I in China:** Similar to the aforementioned section, this section will present the history of the economic and financial environment and R&I perspective in China. Moreover, it will provide an overview of China’s current status in terms of target and priorities regarding the national plan, relevant funded projects and future S&T plans highlighting, as in the case of the EU, supporting policies for S&T innovation, training programmes and supporting schemes for international cooperation.
- **Critical Issues and Recommendations for Researchers:** Taking into account the information described in the previously, this section presents a set of issues identified for applying to both Chinese and European funding, as well as some important recommendations to overcome or avoid those issues.

## 2. Guidelines for the Application to Health Funded Programmes

The purpose of this section is to provide specific guidelines for European and Chinese health researchers and to support them in applying to health funded programmes through the funding landscape in the EU and China. These guidelines include information on how to apply to a set of different funding programmes, including details on the main objective of the programme, target group, eligibility criteria for application, examples of topics/calls and the funding scheme applied. The selected health funded programmes in this section are mainly managed by governmental agencies in the EU and China, which provide numerous research opportunities, in particular for health-related topics. At the EU level, the H2020 and EU Health Programme are analysed. At the Chinese level, the NSFC and NMP are the main state-level funding agencies, addressing S&T development in China through major research funding programmes, while CAMS is one of the main health scientific organisations in the country. The health programmes that have been implemented by the NSFC, NMP and CAMS are considered as one of the main priorities of the Chinese national plan and are analysed in this section.

### 2.1. EU Level

#### 2.1.1. Horizon 2020 - The EU Research and Innovation Framework Programme

This sub-section provides information regarding the H2020 programme and its background. It contains information about the programme's inception (the reasons behind it, main purpose and target) and revisions throughout the years (such as the changes on the research priority fields). More importantly, it provides a detailed guide on how to apply to H2020 funding opportunities.

H2020 is the largest EU R&I programme that replaces the Seventh Framework Programme for Research (FP7, 2007 – 2013). It runs from 2014 to 2020 with a budget of nearly 80 billion EUR and aims to lead to more breakthroughs and innovations by taking great ideas from the research laboratory to the market.

The programme has been designed to deliver results that make a difference in people's lives. Built on three pillars – Excellent Science, Industrial Leadership and Societal Challenges – it funds all types of activities, from frontier science to demonstration projects and close-to-market innovations. The main objective of H2020 is to ensure that Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation. It offers a large variety of funding opportunities for R&I activities through calls for proposals that are set out in the different work programmes. H2020 is open to international participation in all fields and areas. Chinese researchers, enterprises, research institutions and universities are able to team up with European partners to participate in projects and make good use of Europe's excellent opportunities in R&I.

There are four different types of countries that are eligible to apply for funding: the EU MS and overseas departments and outermost regions, the Associated Countries (AC), countries that have shown an intention on becoming associated with H2020 since the signature of the first grant agreement, the Third Countries, which includes opportunities for cooperation and participation for non-EU countries that are foreseen in annex "Annex A – List of countries, and applicable rules for funding"<sup>1</sup>, and the International

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<sup>1</sup> [https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-a-countries-rules\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-a-countries-rules_en.pdf)





European interest organisations, that are organisations which do not belong to the above mentioned countries but can also be eligible in case of being relevant to a specific project.

Within H2020, health priorities are highlighted in the collaborative research for health, demographic change and wellbeing, including personalised medicine, innovative health and care industry, infectious diseases and improving global health - integration of care, decoding the role of the environment, including climate change, health and wellbeing, digital transformation in health and care, trusted big data solutions for cybersecurity for health and care.

### How to apply to H2020

This sub-section provides useful information for researchers about the eligibility and the application process of H2020, including the following steps: (1) Find a suitable call for proposals; (2) Find project partners; (3) Create an account in the portal; (4) Register the organisation; (5) Submit the proposal through the “Funding & Tenders Portal”; (6) Evaluation by experts; and (7) Grant agreement.



Figure 1 – Application process of H2020

### Who can participate?

To apply to H2020 calls, the eligible applicant must be an individual or organisation/institution constituted under the national law of the country where the person or organisation is based, and has the financial capacity to carry out the research tasks set out in the proposal submitted.

### Eligibility criteria

A proposal and/or application will only be considered eligible if:

1. Its content corresponds, wholly or in part, to the topic/contest description for which it is submitted.
2. It complies with the eligibility conditions for participation set out in the table below, depending on the type of action.

Table 1 – Standard eligibility conditions of H2020

Types of Actions	Eligibility conditions for participation
Research & innovation actions (RIA)	At least three legal entities. Each of the three must be established in a different EU MS or H2020 AC. All three legal entities must be independent of each other.
Innovation actions (IA)	At least three legal entities. Each of the three must be established in a different EU MS or H2020 AC. All three legal entities must be independent of each other.
Coordination & support actions (CSA)	At least one legal entity established in an EU MS or H2020 AC.



## Application process

### Step 1: Find a suitable call for proposal

The European Commission (EC) and its funding bodies publish calls for proposals on the Funding & Tenders Portal. Every call of the H2020 programme can be found through the following link:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search>.

In order to facilitate the search, applicants can start their search on the homepage by entering different keywords that characterise their fields of interest, and then refine the results with the help of further filters when looking for the most suitable call.

Using the Funding & Tenders portal, applicants may start their search by selecting one of the EU funding programmes listed on the homepage, and then navigate via the quick links to the calls for proposals of a specific programme. Calls are divided into topics, implemented by different type of actions. Applicants can select a topic to read more about the identified opportunity: this includes topic-related documents, guidance and other instructions. The National Contact Points (NCP) can help the applicant to find the most suitable call. For applicants that want to apply for the H2020 programme in cooperation with China, the CECO - China-EU Science and Technology Cooperation Promotion Office<sup>2</sup> is the NCP for China which has a structure created to help the applicant in finding the most suitable call.

### Step 2: Find project partners

Apart from aiming to promote R&I, H2020 also has the goal of strengthening international research cooperation. As such, most of the projects under this programme are collaborative projects that should usually include a minimum of three organisations from different EU MS or AC. Thus, a number of applications with participation/cooperation of non-EU countries have better chances of being selected. Although the majority of the H2020 projects are collaborative and multidisciplinary projects, there are some mono-participant actions like the European Research Council (ERC) research grants, Marie Skłodowska-Curie Actions (MSCA) or the Small and Medium-Sized Enterprises (SME) instrument.

The Funding & Tenders Portal, the NCPs and the Enterprise Europe Network (EEN) are useful support tools and contacts which can provide assistance in the search for both EU and non-EU partners interested in participating in the proposals. To find partners for project ideas, applicants can use the Partner Search function of the Funding & Tenders portal. This function allows to look for organisations which received funding in the past, as well as create and check partner search requests by call/topic. Applicants can use the Partner Search tools and services from third parties. Several thematic NCP networks and other entities provide partner search facilities with quality checks and a close follow-up of the requests or offers. Participating in conferences, brokerage events organised by the different networks like the NCPs or the EEN are also an effective way to reach out to potential partners.

### Step 3: Create an account on the portal

Regarding the Funding & Tenders portal, each user must have an EU Login account to log in. If applicants already have such an account, they can use it for any interactions supported on this site, from proposal submission to reporting. The applicants only need one account for all Funding & Tenders Portal secured services.

If applicants do not have an account yet, they need to create an ECAS account by clicking on the “Register” button (from the link on top of this page). Once the account is created, it can be used for any future submissions.

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<sup>2</sup> <http://www.cstec.org.cn/>



#### **Step 4: Register in the Beneficiary Register**

Before registering the organisation, applicants should first check the “Organisation Register” to see if it has been done already. If so, there is no need to do it again. If the organisation is not yet registered, the applicant should access the portal and register in the area called “Register Organisation”

(<http://ec.europa.eu/research/participants/portal/desktop/en/organisations/register.html>).

The Beneficiary Register is an online tool to register and manage the data of the organisations participating in EU programmes.

If the applicant wants to participate in a project proposal, the organisation needs to be registered and have a 9-digit Participant Identification Code (PIC), which is a unique identifier of the organisation and will be used as a reference by the EC for any interactions.

#### **Step 5: Submit a proposal**

After every previous step has been taken, the submission of the proposal must be done before the deadline. To do so, it is necessary to follow every instruction that the Funding & Tenders portal provides. The system has been updated and it is simpler than ever, no paper needed, everything is done online.

Applicants should select the topic and go to the “Submission Service” section of the topic page. Additionally, applicants need to make sure that they select the correct type of action before starting to draft a proposal. The link to the submission system is available if the status of the call is “open”. A login with your EU Login account is required.

#### **Step 6: Admissibility and eligibility check**

Applicants must submit a proposal in the Electronic Submission System before the deadline given in the call’s conditions. Applicants must ensure that the proposal corresponds to the topic description for the call. After all proposals are submitted and the deadline expires, every application is carefully examined by a panel of independent experts/specialists who will decide which proposals are suited for receiving funding and which are not. In order to receive grants, the proposals have to meet specific requirements. The evaluation period normally lasts five months<sup>3</sup>.

#### **Step 7: Grant agreement**

Once the evaluation period is over, every applicant is informed about whether or not they are suited to receive funding. Later on, the EC draws up a grant agreement with each successful participant. This document details the information about what R&I activities will be undertaken, the project length, budget, cost rates, all rights and obligations, the EC’s contribution, among others. Usually, the limit time for signing the grant agreements is three months.

### **Examples of health-related calls**

Within H2020, it is relevant to highlight a set of calls that have been announced in 2018-2020 which aim at fostering health and healthy ageing with the need to develop sustainable health and care systems and growth opportunities for the health and care related industries. The final version of the work programme can be accessed through the following link:

[https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-health\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-health_en.pdf)

<sup>3</sup> <https://ec.europa.eu/programmes/horizon2020/en/how-get-funding>



While H2020 is the major framework programme for R&I, there are several public-public as well as public-private partnership schemes available<sup>4</sup>. The most prominent among them are “Societal Challenge 1” (SC1) and the “Innovative Medicine Initiative 2” (IMI2) that offer possible opportunities for collaboration. Though the whole H2020 programme is “open to the world”, the following table depicts some of the current open SC1 and IMI2 calls that are of higher relevance for international collaboration.

**Table 2 – Health-related calls in H2020**

No.	Call	Topic description	Deadline
1	SC1-HCO-18-2020: Developing methodological approaches for improved clinical investigation and evaluation of high-risk medical devices	The overall objective of the call are the need of developing a methodology that enable to generate improved clinical evidence and the new developments in medical technologies such as mHealth, artificial intelligence and combination products.	07 April 2020
2	SC1-BHC-06-2020: Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data	This call was open due to the fact that there is the need of develop research in order to create and validate diagnostics support tools increasing the diagnostics precision and clinical decision making.	07 April 2020
3	SC1-HCO-16-2020: ERA-NET: Sustained collaboration of national and regional programmes in research on brain-related diseases and disorders of the nervous system	The cooperation at transnational level in the area of brain-related diseases has been established with success. The aim of this call is to enhance and further sustain the cooperation that has been done through synergies between projects.	07 April 2020
4	SC1-HCO-17-2020: Coordinating and supporting research on the human microbiome in Europe and beyond	The integration and application of metagenomics from the human microbiome has large potential for personalised medicine approaches. The amount of European research that has been done under this subject is very big, but due to the fact they have different underlying methods, standards and operating procedures the results are not easy to compare. Given this, the call was launched in order to increase coherence	07 April 2020

<sup>4</sup> <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/health-demographic-change-and-wellbeing>



No.	Call	Topic description	Deadline
		and data comparability to better exploit existing microbiome data and clinical information in standardised way.	
5	SC1-BHC-08-2020: New interventions for Non-Communicable Diseases	Non-communicable diseases are the cause of 86% of all deaths in Europe and represent a huge burden on individuals and health care systems. In order to tackle these threats there is the need to improve prevention or even find a cure through innovative and effective healthcare interventions.	Two-stage 24 September 2019 07 April 2020
6	IMI2-2019-18-05: Accelerating research & innovation for advanced therapy medicinal products	This topic aims to accelerate the research and development of advanced therapy medicinal products by filling gaps in the knowledge base in, and tools for, gene and cell therapy. This will provide medicines developers and regulators with the information they need to more swiftly move these potentially transformative medicines forward so that they can benefit patients in need.	Two-stage 26 September 2019 26 March 2020
7	IMI2-2019-18-06: Supporting the development of engineered T cells	The overall objective of the call topic is to support the development of autologous and allogeneic engineered T-cell therapies, including CAR and TCR engineered T cells. The Call topic addresses both haematological and solid tumours.	Two-stage 26 September 2019 26 March 2020
8	IMI2-2019-19-01: Restricted Call to maximise impact of IMI2 JU objectives and scientific priorities	A major challenge in life sciences, in particular within the medicines development process, is the scale of the investment required, the stepwise approach, very long development timelines and the successful involvement of relevant stakeholders. Certain IMI2 JU topics, launched under IMI2 JU Calls for proposals that are now closed, anticipated in their corresponding work plans the need for a stepwise approach.	Two-stage 26 September 2019 26 March 2020



## International cooperation

H2020 is fully open to international participation from all over the world. The specific international cooperation activities are included in section of Societal Challenges, Enabling and Industrial Technologies and Excellent Science. Furthermore, international participation is incentivised and funding is available from the EU. Apart from general openness of most H2020 calls to non-EU researchers, many calls particularly encourage the cooperation with non-EU partners. Calls open for international cooperation are published in bi-annual "Work Programmes" and can be found on the international cooperation topic page of the Funding & Tenders portal. It can be accessed by choosing the option "international cooperation" in the section "filter by cross-cutting priority"<sup>5</sup>.

### 2.1.2. EU Health Programme

This section presents an overview of the EU Health Programme, including a description of the programme, the main function and the funding mechanism. It is relevant to state that the EU Health Programme is a funding instrument to support cooperation among EU countries and develop EU health activities. Moreover, the EU Health Programme is a funding programme created to implement the EU health strategy, aiming to build on the achievements of the previous EU Health Programme and enable health to contribute to the economic growth and the Europe 2020 objectives. The Third Health Programme (2014-2020) is the legal basis for the current Health Programme with a budget of 449.4 million EUR. Through 23 priority areas, the Health Programme serves four specific objectives<sup>6</sup>:

- Promote health, prevent disease and foster healthy lifestyles through "health in all policies";
- Protect EU citizens from serious cross-border health threats;
- Contribute to innovative, efficient and sustainable health systems;
- To ease access to high quality, safe healthcare for EU citizens.

The overall goal of the Third EU Health Programme, which is currently in place, is to enhance the EU's health research by encouraging cooperation between the MS, ultimately improving the health policies that are beneficial to the citizens. Since health is a crucial condition for maintaining growth and sustainable development of countries, it is expected that the EU Health Programme is aligned with the Europe 2020 Strategy for intelligent, sustainable and inclusive growth, and the EU Health Strategy "Together for Health".

Moreover, the EU Health Programme has been designed to support EU countries to reform their health systems and promote actions on the prevention of chronic and major diseases. The EU MS will also get support to implement health legislation, including new rules on medicines and medical devices.

### How to apply to the EU Health Programme

This sub-section provides useful information for researchers about the eligibility and the application process of the EU Health Programme, including the following steps: (1) Find a suitable call for proposals; (2) Find project partners; (3) Create an account on the portal; (4) Register the organisation; (5) Grant agreement.

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<sup>5</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=null;focusAreaCode=null;crossCuttingPriorityCode=IntlCoop;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

<sup>6</sup> [https://ec.europa.eu/health/funding/programme\\_en](https://ec.europa.eu/health/funding/programme_en)

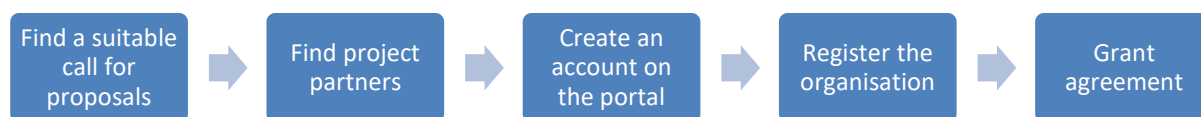


Figure 2 – Application process of the EU Health Programme

### Who can participate?

All EU countries can participate. Additionally, the entities registered in the EU are eligible to participate in the calls for proposals. Organisations from other countries are also encouraged to get involved, however, funding cannot be awarded to them.

Participation is open to a wide range of organisations, including:

- Legally established organisations;
- Public authorities, public (or non-public sector) sector bodies (research and health institutions, universities and higher education establishments);
- Non-governmental bodies;
- International organisations;
- Private companies (through public procurement).

### Eligibility criteria

- Applications are eligible if submitted by legal persons.
- Applicants participating in a project proposal have to be three different legal entities from at least three countries participating in the EU Health Programme.
- Applicants from entities established in one of the following countries are eligible: 1. EU Member States, 2. Iceland and Norway and 3. Countries which have bilateral agreements with the EU.

All projects should:

- Provide high added value at EU level;
- Be relevant to the objectives and priorities defined in the current annual work plan;
- Be innovative and last no longer than three years.

### Funding mechanisms

There are two funding mechanisms<sup>7</sup>: grants and tenders. Grants for projects, operating grants, direct grants with international organisations and grants to EU authorities and bodies for co-financed actions (called joint actions).

#### 1. Project Grants:

Projects under the call can receive up to 60-80% co-financing of eligible costs.

#### 2. Operating Grant:

Operating grants may be awarded to non-governmental bodies that pursue one or more of the specific objectives of the Third Health Programme.

#### 3. Joint action:

Grants for action co-financed by the competent authorities responsible for public health in the Member States (called “Joint Actions”).

<sup>7</sup> [http://ec.europa.eu/chafea/health/funding/index\\_en.htm](http://ec.europa.eu/chafea/health/funding/index_en.htm)

#### 4. Call for tender:

Call for tender is a procurement contract. With calls for tenders, the EC aims to purchase goods, services or works in exchange for payment of an agreed price.

### Application process

#### Step 1: Find a suitable call for proposal

Applicants may start searching from on homepage by entering different keywords that characterise their field of interest, and then refine the results with the help of further filters. Applicants can start by selecting one of the EU funding programmes listed on the homepage.

#### Step 2: Find partners

The Partner Search can be used to select an organisation based on their profile or their previous participation (<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/partner-search>).

#### Step 3: Create your own account

If the applicant's organisation is not registered in the electronic registration system for FP7 / H2020 and other programmes, and they do not have a 9-digit PIC-number, it is necessary for them to register on the Funding & Tenders Portal.

#### Step 4: Register your organisation

Applicants must register in the online tool and manage the data of the organisations participating in the EU programmes. It allows consistent handling of the participants' official data and avoids multiple requests to enter the same information.

#### Step 5: Submit the proposal

Applicants must submit the proposal electronically through the Electronic Exchange System of the EU Research and Innovation Funding & Tenders Portal:

<https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>

### Examples of health-related calls

In July 2017, the EC launched a new online database providing information on projects funded by the EU Health Programme. Managed by the EC's Consumers, Health, Agriculture and Food Executive Agency (Chafea), the database provides information on the nature of projects and their results.

The Annual Work Programme 2019 (AWP 2019) under the Third EU Health Programme has been adopted on 29 March 2019. The open calls under this programme are listed below.





Table 3 – Health-related calls in the EU Health Programme<sup>8</sup>

No.	Call	Topic description	Number of projects to be funded	Deadline
1	PJ-01-2019: Rare disease registries for the European Reference Networks (Heading 2.1 of the AWP 2019)	The proposed action aims to support the development of rare disease registries for the European Reference Networks.	Maximum one per ERN. Two or more ERN can submit one proposal together.	11 October 2019
2	PJ-02-2019: Stakeholder actions to implement the EU guidelines on prudent use of antimicrobials in human health (Heading 2.2 of the AWP 2019).	The proposed action should consider activities focused on the implementation of the EU guidelines on the prudent use of antimicrobials in human health, which were published by the Commission in June 2017. These Guidelines aim to support a variety of key stakeholders and public health authorities in Member States in reducing unnecessary antibiotic use and combatting antimicrobial resistance. While the Guidelines have been well received further action is needed to facilitate and encourage stakeholders to take them forward and implement them.	One large project with 20-30 partners or at least two smaller projects with 5-19 partners.	11 October 2019

### International cooperation

The EU Health Programme is open to a wide range of countries, including all EU MS, European Free Trade Association/European Economic Agreement (EFTA/EEA) countries, countries acceding to the EU, candidate countries and potential candidates, as well as countries covered by the European Neighbourhood Policy. By allowing non-EU countries to have access to funding, the EC aims to promote international cooperation.

<sup>8</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502,31094503;programCode=3HP;programDivisionCode=null;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

### 2.1.3. Human Brain Project

The Human Brain Project (HBP) started in 2013 and is planned to run at least until 2023. This project is one of four Future and Emerging Technology Flagships. Together, these projects are the largest scientific projects ever funded by the EU. The project expects to provide more than 300 million EUR divided between four different types of grants, Ramp Up Phase (72.5 Mio. EUR), SGA1 Grant (89 Mio. EUR), SGA2 Grant (88 Mio. EUR) and the ICEI Grant (up to 50 Mio. EUR). The aim of the HBP is to build research infrastructure helping to advance neuroscience, medicine and computing as well as to produce targeted research and theoretical studies and to explore brain structure and function in humans, rodents and others species.

Since 2013, this 10-year project directly employs around 500 scientists at more than 100 universities and provides services to hospitals and research centres across Europe. The work under the HBP can be divided into six different Information and Communication Technology research platforms:

- **Neuroinformatics:** Aims to provide the community with an integrated multi-level data-enriched atlas of human and rodent brains as well as the tools to facilitate its understanding and usage; “HBP Collaboratory”, a virtual lab bench for reproducible data-driven science; programmatic Application Programming Interface to access data in the atlases.
- **Brain Simulation:** An internet-accessible collaborative platform designed for reconstruction and simulation of brain models. This very complex platform is equipped with a huge variety of tools that make it possible to run different types of experiments such as reconstruction and simulation of detailed multi-level brain models, displaying emergent structures and behaviours and performing in silico experiments to validate models or investigations that are not possible to do in the laboratory.
- **High Performance Analytics and Computing:** Produce and provide supercomputing, storage, visualisation and simulation technology through which scientists can run large-scale, data intensive, interactive multi-scale brain simulations up to the size of a full human brain; manage large amounts of data used and produced by simulations and experiments; manage complex workflows comprising concurrent simulation, data analysis and visualisation workloads.
- **Medical Informatics:** Serve as a huge database and a bridge between brain-science research, clinical and patient care, providing the collaborative infrastructure and tools to improve knowledge of the human brain and define biological signature of diseases, towards better diagnosis and improved treatments.
- **Neuromorphic Computing:** Provides a tool for neuroscience to understand the dynamic processes of learning and development in the brain and applying brain inspiration to generic cognitive computing.
- **Neurorobotics:** Allows researchers to give any simulated brain model its own body. Creating an “actual brain” (virtually or even in reality) and being able to understand how it actually works, how it controls movements, reacts to stimulus and how it processes information (learns). These robots have provided the researchers with very useful information.

#### How to apply to the HBP

As previously mentioned, the HBP has four different grant phases. Within this context, the project team opted to analyse the SGA2 phase as it is currently ongoing (1 April 2018 – 30 March 2020) and the calls launched are health-related. Within this context, this sub-section provides information for researchers about the eligibility and the application process of the Second Core Project SGA2 (under H2020),



including the following steps: (1) Contact the HBP and discuss your request (2) Upload the proposal (3) HBP Infrastructure contact complete the part of proposal (4) Final announcement.

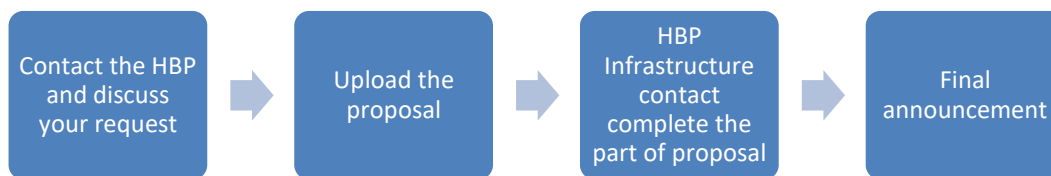


Figure 3 – Application process of the HBP

### Who can participate?

- Existing members of the HBP consortium (PI/LAB level) are welcome to become part of new consortia applying to the calls, however, will not be eligible for additional funding through the HBP.

### Eligibility criteria

- Have a suggestion for a useful HBP infrastructure feature.
- Open to all non-HBP researchers, with separate target groups from academic, non-academic and medical research (including hospitals), and industry and pharma (SMEs and companies).

### Application process

#### Step 1: Contact the HBP and discuss your interest

Interested applicants should get in contact with the HBP already during the application process to work together with the HBP Platform engineers concerned to refine their proposals<sup>9</sup>.

#### Step 2: Upload the proposal

Applicants should submit their application on the HBP's website, more precisely on the Open Calls Platform<sup>10</sup>.

#### Step 3: HBP infrastructure contact complete the part of proposal

The key is to meet the user community's needs of an open HBP research infrastructure in a dynamic new way and to establish collaborations that pursue technology innovation and engineering solutions of mutual interest and benefit.

#### Step 4: Final announcement

The selected projects will be funded via the EC grant for SGA2.

### Examples of health-related calls

HBP provides some health-related calls, in order to keep consistency, the project team decided to just include calls that are opened to application and international cooperation. The table below presents those calls.

<sup>9</sup> <https://www.humanbrainproject.eu/en/>

<sup>10</sup> <https://www.humanbrainproject.eu/en/collaborate/open-calls/>

Table 4 – HBP open calls

No.	Call	Topic description	Deadline
1	The HBP Research Infrastructure Voucher Programme Call 2019	This call aims to provide the community with the knowledge and tools the Human Brain Project can offer in order to meet the community needs and establish collaboration that pursue technology innovation and engineering solutions of mutual interest and benefit. The call is open to all non-HBP researchers but targets academic, non-academic and medical researchers (including hospitals), and industry and pharma (SMEs and companies).	27 September 2019
2	Best Concepts and Ideas for Diversity in Research and Management SGA2	This call is open only for HBP members, specially targeted for scientists and science managers at an early stage of their careers. The applications for this call should be within two different categories: <ul style="list-style-type: none"> <li>– Best ideas and measures to improve equal opportunities</li> <li>– Best scientific research project that integrates diversity</li> </ul>	14 October 2019

## 2.2. China Level

### 2.2.1. National Natural Science Fund (NSFC)

Founded in 1986, the NSFC is an institution directly under the jurisdiction of the State Council, tasked with the administration of Central Government’s National Natural Science Fund<sup>11</sup>. It is China’s largest fund for supporting basic and applied research in natural sciences, particularly in the fields of physics and mathematics, chemistry, life sciences, earth sciences, engineering and materials, information sciences, and management sciences. The funding system of the NSFC is divided into 14 different programmes, grouped into three categories: research promotion, talent fostering, and research environment.

One of these programmes is specifically linked to international joint research, while the other two target China-based actors, meaning that China-based affiliates of European institutes and European scientists working in China can apply too.

Health programmes are initiated and managed by the Department of Life Science and the Department of Health Science of the NSFC. The main objective of the Health Science Department is to support basic research on issues concerning disease prevention, disease control and disease treatment in China.

<sup>11</sup> <http://www.nsf.gov.cn/nsfc/cen/xmzn/2019xmzn/01/08yx/index.html>



The Department of Life Science funds a broad-spectrum including biology, agricultural sciences and basic medicine, which extends to various fields of resources, environment, ecology, population and health. In recent years, research in life sciences has achieved extraordinary progress in China through the support from the NSFC and other funding sources. It is important to note that the number of authentic research articles published by Chinese scientists in international authoritative journals is rapidly increasing and highly improving in terms of research quality. The Life Science Department continues to encourage studies regarding basic research on morphology, structure and function of cells, tissues, organs and systems, and actively supports researches related to human physiology, biochemistry, immunology, reproduction, development, aging, stem cell and tissue engineering, among others.

The research areas of the Health Science Department mainly focus on innovative theoretical and methodological research aimed at scientific issues emerging from medical practices, systematic and indigenous study on key scientific issues emerging from medical disciplines, translational medicine through combination of basic research, clinical research and integrative medical research on the occurrence, development and regression of diseases at various levels. Additionally, the main priority of the Health Science Department is the basic research on major key diseases closely related to the national welfare, human livelihood, and major emergency events of public health. It is relevant to highlight that the department is putting effort on research of rare diseases based on existing accumulated research work.

There are five funding programmes for European researchers within the NSFC as described below:

- General Programme: It supports researchers to conduct innovative explorative research on open topics within certain areas;
- Young Scientist Fund: Similar to the General Programme, but exclusively targeting young scientists;
- Key Programme: Medium-sized projects supporting prospective and frontier studies;
- Major Research Plan: Medium and large-sized projects of strategic value to economic and social development in national priority areas;
- International (Regional) Cooperation and Exchange Programmes: They support joint research with top researchers and institutions worldwide.

### How to apply to the NSFC

This sub-section provides useful information for researchers about the eligibility and the application process of the NSFC, including the following steps: (1) Check the Guide to Programmes (2) Prepare the proposal in person and in accordance with the outline (3) Select the correct “funding category”, “subclass introduction” and “annotation”(4) Choose “National Natural Science Foundation Application Code” (5) Prepare a hard copy of application.

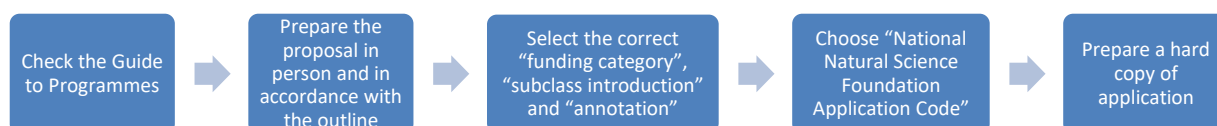


Figure 4 – Application process of the NSFC



### Who can participate?

The programmes of the NSFC are targeted at China-based actors. The eligible applicants are mainly the following groups:

1. China-based affiliates of European entities that possess legal personality in mainland China and are registered on the NSFC's internet-based system.
2. European researchers working in China either in China-based affiliates of European entities or in Chinese institutions.

### Eligibility criteria

As the Principle Investigator (PI), the applicant should comply with NSFC regulations. The applicant has to have the experience of undertaking basic research programme(s) or other basic research activities as well as a senior academic rank (title) or a doctoral degree or recommendation from two researchers who are in the same research field and have a senior academic rank.

In addition, it is also important to note that applicants should only apply for a type of programme once a year, excluding the Integrated Programme and Strategic Research Programme in the Major Research Plan, and the International (Regional) Exchange Programme.

Meanwhile, applicants cannot apply for the same type of programme if one has received funding for the General Programme (including one-year programme), Key Programme, Major Programme and the Major Research Plan Programme (excluding the Fostering Programme and Strategy Research Programme), Programme of Joint Funds (referring to the Joint Fund with the same name), Fund for Less Developed Regions (including one-year programme), International (Regional) Cooperation and Exchange Programmes (unless otherwise notified) and National R&D Programme for Major Research Instruments in the previous year.

### Application process

The NSFC publishes annual guidelines that include detailed programmes and areas that will be funded under each specific programme. All applications must be submitted by March of the following year and must be submitted by a PI through the NSFC's system. The NSFC has standardised the selection and evaluation process<sup>12</sup>. It applies to all categories of projects, and has been summarised in Figure 5.

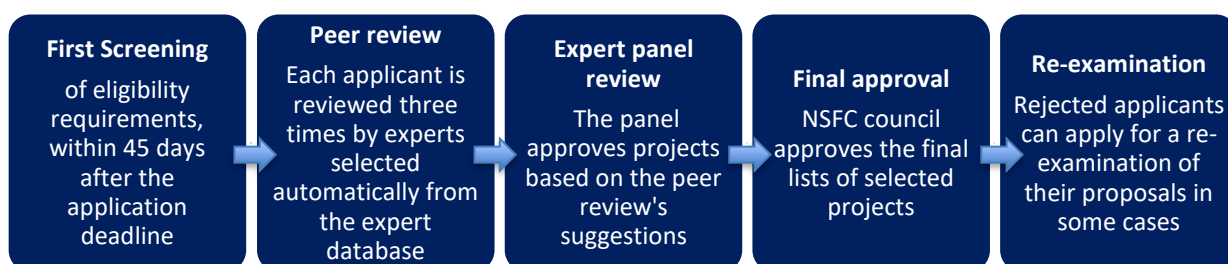


Figure 5 – Selection and evaluation process of the NSFC<sup>13</sup>

<sup>12</sup> <http://www.nsf.gov.cn/nsfc/cen/xmzn/2019xmzn/index.html>

<sup>13</sup> Advance EU Access to Financial Incentives for Innovation in China Guide for EU stakeholders on Chinese national STI funding programmes, DEVELOPMENT Solutions Europe Ltd. 2018 <https://eeas.europa.eu/sites/eeas/files/1.pdf>

In the first stage, the applications run through a screening process to check if the eligibility requirements are met. Normally, around 98% of applications pass this stage. The peer review is then conducted by experts selected from the National S&T Experts Pool. The panel does further reviews based on the peer review's suggestions. The selected proposal should meet the evaluation criteria, including:

- Scientific value, innovativeness, impact on society, feasibility of the proposal, and
- The PI's research experience, composition and research conditions of the team, rationality of the requested funding.

The final results are announced by email in September of the year of submission. Only high-ranked proposals are accepted to receive funding. When applying for NSFC funds, applicants should comply with the following provisions:

#### **Step 1: Read the NSFC Guide to Programmes<sup>14</sup>**

Prior to the writing the proposal, applicants should carefully read the Regulations, Guide to Programmes, Management Methods of National Natural Science Funds, and management regulations on various programs, as well as relevant notices and announcements.

#### **Step 2: Prepare the proposal**

Applicants should prepare the proposal in person and in accordance with the outline. Applicants and the main participants should fill in their Curriculum Vitae accordingly.

#### **Step 3: Select the funding category**

Applicants shall select the correct "funding category", "subclass introduction" and "annotation". Content that requires "choosing" can only be chosen in the pull-down menu; content that requires "filling out" can be written in words; some programme annotation attachments should be written strictly in accordance with the Guide to Programmes.

#### **Step 4: Choose a "National Natural Science Foundation Application Code"**

The application code is published by NSFC under each department and each research field has its specific code for applying.

- 1) When choosing the code, try to select the full code including the last digit.
- 2) The first application code is the reference for deciding NSFC's accepting department and selecting the panel experts.
- 3) The Key Programmes, Major Research Programmes and Programme of Joint Funds, etc., have special requirements for the application code.
- 4) The NSFC promotes the standardisation of the "application code", "research direction" and "key word". Applicants should accurately select "application code 1" and the corresponding "research direction" and "key word" when filling out the proposal form.

#### **Step 5: Prepare a hard copy of the application**

The hard copy of the application should be signed by the applicant and all major participants.

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<sup>14</sup> National Natural Science Fund Guide to Programmes 2018 [http://nsfc.gov.cn/english/site\\_1/funding/E1/2018/07-09/112.html](http://nsfc.gov.cn/english/site_1/funding/E1/2018/07-09/112.html)

### Examples of health-related calls

The table below shows the on-going NSFC health call open for application. Based on the information collected, the NSFC currently only has one open health-related call.

Table 5 – Health-related call of the NSFC

No.	Call	Topic description	Deadline
1	UKRI-NSFC Joint Call: Understanding and Addressing Health and Social Challenges for Ageing in the United Kingdom and China <sup>15</sup>	The aim of this programme is to enhance the evidence base on understanding and addressing health and social challenges facing ageing societies through interdisciplinary collaborations.	17 Oct 2019

### International cooperation

The NSFC has specifically designed the International (Regional) Cooperation and Exchange Programme to support joint research and exchanges between Chinese scientists and top researchers and institutions around the world. The programme aims to provide necessary supports for the researchers involved in NSFC funded on-going projects to participate widely in international cooperation and exchange activities.

Until today, the NSFC has framework agreements with 86 institutions in 44 countries worldwide, including with 17 EU MS, the EC's Directorate-General for Research, the ERC, the European Organization for Nuclear Research, as well as international organisations based in Europe.

### Other health-related programmes

In addition to the programmes mentioned above, the NSFC has set up two specific departments addressing health-related research within the General Programme and the Key Programme, namely the Department of Life Sciences and Department of Health Science. The programmes summarised below are related to health research.

#### General Programme - Department of Life Sciences

Under the General Programme, the NSFC has set up the Department of Life Science that aims to fund a broad spectrum of areas within the life sciences including biology, agricultural sciences and basic medicine, which extends to various fields of resources, environment, ecology, population and health.

##### Eligibility

1. Applicants should carefully read their subject of application. If the subject is not funded by the Division in the General Programme, it may apply to other types of programmes in the same division.
2. Applicants should provide a hard copy of the certification from the ethic committee of their host institutions or the superior administrative agencies.
3. The research period should be in line with the requirements for application available in the NSFC guide.

<sup>15</sup> <http://www.nsf.gov.cn/publish/portal0/tab568/info76142.htm>





4. Applicants should follow the requirements of the Guide to Programmes and the application syllabus when writing their proposals, otherwise they will be rejected or not funded.

### **General Programme – Department of Health Sciences**

To support basic research on issues concerned with disease prevention, disease control and disease treatment in China, the Department of Health Sciences gives priority to basic research on major key diseases closely related to the national welfare, human livelihood, major emergency event of public health, and common or frequently encountered diseases.

#### Eligibility

1. Applicants are encouraged to implement in-depth basic research toward scientific issues, especially the original research.
2. Applicants are expected to elaborate the scientific values and potential clinical applications of the anticipated research results in detail.
3. It is important to provide detailed information on relevant previous research.
4. Applicants are expected to refer to the specific requirements for various programs via the Department's website (<http://health.nsf.gov.cn>).

### **Key Programme - Department of Life Sciences**

The Department of Life Sciences accepts two types of applications for the Key Programme. One of them, the majority of total applications, is guided by designated areas (ADA) and the other, complementary to ADA, is freely selected research areas (ANA).

#### Eligibility

1. Applicants should propose research topics and compose every part of the proposal following the guidelines of designated areas. The designation of application codes for the Key Programme projects is set for efficient project management, whereas the application codes appointed may not include all research contents of the designated areas.
2. Applicants for the Key Programme (including both ADA and ANA) of the department are required to attach the first pages of five representative research articles closely related to the proposal.

### **Key Programme - Department of Health Sciences**

Applications to the Key Programme in the Department of Health Sciences are accepted only if they are in response to the solicited thematic areas listed in the Guide to Programmes. Applicants are expected to give their own specific project titles, research contents and research plans according to the listed areas. The research fields are chronic disease, remodelling of myocardium, digestive diseases.

#### Eligibility

1. Applicants are expected to refer to the requirements of the General Programme in the Department of Health Sciences.
2. The applicant should choose the relevant application code corresponding to the given thematic area and fill in the application form.
3. The applicant must attach PDF copies of five relevant representative papers of the PI to the electronic proposals.
4. When applying to this funding, it is necessary to fill in the budget form with detailed justification.
5. Detailed requirements for applications for the key programmes are in Guide to Programmes.

### 2.2.2. National Science and Technology Major Project (NMP)

The NMP (hereinafter referred to as “Mega Projects”) is seen to be the most ambitious research and development (R&D) assignment for China’s mid- and long-term development, according to national medium-and long-term science and technology development planning (2006-2020), approved by the State Council. It has identified 16 major projects, which reflect the most important priorities of the development of science and technology in China until 2020. These Mega Projects were integrated in the State Council’s 2014 reform of the national science, technology and innovation (STI) funding system. Mega Projects address major key products, technologies and engineering tasks of strategic importance for the country’s economy and competitiveness. A total of 16 vanguard Mega Projects were established, out of which 10 belong to civilian application (“Civilian Mega Projects”) and the remaining six belong to civil-military integration or pure military application (“Military Mega Project”).

Health-related research is one of the main priorities under the NMP. The Mega Projects for “Significant New Drugs Development” was launched in 2008, focusing on researching and developing new targets and certifications of Chinese-made chemicals and biopharmaceutical products, by designing new drugs and developing key technologies of large-scale and highly efficient drug selection, drug potency and drug safety evaluation. In addition, the Mega Project for “Prevention and treatment of major infectious diseases” such as AIDS and viral hepatitis is also considered one of the main priorities under the NMP. This project focuses on prevention and control technologies for emergent acute infectious diseases; diagnosis, prevention and treatment technologies and products for HIV/AIDS, hepatitis B and tuberculosis; vaccine research; R&D of a series of advanced detection diagnostic products and; formulation of traditional Chinese medicine-based treatment plans.

#### How to apply to the NMP

This sub-section provides useful information for researchers about the eligibility and the application process of the NMP, including the following steps: (1) Read the annual tender guideline; (2) Prepare the application documents; (3) Evaluation of the application; (4) Shortlist of the selected proposal; (5) Final approval.

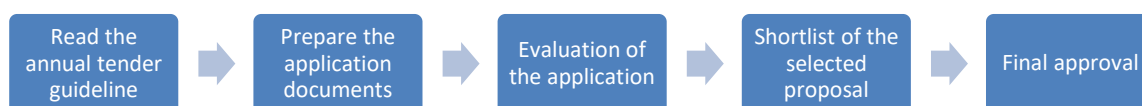


Figure 6 – Application process of the NMP

#### Who can participate?

In general, Mega Projects are open for participation of Chinese and European actors. It is important to highlight that the participation of China-based international actors is expected to be limited to minor roles only as consortium participants rather than as project leading units.

European actors interested in participating in Mega Projects are recommended to identify key players within each respective Mega Project.

## Eligibility criteria

Each Mega Project tender includes several project activities to be funded, each targeting different areas and aspects<sup>16</sup>. Every project activity should feature one of the following three modalities of application:

- Directionally-entrusted applications: Project leading units have already been chosen and are specified in the tender. Applicants that are interested in this category of project activities should contact and coordinate with the “directionally-entrusted” unit.
- Directionally-selected applications: Applicants can apply to the projects they are interested in independently. The selected project leading unit will then coordinate with the consortium and draft a detailed project implementation proposal, which must be approved by the expert committee after different rounds of evaluation.
- Openly-selected applications: Already-formed consortiums apply as a whole to particular activities. Detailed technical and financial proposals must be submitted.

Applicants can only submit proposals to those project activities which feature the latter two models of application. Eligibility requirements an applicants must possess are specified in individual tenders published and in each specific project activity, including:

- Requirement to possess legal personality in mainland China;
- Official endorsement and support from local government departments which have jurisdiction over the applicant;
- Additional funding provided by applicants, and possession of good financial capabilities;
- Previous experience in implementing major research projects;
- Industry-University-Research cooperation is often particularly encouraged.

## Application process

The tender guidelines are published on the Mega Projects’ website and are presented in the figure below.

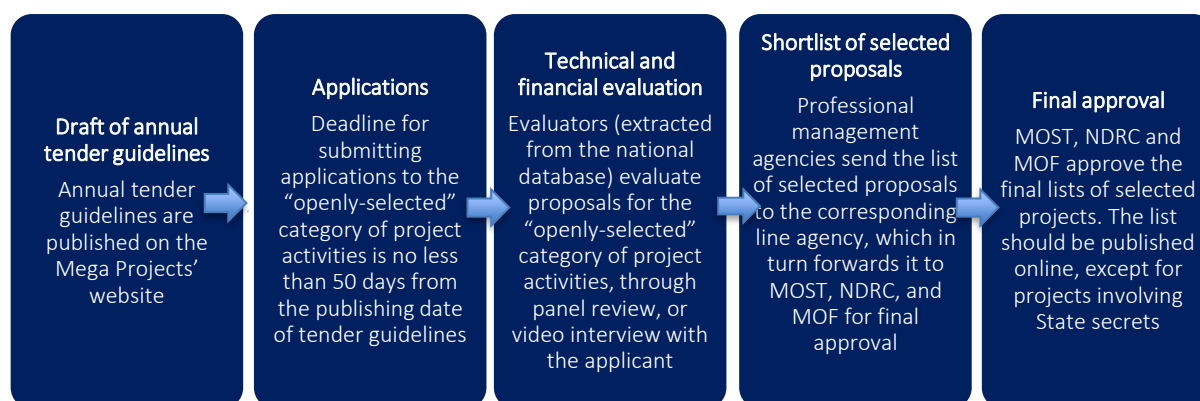


Figure 7 – Tender guidelines of the NMP

### Step 1: Read the annual tender guideline

Applicants shall check the Mega Projects’ annual tender guideline on the NMP website<sup>17</sup>.

Applicants shall apply according to the research contents, assessment indexes, relevant instructions, implementation period, declaration method and other requirements in the declaration guide.

<sup>16</sup> [http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2017/201706/t20170627\\_133757.htm](http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2017/201706/t20170627_133757.htm)

<sup>17</sup> <http://www.nmp.gov.cn/>

## Step 2: Prepare the application documents

The deadline for application is no less than 50 days from the publishing date of the tender. The relevant information that can be accessed for Mega Project tenders remains fragmented as it is being integrated within the “National Science and Technology Information System, Public Service Platform”.

For the application to the Mega Projects, all documentation should be prepared in advance, including:

1. An application form for acceptance to the Mega Projects;
2. Self-evaluation report;
3. Final conclusion of the projects.

## Step 3: Evaluation of the application

After receiving the application form for acceptance and related documents, the professional institution will conduct a formal review within 30 days and will send a reply to the lead undertaking unit whether or not it agrees with the acceptance.

## Step 4: Shortlist of the selected proposal

The selected proposal will be sent to the corresponding line agency which in turn will forward it to the Ministry of Science and Technology (MOST), National Development and Reform Commission (NDRC), and Ministry of Finance of China (MOF) for final approval.

## Step 5: Final approval

MOST, NDRC and MOF approve the final lists of selected projects. The list will be published online, except for projects involving State secrets.

## Examples of health-related calls

The table below shows the on-going NMP health calls open for application. The calls described below are the major health-related calls from the NMP and are published annually.

Table 6 – Health-related NMP calls

No.	Call	Topic	Deadline
1	Significant New Drugs Development <sup>18</sup>	Major Project for Significant New Drugs Development was launched in 2008, by the National Health Commission and the Military Commission logistics and Support Department led the implementation of the organisation.	March-April annually
2	Prevention and treatment of major infectious diseases <sup>19</sup>	Programme aims to prevent and control of infectious diseases by creating a preventive and control system for research and development of infectious disease diagnosis, prevention and protection products on AIDS, viral hepatitis B and other major infectious diseases.	March-April annually

<sup>18</sup> [http://www.nmp.gov.cn/tztg/201902/t20190218\\_6181.htm](http://www.nmp.gov.cn/tztg/201902/t20190218_6181.htm)

<sup>19</sup> [http://www.nmp.gov.cn/tztg/201902/t20190218\\_6180.htm](http://www.nmp.gov.cn/tztg/201902/t20190218_6180.htm)

## International cooperation

No concrete examples of international participation have been identified. The participation of China-based international actors is expected to be limited to minor roles as consortium participants rather than as project leading units, and is also likely to depend on the provision of additional funding.

### 2.2.3. Chinese Academy of Medical Sciences (CAMS)

Founded in 1956, CAMS is the only state-level academic centre for medical sciences and multidisciplinary medical research institution in China. Furthermore, the Peking Union Medical College (PUMC), founded in 1917, is the first key medical school to offer an eight-year curriculum on clinical medicine and undergraduate courses on nursing in China.

Having the responsibility of advising the Chinese government on pivotal healthcare and medical education reforms, CAMS and PUMC produce and provide world-class medical research and education. Both institutions have same administration and faculty<sup>20</sup>.

CAMS and PUMC have been leading modern medicine in China for over a century. There are 19 institutes (and five sub-institutes), six hospitals, seven schools and five CAMS branches among CAMS and PUMC. More importantly, international cooperation is one of the main focuses in CAMS, including being an associated member of the Global Alliance for Chronic Disease (GACD), providing funding for health research. Although there are other initiatives that could be mentioned here, based on the information gathered in the reports “Review on health research and innovation priorities in Europe” and “Map of the major funding agencies and stakeholders in Europe and China”, the project team has decided to describe the GACD in more detail as chronic diseases have been identified as a top health priority in both China and the EU.

There are a number of research institutes located in Beijing, Tianjin, Chengdu, Kunming, Suzhou and Nanjing. In Beijing, the Institute of Basic Medical Sciences has recently made remarkable progresses in multiple projects involving research on and development of diagnostic assays, genetically engineered drugs, Traditional Chinese Medicine, and biomedical polymers, and has established collaborations with more than 20 pharmaceutical companies in China and abroad<sup>21</sup>.

In Tianjin, the Institute of Hematology and Blood Diseases Hospital (IH) is the national centre for research and education in haematology and is also the largest treatment centre for blood diseases in China. IH is committed to standardising protocols for diagnosis and treatment, developing new technologies and methods for translational medicine in haematological malignancies, and advancing the field of haematology in China.

In Chengdu, the Institute of Blood Transfusion (IBT) is the sole National Key Research Institute devoted to transfusion science and medicine. The Transfusion Transmitted Center is one of research centres focusing on the early detection of transfusion-transmitted infectious diseases.

In Kunming, the Institute of Medical Biology was founded to develop and commercially produce viral vaccines for infectious diseases, particularly poliomyelitis, hepatitis A, and hand, foot, and mouth disease. The Institute of Systems Medicine (ISM) was created jointly by CAMS and Suzhou Industry Park (SIP), which is under the local government of Suzhou Municipality, Jiangsu Province. ISM conducts

<sup>20</sup> <http://english.cams.cn/index.html>

<sup>21</sup> <http://124.17.100.213/maps.html>

cutting-edge basic medical research in cancer as well as infectious, inflammatory, autoimmune, metabolic, and degenerative diseases.

The Institute of Dermatology was established as the Central Institute of Dermatovenereology by the Ministry of Health in 1954, with the aim of having a professional institution for planning, coordinating, and implementing the nationwide campaign to eliminate sexually transmitted diseases (STD). The institute has been certified as a World Health Organization Collaborating Center for Prevention and Control of STDs, providing technical consultations and support to other countries.

### How to apply to CAMS

This sub-section provides useful information for researchers about the eligibility and the application process of CAMS, including the following steps: (1) Read the call for application (2) Identify a research topic (3) Submit the application for call (4) Evaluation of the application (5) Final approval.

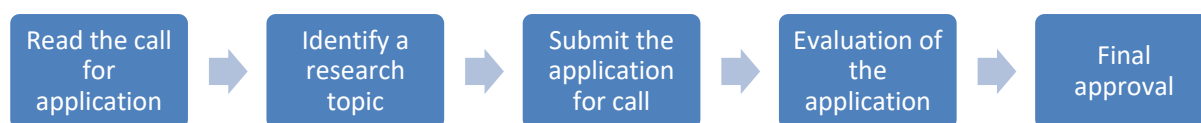


Figure 8 – Application process of CAMS

### Who can participate?

Participants can apply from all regions in the EU and China through associated members of the GACD, bringing together national and international member agencies representing more than 80% of all public research funding in the world – members of the GACD participate in funding implementation research as part of joint GACD research programmes.

### Eligibility criteria

Applications for grants will be assessed according to the following criteria:

- Relevance and Quality of the Project: The proposal must meet the objectives and scientific remit set out in the call.
- Quality of Team: Multidisciplinary team members who have established a high-quality track record in related fields of the proposed research, are pertinent to implementing science and have the right balance of expertise regarding the goal(s) of the research project.
- Project Implementation Plans: It is necessary to outline the major scientific, technical or organisational challenges identified and provide realistic plans on how to tackle these.
- Potential Impact: The project shall demonstrate alignment with international and/or national commitments.

### Application process

#### Step 1: Read the call for application

Applicants should check the call for application and call text through <https://www.gacd.org/funding/calls-for-proposals>. Some funders may have specific requirements in terms of scope and eligibility. Please refer to the funding agency specific information below or the respective agency’s website.

#### Step 2: Identify a research topic



Applicants shall identify a relevant health research topic mainly from four fields: hypertension, diabetes, lung disease and mental health. GACD member agencies fund research projects from around the world. Applicants need to clearly explain in their proposal why their chosen topic fits within the aims and scope of the call.

### **Step 3: Submit the application for call**

Applicants need to submit their proposal through a common submission portal. The majority of funders will accept applications submitted through the common portal. Please refer to the individual agency guidance notes for details.

### **Step 4: Evaluation of the application**

Applications for grants will be assessed against the following criteria: 1. Relevance and Quality of the Project, 2. Quality of the Team, 3. Project Implementation Plans, 4. Potential Impact

### **Step 5: Final approval**

The final approval can be obtained from the national agencies.

## **Examples of health-related calls**

CAMS provides funding for projects targeting health research, such as diabetes, heart and lung disease. Although there are no open/ongoing calls right now, there are some past calls worth mentioning such as:

- “Systematic Medical Assessment, Referral and Treatment for Diabetes care using Lay Family Health Promoters - SMART Diabetes” aiming to develop the SMART Diabetes system and determine its clinical impact for people with T2DM;
- “ Effects of information technology-based tools on long-term self-management of diabetic and non-diabetic patients with coronary heart disease” aiming to evaluate the effectiveness of information technology-based tools (short message services) on improvement of long-term adherence to secondary prevention and risk factors control among patients with established coronary artery disease, including those with diabetes;
- “Lung function of Chinese adults and the predictive value of peak flow rate to long-term incidence and prognosis of lung diseases” targeting chronic lung diseases, such as chronic obstructive pulmonary disease which has been the leading cause of morbidity and mortality in China. This high burden of chronic lung diseases may be due to increasing exposure to risk factors, but also to a lacking of population-based screening, poor early diagnosis and management, particularly in rural areas of China.

## **International cooperation**

CAMS has been strongly involved in international cooperation, including being part of the GACD as an associated member, providing funding for health research. In 2016, CAMS and the Ludwig Institute for Cancer Research in Switzerland signed a cooperative framework agreement in UK. Through this agreement, both sides are driving the development of cancer treatment and prevention with greater force in China and throughout the world. Moreover, CAMS held an International Symposium on Drug-resistant Tuberculosis Diagnosis and Treatment in 2016 with the aim to discuss common issues in clinical diagnosis and treatment of tuberculosis.



### 3. Latest Developments of R&I in the EU

In 2015, three main policy goals regarding R&I, namely Open Science, Open Innovation and Open World, were set for the EU by the Commissioner Carlos Moedas<sup>22</sup>. By implementing this set of policies, the EU and the EU MS aim to create and promote a better R&I environment open not just to EU researchers, but also researchers from all over the world who are interested in the R&I programme, which could engage and exchange knowledge in order to serve a bigger purpose. Within this context, this section provides information on the current state of the supporting policies for S&T innovation, training programmes promoted at the EU level and schemes and projects available within the EU for international collaboration. The table below summarises the main initiatives detailed in each sub-section.

Table 7 – Latest developments of R&I in the EU

European Science, Technology and Innovation Resources	
<b>Policies Supporting S&amp;T Innovation</b>	<ul style="list-style-type: none"> <li>• Better regulations for innovation-driven investments</li> <li>• Innovation Deals</li> <li>• Innovation Principle</li> <li>• Policy Support Facility</li> </ul>
<b>Training Programmes Supporting S&amp;T Innovation</b>	<ul style="list-style-type: none"> <li>• European Innovation Council</li> <li>• InnovFIN schemes</li> <li>• Pan-European Venture Capital Fund-of-Funds</li> <li>• COSME programme</li> <li>• European Health Catapult</li> <li>• MSCA</li> </ul>
<b>Support Schemes for International Cooperation</b>	<ul style="list-style-type: none"> <li>• European Innovation Partnerships</li> <li>• Knowledge and Innovation Communities</li> <li>• Innovation Radar</li> <li>• Seal of Excellence</li> <li>• Enterprise Europe Network</li> </ul>

#### 3.1. Policies Supporting S&T Innovation

Regarding policies supporting S&T innovation, four major initiatives promoted by the EC should be highlighted: **better regulation for innovation-driven investments in the EU, innovation deals, innovation principle** and **policy support facility**.

##### “Better regulations for innovation-driven investments at the EU level”<sup>23</sup>

A report that intends to give an in-depth sight of the EU’s regulatory framework and how this regulatory framework influences the innovation process. With this analysis, the EU aims to understand the current status of the innovation environment in order to produce a more adequate set of policies and measures to promote an innovation friendly ecosystem. The report is divided into four parts (i) Innovation and better regulation, (ii) An innovation-friendly regulatory framework, (iii) Openness to innovation through innovation deals and (iv) conclusions, where it is possible to determine that increases in investment in

<sup>22</sup> [https://ec.europa.eu/info/research-and-innovation/strategy/goals-research-and-innovation-policy\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/goals-research-and-innovation-policy_en)

<sup>23</sup> <https://publications.europa.eu/en/publication-detail/-/publication/404b82db-d08b-11e5-a4b5-01aa75ed71a1/language-en>





R&I are strongly correlated with economic growth. Although the current EU regulatory environment is considered positive, this may sometimes be a real regulatory bottleneck and constitute a barrier to innovation. In order to tackle those barriers, the design and implementation of new policies using the Better Regulation Guidelines seem to be an important step towards boosting growth, employment and competition.

### **Innovation Deals<sup>24</sup>**

None other than cooperation agreements between the EU, innovators and regional or local authorities that measure the influence of specific EU rules trying to understand if those rules are obstacles to R&I initiatives. The Innovation Deals were created following the EC Better Regulation Agenda, inspired by the Dutch Green Deal Programme, with the objective of trying to replicate the model used in the Netherlands, where a large number of Green Deals were successfully implemented by improving the regulation status, and use the same model to improve the innovative environment within the EU. Following this, in 2016, a call named “Innovation Deals on Circular Economy” was opened to any innovator that have faced a barrier or regulatory obstacle when trying to launch a circular economy-related product or service to the market. The implementation of the Innovation Deals is pointed seems to be a very reliable instruments to increase opportunities for innovation. Knowing this, the EC works together with the Presidency of the Council and collect suggestions on how to improve regulation in order to create a better relationship between innovation and regulation to make it simpler and more efficient.

### **Innovation Principle<sup>25,26</sup>**

It was created to make sure that the impact and consequences of a policy are measured before its implementation. Throughout the regulatory life cycle, every policy should be submitted to the Innovation Principle’s test ensuring that every new policy is considered as another step towards a more innovation-friendly environment. With the creation of this Innovation Principle, the EC wants to raise peoples’ awareness and share the idea that innovation is a natural way of addressing Europe’s societal challenges and improving its opportunities to prosper.

### **Policy Support Facility (PSF<sup>27</sup>)**

This is available to the EU countries and to all countries involved in H2020 projects, and aims to provide assistance on the evaluation as well as on the design and implementation of national and regional policies with regards to R&I. The PSF provides a wide range of services and tools to help countries improve their support of science and innovation by for example providing top-level expertise, peer reviews, meetings with stakeholders (universities, firms and researchers), mutual learning exercises and specific support to countries. With this set of services, PSF aims to provide tailor-made advice to every case or situation. Through peer reviews, PSF is able to give the national authorities some concrete recommendations to enhance the effectiveness of the reforms regarding the R&I system. With mutual learning exercises, the platform users are able to participate in exercises that focus on specific R&I

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<sup>24</sup> [https://ec.europa.eu/info/research-and-innovation/law-and-regulations/innovation-friendly-legislation/identifying-barriers\\_en](https://ec.europa.eu/info/research-and-innovation/law-and-regulations/innovation-friendly-legislation/identifying-barriers_en)

<sup>25</sup> [https://ec.europa.eu/info/research-and-innovation/law-and-regulations/innovation-friendly-legislation\\_en](https://ec.europa.eu/info/research-and-innovation/law-and-regulations/innovation-friendly-legislation_en)

<sup>26</sup> [https://ec.europa.eu/epsc/sites/epsc/files/strategic\\_note\\_issue\\_14.pdf](https://ec.europa.eu/epsc/sites/epsc/files/strategic_note_issue_14.pdf)

<sup>27</sup> <https://rio.jrc.ec.europa.eu/en/policy-support-facility/specific-support>

challenges and use the produced knowledge to make decisions and design policies that will benefit their countries R&I status. Regarding the specific support for countries, the PSF tool that countries can use will provide suggestions and recommendations of reforms that those countries should implement to tackle specific R&I policy challenges.

Conductive to pursue an innovation-friendly environment, the EC has the goal of designing better regulations to promote R&I initiatives. Following this, the EC divided its actions in different objectives, strengthening preparation, making sure EU laws are fit for implementing, ensuring quality, increasing cooperation between EU institutions and international regulatory cooperation.

**“Strengthening preparation”<sup>28</sup>**

It intends to evaluate the impact of an action at every stage of the decision-making process. Before the implementation of each law, policy or when evaluating how laws are performing, the EC considers mandatory to do an extensive and in-depth analysis of the situation so the following actions are the most correct. The Commission is also paying particular attention to citizens’ and stakeholders’ input by taking peoples’ opinion into account on the policy design. Citizens and stakeholders can share their views on roadmaps and inception impact assessments, legislative proposals, draft implementing and delegated acts and how to improve EU laws.

**“Making sure EU laws are fit for purpose”<sup>29</sup>**

It is an attempt by the EC to ensure that the laws follow the continuous changes and stay up-to-date. In 2012, the Regulatory Fitness and Performance (REFIT) programme was created to make laws simpler and to reduce the costs of regulation. Through the REFIT platform, the EC is able to collect suggestions and use them to make recommendations to make laws simpler.

The EC established the **“Ensure quality the Regulatory Scrutiny Board”<sup>30</sup>** with the aim of measuring the quality of the impact assessments and major evaluations that inform EU decision-making. The Scrutiny Board is independent from the Commission and gathers officials and experts in several areas.

Regarding the “Increasing cooperation between EU institutions<sup>31</sup>”, in April 2016 an agreement was signed between the EC, the European Parliament and the European Council. This inter-institutional agreement aims to improve law-making, review the existent laws and, when necessary, update them.

**Table 8 – Key health policies in Europe<sup>32</sup>**

Key Health Policies in Europe		
Personalised Medicine	Environment and Health	Public Health
SME Support	Horizon Prizes	Innovative Medicines Initiative

<sup>28</sup> [https://ec.europa.eu/info/law/track-law-making\\_en](https://ec.europa.eu/info/law/track-law-making_en)

<sup>29</sup> [https://ec.europa.eu/info/law/law-making-process/evaluating-and-improving-existing-laws/refit-making-eu-law-simpler-and-less-costly\\_en](https://ec.europa.eu/info/law/law-making-process/evaluating-and-improving-existing-laws/refit-making-eu-law-simpler-and-less-costly_en)

<sup>30</sup> [https://ec.europa.eu/info/law/law-making-process/regulatory-scrutiny-board\\_en](https://ec.europa.eu/info/law/law-making-process/regulatory-scrutiny-board_en)

<sup>31</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2016.123.01.0001.01.ENG&toc=OJ:L:2016:123:TOC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.123.01.0001.01.ENG&toc=OJ:L:2016:123:TOC)

<sup>32</sup> <https://ec.europa.eu/research/health/index.cfm?pg=keypolicies>



- **Personalised medicine**<sup>33</sup> – aims to provide tailor-made prevention and treatment strategies for individuals or groups of individuals. In November 2016, ICPeMed was officially launched. This consortium specialises in personalised medicine and one of its main goals is the support of the personalised medicine base through a coordinated approach to research.
- **Environment and Health**<sup>34</sup> – the EU intends to reduce pollution and therefore improve peoples' welfare by modernising legislation. Through the years, these changes on the EU's policy framework resulted in the constitution of several clusters and consortia that support R&I in these fields. The European Human Biomonitoring Initiative started in 2017 and is expected to be ongoing until 2022. The European Cluster for Research on Endocrine Disruptor Testing and Screening initiated in 2018. These previous examples develop and support environmental and health research and can be used to describe the outcomes of the changing in the EU's policy framework.
- **Public Health**<sup>35</sup> – a new set of policies towards a sustained population-wide health improvement and reduction of health inequalities. The EC supports all researchers interested in developing RDI, addressing major current and future policy challenges, promoting the sharing of data, knowledge and best practices, researching and developing health technology assessment and foresight projects in public health research.
- **SME Support**<sup>36</sup> – mainly through H2020 the EU encourages SMEs to participate in the health-related projects promoted by the EC.
- **Horizon Prizes**<sup>37</sup> – since 2015, the EC awards financial prizes to developers of breakthrough solutions.
- **Innovative Medicines Initiative**<sup>38</sup> – this initiative had two phases. The first one, between 2008-2013, with a total budget of almost 2 billion EUR and the second that is ongoing, between 2014-2024 with an expected total budget of 3.3 billion EUR. These initiatives aim to support joint research projects and the creation of networks of industrial and academic experts by bringing together universities, industries, SMEs, patient organisations and regulators.

### 3.2. Training Programmes Supporting S&T Innovation

In order to provide an innovation-friendly ecosystem, the EU has established several different platforms and schemes to help innovators search for funding. Below some of them will be presented.

#### European Innovation Council<sup>39</sup>

The EIC is a platform available on the EC website that gathers all innovation funding schemes and is at the disposal of the innovators facilitating the search for the best-suited scheme.

<sup>33</sup> <https://ec.europa.eu/research/health/index.cfm?pg=policy&policyname=personalised>

<sup>34</sup> <https://ec.europa.eu/research/health/index.cfm?pg=policy&policyname=environment>

<sup>35</sup> <https://ec.europa.eu/research/health/index.cfm?pg=policy&policyname=public>

<sup>36</sup> <https://ec.europa.eu/research/health/index.cfm?pg=policy&policyname=sme>

<sup>37</sup> <https://ec.europa.eu/research/health/index.cfm?pg=policy&policyname=horizon>

<sup>38</sup> <https://ec.europa.eu/research/health/index.cfm?pg=policy&policyname=imi>

<sup>39</sup> <https://ec.europa.eu/research/eic/index.cfm>

In addition, the Proof of Concept grants, which are funding opportunities from the ERC, are designed for applicants who have already received funding from previous projects and now want to launch their work into the market and test its economic potential.

#### **InnovFIN schemes<sup>40</sup>**

These are provided by the European Investment Bank group and facilitate the access to financial tools (loans, guarantees and equity-type funding) and advisory services (financial advisory or public and private sector promoters). InnovFIN also has a specific tool of high relevance and use directed to infectious diseases (InnovFIN Infectious Diseases). Furthermore, the European Fund for Strategic Investments, part of the European Investment Fund, aims to increase the level of investment in Europe by attracting private investment and redirect it to strategic investment. Finally, the innovation procurement scheme is a platform that fosters innovation in specific fields and aims to provide solutions to public interest challenges through two strategies:

- Public Procurement of Innovative solutions (PPI), which are used when there is no need for new R&D because innovative solutions to the challenge already exist on the market on a small scale;
- Pre-Commercial Procurement, which comes in opposition to PPI, are used when there is the need for new R&D given the fact that there are no solutions available on the market yet.

#### **Pan-European Venture Capital Fund-of-Funds<sup>41</sup> (VC FoF) programme.**

This programme aims to strike the European equity gap, the fragmentation of the venture capital market and to attract additional private funding from institutional investor into the EU venture capital asset class.

#### **Competitiveness of Enterprises and SMEs (COSME)<sup>42</sup>**

The programme focuses on SMEs and provides them with a different variety of tools, such as (i) Accessing finance, (ii) Opening markets, (iii) Supporting entrepreneurs and (iv) Improving business conditions. In point (i), regardless of the business cycle phase the business is in (creation, expansion or business transfer), given the fact that COSME is supported by the EU, the access to finance (guarantees, loans or equity) can become easier. Moreover, as this programme is directed to EU based business the funding will be channelled through local institutions. In terms of point (ii), COSME funds the EEN which is a worldwide network with over 600 partners that helps SMEs in finding partners for their projects, thus promoting the opening of new markets. Regarding point (iii), COSME offers a wide range of services to entrepreneurs to enhance their skills such as mentoring, guidance and other support services. Finally, in point (iv), in order to create a business-friendly environment, COSME provides support aiming to reduce the administrative burden on the SMEs and helps those businesses to implement new models and innovative practices so they can be more competitive.

#### **European Health Catapult<sup>43</sup>**

The EHC is a European programme focused on MedTech, BioTech and Digital Health, intending to provide support and guidance to European health start-ups in order to help them reach their full

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<sup>40</sup> <https://www.eib.org/en/products/blending/innovfin/products/index.htm>

<sup>41</sup> <https://ec.europa.eu/programmes/horizon2020/en/ventureeu>

<sup>42</sup> [https://ec.europa.eu/growth/smes/cosme\\_en](https://ec.europa.eu/growth/smes/cosme_en)

<sup>43</sup> <https://www.europeanhealthcatapult.eu/>

potential. To do so, the participants have the chance to get in touch with leading experts and international inventors and have access to multi-channel involvement with the whole European Institute of Innovation and Technology's health community. The event ends with a competition between the participants. The European Health Catapult also includes a competition with prizes with up to 200,000 EUR (for the winner).

#### **Marie Skłodowska-Curie Actions (MSCA)<sup>44</sup>**

The MSCA are also worth mentioning when speaking about Training Programmes Supporting S&T Innovation. This initiative provides grants for all stages of researchers' careers (be they doctoral or highly experienced researchers) encouraging transnational, inter-sectoral and interdisciplinary mobility. With the opportunities provided, the programmes aims to equip researchers with the necessary skills and international experience for a successful career. MSCA are not focused on a single domain, on the contrary, it provides funding to a wide range of fields from fundamental research to market take-up and innovation services.

### **3.3. Support Schemes/Programmes for International Cooperation**

Following what was aforementioned, the EU also has services available to support innovators, some of the best known are the European Innovation Partnerships, the Knowledge and Innovation Communities, the Innovation Radar, the Seal of Excellence and the EEN.

#### **European Innovation Partnerships<sup>45</sup>**

These partnerships promote the cooperation between organisations at regional, national and EU level in specific areas in order to raise the effectiveness ratio of the initiatives with the objective of modernising sectors and markets and create benefits for the society.

#### **Knowledge and Innovation Communities<sup>46</sup>**

These are essentially partnerships between businesses, research centres and universities targeting to develop new services or even new companies in any field of knowledge, such as climate change or healthy living.

#### **Innovation Radar<sup>47</sup>**

This is an initiative that aims to identify true potential projects within the major programmes promoted by the EC, namely the FP7, H2020 and the Competitiveness and Innovations Framework Programme, and later provide support with the objective of the project reaching its full potential. The Innovation Radar process can be divided into three phases: (i) assessing maturity, (ii) providing guidelines and (iii) supporting innovators. Throughout its existence, this initiative has helped some health-related projects, such as the development of an automatic software framework, which helps the treatment of prostate cancer at the Netherlands Cancer Institute, the development of models for measuring and manipulating

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<sup>44</sup> [https://ec.europa.eu/research/mariecurieactions/msca-actions\\_en](https://ec.europa.eu/research/mariecurieactions/msca-actions_en)

<sup>45</sup> [https://ec.europa.eu/info/research-and-innovation/strategy/goals-research-and-innovation-policy/innovation-union\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/goals-research-and-innovation-policy/innovation-union_en)

<sup>46</sup> <https://eit.europa.eu/our-communities/eit-innovation-communities>

<sup>47</sup> <https://ec.europa.eu/digital-single-market/en/innovation-radar>

neural activity under controlled conditions at the Scuola Internazionale Superiore di Studi Avanzati, and also the development of ObTiMA that helps to set up, run and analyse clinical trials faster and easier.

### Seal of Excellence<sup>48</sup>

The Seal of Excellence was created to reward H2020 proposals that, even though were not selected for funding, are considered as very high-quality projects. In order to help the applicants with their search for an alternative source of funding, this quality label was created by the EC.

### Enterprise European Network EEN<sup>49</sup>

EEN is a platform specialised on helping small and medium sized businesses to innovate, grow internationally and make the best of their opportunities. The EEN gathers around 600 members including chambers of commerce and development agencies. The help provided by this platform can be divided into three categories: (i) International partnerships, (ii) Advice for international growth and (iii) Support for business innovation. Throughout its existence the EEN has helped a lot of businesses and projects, turning them into success stories. As an example, in 2017 EEN helped a Spanish SME called Life Length to develop a new blood test that makes it easier to provide tailor-made treatment to cancer patients. In 2016, it supported a British SME called Rogue Resolutions Ltd., that produces technologies for brain imaging and stimulation, to expand its business to Poland. Also in 2016, the EEN helped a Greek SME called BodyUpEvolution, that is specialised in providing innovative solutions to improve elderly peoples' mobility inside their houses, to find a distributor in the Czech Republic.

Based on the report “Map of the major funding agencies and stakeholders in Europe and China”, the project team identified a set of ongoing projects worth mentioning here. The health-related projects presented below are very good examples of schemes/programmes that promote international cooperation.

**Table 9 – Relevant ongoing health-related projects promoting international cooperation**

No	Initiative / Project	Time Frame	EC Contribution	Website
1	PRODEMOS	Start date: 1 January 2018 End date: 31 December 2022	2.465.041,25 EUR	<a href="https://www.prodemos-project.eu/">https://www.prodemos-project.eu/</a>
2	AiPBAND	Start date: 1 January 2018 End date: 31 December 2021	3.687.311,88 EUR	<a href="https://www.aipband-itn.eu/">https://www.aipband-itn.eu/</a>
3	MNR4SCell	Start date: 1 January 2017 End date: 31 December 2020	1.215.000 EUR	<a href="https://warwick.ac.uk/">https://warwick.ac.uk/</a>
4	Ageing with elegans	Start date: 1 May 2015 End date: 31 April 2020	6.573.680,50 EUR	<a href="http://www.h2020awe.eu/">http://www.h2020awe.eu/</a>

<sup>48</sup> [https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/seal-excellence\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/seal-excellence_en)

<sup>49</sup> <https://een.ec.europa.eu/>

## 4. Latest Developments of R&I in China

This section describes the latest developments of R&I in China. It provides an overview of the current status of China in terms of targets and priorities from the National Plan, the relevant funded projects and the future S&T plan, highlighting supporting policies for S&T innovation and recent developments, training programmes and support schemes for international cooperation.

China's R&D expenditures have reached a new high in 2017, accounting 2.1% of gross domestic product, as the country continues its drive to become a technology powerhouse. According to the National Bureau of Statistics, China spent 1.76 trillion RMB (228.000 million EUR) on research and development in 2017, an annual growth rate of 12.3%. The R&D spending has increased rapidly over the last decade<sup>50</sup>. In 2018, China ranked 17 out of 143 countries in the Global Innovation Index with relative strengths in firms offering formal training, high-tech net imports, creative goods exports and Gross Domestic Expenditure on R&D (GERD) financed by business, among others. When talking about the weakness of doing business in China, some issues on regulatory environment, GERD financed by abroad and environmental performance are mentioned in the Global Innovation Index<sup>51</sup>.

China has a population of 1.4 billion<sup>52</sup> with more elderly people than any other country. This may result in different disease patterns, diet and lifestyle, and has become the second largest market for medicine in the world. The government has launched a new healthcare system in order to promote efficient, safe, affordable, and accessible healthcare services through the Healthy China 2030 Plan.

### 4.1 Policies Supporting S&T Innovation

China has been striving to upgrade its industrial structure and shift its economy toward a growth model that draws strength from innovation. In order to accelerate the transformation of the Chinese economy to a more productivity-driven, knowledge-based economy, the Chinese government made considerable efforts to improve the S&T and innovation capabilities through a series of national strategic plans.

#### National Medium and Long-term Plan for Building Key Science and Technology Infrastructure (2012 - 2030)<sup>53</sup>

Under the 13<sup>th</sup> Five-Year Plan, China has outlined policies to improve its research infrastructure through the plan of "National Medium-and Long-term Plan for Building Key Science and Technology Infrastructure (2012 -2030)", aiming to improve the research infrastructure in seven strategic fields: energy, life science, earth system and environment, materials, particle physics and nuclear physics, space and astronomy, and engineering technology. The research infrastructures are to be opened to foreigners to promote international collaboration.

It is important to highlight the major scientific and technological construction of infrastructure and its general technical level of operation which should enter international advanced ranks by 2020<sup>54</sup>. It is also relevant to mention that health research and life science are the main focused areas in the Plan, especially for the development of modern medicine. The main target is to promote the rapid transformation of biomedical basic research results into clinical diagnosis and treatment technology.

<sup>50</sup> <https://www.caixinglobal.com/2018-10-10/chart-of-the-day-another-record-year-for-china-rd-spending-101333479.html>

<sup>51</sup> <https://www.globalinnovationindex.org/gii-2018-report#>

<sup>52</sup> <https://www.fic.nih.gov/News/GlobalHealthMatters/September-October-2015/Pages/china-global-research-impact.aspx>

<sup>53</sup> [http://most.gov.cn/yw/201303/t20130306\\_99983.htm](http://most.gov.cn/yw/201303/t20130306_99983.htm)

<sup>54</sup> [https://www.innovitalia.net/uploads/19210/infrastrutture\\_scientifiche\\_cinesi%20XIII%20PQ.pdf](https://www.innovitalia.net/uploads/19210/infrastrutture_scientifiche_cinesi%20XIII%20PQ.pdf)

During the "13<sup>th</sup> Five-Year Plan" period, a number of goals will be fulfilled in order to start building priority projects, namely deepen preparation demonstration of the reserve projects, promote the completion of facilities and enhance their performance, promote continuous improvement of scientific benefits and economic social benefits of facilities, strengthen the advanced exploration and pre-research of facilities and build a number of comprehensive national science centres of international influence.

### **Made in China 2025**

In 2015, the Chinese Government launched the Made in China 2025 strategy with the aim of transforming China into an advanced and competitive economy based on highly innovative manufacturing technologies. In this context, Made in China 2025 targets high-tech industries that strongly contribute to economic growth in 10 key priority sectors: 1) New advanced information technology; 2) Automated machine tools and robotics; 3) Aerospace and aeronautical equipment; 4) Maritime equipment and high-tech shipping; 5) Modern rail transport equipment; 6) New-energy vehicles and equipment; 7) Power equipment; 8) Agricultural equipment; 9) New materials; and 10) Biopharma and advanced medical products<sup>55</sup>.

The Made in China 2025 strategy's main goal is to stimulate and restructure the industry to move from quantity to a quality and efficiency principle in production, so that the country becomes a leader in technology at an international scale<sup>56</sup>. In this context, Made in China 2025 prioritises aspects such as the production of domestic-origin parts, growing usage of local content and own brands. It also emphasises the expansion of R&D capacity since core design centres for products usually remain based in other countries. In the strategy, China outlines 40 new R&D centres to be deployed in order to boost innovations in the manufacturing sector. Made in China 2025 is particularly focused on the development of high-end medical devices across sectors such as diagnostic imaging, robotic surgery, wearable devices and telemedicine. The government aims to raise its domestic content of core components and materials to 40% by 2020 and 70% by 2025<sup>57</sup>.

### **National Innovation-Driven Development Strategy<sup>58</sup>**

The National Innovation-Driven Development Strategy is the first driving force to lead the development of scientific, technological and institutional innovation, management innovation, business model innovation, industry innovation and cultural innovation, to promote the development of the way we rely on continuous accumulation of knowledge, technological progress and the upgrading of labour quality, and to promote the economy to a higher form with more fine division of labour.

The objective of the National Innovation-Driven Development Strategy will be fully implemented in three phases: First, by 2020, China will build a national innovation system with Chinese characteristics, which will strongly support the goal of building a well-off society in an all-round way. Second, by 2030, China aims to assume a frontline position in the world's innovation landscape, and improve the level of economic and social development and international competitiveness. Third, by 2050, China aims to be one of the leading countries in STI.

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<sup>55</sup> Centre for Strategic & International Studies, Made in China 2025, [www.csis.org/analysis/made-china-2025](http://www.csis.org/analysis/made-china-2025)

<sup>56</sup> Gómez Pérez-Cuadrado, E., Oficina Económica y Comercial de España en Pekín (2016) "Plan Made in China 2025"-  
[www.icex.es](http://www.icex.es)

<sup>57</sup> <https://www.medicalplasticsnews.com/news/ten-year-plan/>

<sup>58</sup> [http://most.gov.cn/kjzc/gjkjzc/gjkjzczh/201701/t20170117\\_130531.htm](http://most.gov.cn/kjzc/gjkjzc/gjkjzczh/201701/t20170117_130531.htm)



One of the key areas of the National Innovation-Driven Development Strategy is to promote the industrial innovation system and develop advanced health technology to meet the challenges of major diseases and population ageing. This plan will implement the integration of technology in many fields, such as life science, Chinese and Western medicine and bioengineering, and enhance the technical support capabilities of major disease prevention and control, public health and reproductive health.

### Healthy China 2030 Plan<sup>59</sup>

Healthy China 2030 was launched by the Central Committee of the Communist Party and the State Council in 2016. The Plan is considered as one of the key health strategies under the national medium and long-term strategic plan for health. Healthy China 2030 is a complete national action plan covering important areas of healthcare, including infant and maternal health, mental health, healthy ageing, healthy lifestyle promotion and education, control and management of non-communicable diseases, disease prevention, capacity building of healthcare services, building healthy environments (water and air quality improvement) as well as health services and security. Moreover, a medium to long-term plan (2017-2025) on the prevention and treatment of chronic diseases was released in 2017, aiming to reduce peoples' financial burden caused by medical expenses, improve the average life expectancy and boost their health. With Healthy China 2030, China expects to strengthen its health STI capacity.

## 4.2 Training Programmes Supporting S&T Innovation

China has established a national financial aid system for various talent programmes to support talented personnel by government agencies such as the NSFC, the Ministry of Education (MOE) and the Chinese Academy of Sciences (CAS). In order to continue being an innovation-oriented country, China published the Medium and Long-term Talent Development Plan (2010-2020), National Plan for Medium and Long-term Educational Reform and Development (2010-2020) and other funding programmes to support talents from China and other countries.

### National Outline for the Medium and Long-term Talent Development Plan (2010-2020)<sup>60</sup>

The objective of this plan is to increase the quantity and improve the quality of talents in multi-fields, so that it will foster sustainable development by enhancing the comparativeness of research activities and industry growth.

This plan is the first national comprehensive plan in China's history focused on national human resources development and is of vital importance to China's current and future development in the next decade and beyond. The plan also has significant impact on promoting the development of scientific and technological talents. It targets the training of high-level innovative talents and the promotion of all-around development of different types of scientific and technological personnel, aiming at accelerating scientific and technological progress and innovation.

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<sup>59</sup> <https://www.bmj.com/content/360/bmj.k234>

<sup>60</sup> [http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2011/201108/t20110816\\_89059.htm](http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2011/201108/t20110816_89059.htm)

### **National Plan for Medium-and Long-term Educational Reform and Development (2010-2020)<sup>61</sup>**

In 2010, China's first National Plan for Medium and Long-term Educational Reform and Development was put in place. It provides a roadmap to achieve the modernisation of the education system by 2020 in accordance with China's overall national strategy of reform and open to the outside. The plan is focused on implementing the education reform, to cultivate talented personnel and innovative talent.

### **Thousand Talents Program<sup>62</sup>**

China initiated the Thousand Talents Program at the end of 2008, aiming at bring top talents from overseas to China in the next five to ten years. Relying upon National Key Innovation Projects, National Key Disciplines and National Key Laboratories, central state-owned enterprises and state-owned commercial and financial institutions, and various industrial parks (mainly the high-tech development zones), this plan attracts strategic scientists or leading talents who could make breakthroughs in key technologies or could enhance China's high-tech industries and emerging disciplines. In addition, the programmes attract talents from multiple R&I areas, including health, life science and medical devices.

### **Hundred Talents Program<sup>63</sup>**

The Hundred Talents Program is one of the major measures that was launched by the CAS in 1994 to identify and foster top-quality professionals for the next century. The program selects distinguished talented candidates from both overseas and China. The qualified candidates will receive financial support for their research activities and living allowance in China. The Hundred Talents Program offers positions to those who have an international doctoral degree and who are assistant professors or higher in an international university with four (or more) consecutive years of research experience.

### **Talented Young Scientist Program<sup>64</sup>**

Talented Young Scientist Program (TYSP) is an international mobility scheme funded by MOST, aiming to cultivate future leading scientists together with other developing countries. TYSP promotes cross-border exchanges of excellent young scientists, scholars and researchers. TYSP also enhances cooperation among research institutes, universities and enterprises. TYSP offers sponsorship of around 12.500 RMB/month (approximately 1.600 Euros) to talented young scientists from developing countries to work in China on full-time basis. The duration of the exchange program is normally 6 or 12 months.

## **4.3 Support Schemes/Programmes for International Cooperation**

China has launched a number of programmes for international collaboration over the past years. The Chinese government has been investing in its S&T infrastructure through international collaboration programmes between Europe and China. This section includes a list of some of the most important schemes and programmes between Chinese and European organisations. The project team intends to provide the readers with useful information to build an opinion and have gain an understanding of what has been done and what is being done in the context of EU-China collaboration.

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<sup>61</sup> [http://www.gov.cn/jrzq/2010-07/29/content\\_1667143.htm](http://www.gov.cn/jrzq/2010-07/29/content_1667143.htm)

<sup>62</sup> <http://www.1000plan.org/>

<sup>63</sup> [http://english.gvig.cas.cn/jw/201202/t20120223\\_81675.html](http://english.gvig.cas.cn/jw/201202/t20120223_81675.html)

<sup>64</sup> <http://www.cistc.gov.cn/scientist/english/details.asp?column=927&id=89358>

### **President's International Fellowship Initiative<sup>65</sup>**

The CAS President's International Fellowship Initiative is a specific funding programme to attract talented foreigners to CAS for scientific exchanges and research cooperation. It is open to scientific research personnel from around the world who fit under the following seven categories: distinguished scientists, visiting scientists, postdoctoral researchers, special experts, young staff, PhD student and Master student.

### **NSFC - International Young Scientists Fellowship<sup>66</sup>**

The fund supports young foreign scientists to conduct basic research in mainland China in all areas of NSFC's funding scope in order to promote long-term sustainable academic collaboration and exchanges between Chinese researchers and young foreign scientists. The program provides funding for the research activities while the Chinese host organisation is responsible for covering living costs, insurance, and research facilities, among others. Young scientists are encouraged to submit proposals to the department responsible for funding of health sciences and life sciences.

### **China / UNESCO - The Great Wall Fellowship Programme<sup>67</sup>**

Established by the MOE, the Great Wall Fellowship Programme is a full scholarship for the United Nations Educational, Scientific and Cultural Organization (UNESCO) to sponsor students and scholars in developing countries to study and conduct research in China. The Great Wall Fellowship Programme provides a full scholarship covering tuition waiver, accommodation, stipend and comprehensive medical insurance.

### **Chinese Government Scholarship-Chinese University Programme<sup>68</sup>**

The Chinese University Programme is a full scholarship for designated Chinese universities and education offices in specific provinces or autonomous regions to recruit outstanding international students for graduate studies in China. It only supports graduate students. The Chinese University Programme provides a full scholarship, which includes covering tuition waiver, accommodation, allowance and medical insurance.

## **5. Critical Issues and Recommendations for Researchers**

This section presents a set of critical issues and recommendations that have been identified through the analysis developed in this document. Some of these issues are linked to the application to funding programmes both at EU and China level. Key recommendations are also provided in this section in order to give researchers comprehensive instructions on applying for such funding support.

As described in the previous sections, this report provides information and details of three programmes from the EU, namely H2020, the EU Health Programme and the Human Brain Project and three programmes from China which are considered to be the key funding programmes, namely NSFC, NMP and CAMS programmes.

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<sup>65</sup> [http://english.bic.cas.cn/AF/Fe/201809/t20180904\\_196916.html](http://english.bic.cas.cn/AF/Fe/201809/t20180904_196916.html)

<sup>66</sup> [http://www.nsf.gov.cn/english/site\\_1/index.html](http://www.nsf.gov.cn/english/site_1/index.html)

<sup>67</sup> [http://www.campuschina.org/content/details3\\_74777.html](http://www.campuschina.org/content/details3_74777.html)

<sup>68</sup> [http://www.campuschina.org/content/details3\\_74779.html](http://www.campuschina.org/content/details3_74779.html)

After the restructuring of the Chinese funding programmes, the Chinese government already implemented new funding pillars, centralising the system to monitor all types of national funding programmes. However, China's STI funding environment still remains somewhat fragmented and is still perceived to be a complicated procedure for EU actors. Concerning the EU funding system, H2020 provides funding and tender opportunities via the Single Electronic Data Interchange Area (SEDIA) with 80 billion EUR for funding available over 7 years (2014 -2020).

### **Critical issues**

According to the analysis developed, a set of issues should be considered for both European and Chinese researchers when applying to funding programmes.

#### Language barrier

Some European researchers have identified from previous experience that one of the main issues is the difficulty of accessing detailed information about the application process of a specific Chinese funding programme. Not all contents of the call for applications are available in English, which can bring constraints for European researchers when applying to these programmes. Although some funding programmes are available in English, it remains to be one of the major challenges for EU researchers to find accurate information published in languages other than Chinese.

From the Chinese side, it is also understandable that the English language is not mastered by every researcher which leads to difficulties in the establishment of partnerships and the full comprehension of the funding opportunities, their scope and goal. This still remains an issue among the Chinese researchers in applying to EU funds.

#### Policy and bureaucracy procedures

When it comes to the grant allocation for the funding programmes, there can be a lot of bureaucratic interference in decision making, especially in some funding agencies. This ultimately results in the lack of consideration of experts' opinion on this matter. Therefore, the accessibility and transparency of Chinese programmes is limited to Chinese applicants and for those who have Chinese collaborators. On the other hand, as aforementioned, it can also be an issue for Chinese researchers to follow the standards and procedures which the EU researchers are used to and that require a certain level of commitment and responsibility which is not common for the Chinese counterpart. Furthermore, the funding available for Chinese applicants to H2020 requires the application for funding through the Co-Funding Mechanism (CFM). It is relevant to highlight that applicants need to keep track of the EU-China CFM. The results of each evaluation stage (pre-application and formal application) are communicated timely by the professional management agency responsible for the daily operations of EU-China CFM calls – the China Science and Technology Exchange Centre. Therefore, all the evaluation and final results are to be published on the National S&T Information System.

#### Reliable and credible partnerships

Another issue is related to building a solid and consistent partnership. It is important to have good relations and partnerships with Chinese research organisations. From the NSFC and NMP programme, the lead applicants have to be based in China or to be Chinese. In some cases, programmes that have this requirement for the lead applicant, normally mean they have to be individuals and not organisations.



This shows that establishing a strong relationship with Chinese researchers is very important. Therefore, working with Chinese partners is considered to be essential, and in some cases mandatory, for participation in Chinese funded programmes. The word “Guanxi” means “relationship” in Chinese, and is extremely important for the success of an application when building the connection with Chinese counterparts. This also applies to both sides and in the application in programmes of both regions.

#### Lack of clarification for international cooperation in health-related calls

As described throughout the report, it can be concluded that there are many calls currently open which focus on health. However, in many of them, the openness for Europeans or Chinese to apply is not quite clear, having few or no clarification towards fostering international cooperation and attract foreign researchers.

### **Recommendations**

Based on the analysis developed and on the critical issues identified above, the project team highlights the following recommendations to European and Chinese researchers:

- European and Chinese researchers are encouraged to build relationships between them and extend their S&T network – platforms such as the H2020 Funding & Tenders Portal, EEN and NCPs, CAMS, among others. By doing this, it supports the understanding of the European and Chinese S&T policy and the structure of bilateral funding programmes and funding agencies. Moreover, it helps to identify potential funding opportunities within a specific research field such as health. Besides, it would be necessary to arrange physical meetings, allowing potential partners to know about the mutual interest in the collaborative projects and be prepared to have a concept note or even a short proposal before identifying the funding opportunity.
- It is also important to always keep track of the European and Chinese programme websites in order to obtain the most updated information on funding programmes. For instance, the NSFC website frequently announces new collaborative projects open for international participation. In the case of EU calls, there might be changes in deadlines and conditions that are important for the Chinese counterparts. Taking this into account, below is a list of websites for consultation of the programmes and open calls on health:

#### European

- Horizon 2020 – Health, Demographic Change and Wellbeing: <https://bit.ly/2NxxeVQ>
- EU Health Programme: <https://bit.ly/2BZl28W>

#### Chinese

- National Natural Science Foundation of China (NSFC):  
[http://www.nsf.gov.cn/english/site\\_1/funding/E1/2019/06-13/170.html#](http://www.nsf.gov.cn/english/site_1/funding/E1/2019/06-13/170.html#)
- National Science and Technology Mega Projects (NMP):  
<http://chinainnovationfunding.eu/national-st-megaprojects/>
- Chinese Academy of Medical Sciences (CAMS): <https://www.gacd.org/funding/calls-for-proposals>

- It is very important to understand the counterpart's working culture and research environment. Building a common understanding for both sides is very important for preparing a good proposal. When conducting a proposal, the Chinese counterpart emphasises more on what is the “mutual benefit” and “a win-win situation” and is directly linked to the project outputs, rather than other equal terms (financial contribution, exchange of information, clear terms of participation, etc.) that should be ensured by both parties. The European and Chinese researchers must be fully aware of essential differences in the interpretation of reciprocity by both parties.
- Finally, it is crucial that the open calls for health research in both regions are perceived and understood to be available for European and Chinese researchers, promoting international cooperation and highlighting the mutual benefits for Europeans and Chinese. This attracts Europeans towards the Chinese funded programmes and the Chinese researchers to the European funded programmes. In addition, it is relevant to understand the common priorities on health between both regions, in order to better align interests between researchers – detailed information on health research priorities between the EU and China are available in the report “Scoping paper: Review on health research and innovation priorities in Europe and China” of the SENET project.

Some additional recommendations for **European researchers**, specifically regarding the identification of the most suited research topic for both NSFC and NMP programmes are listed below:

#### NSFC

- When choosing health research topics from the NSFC, it is necessary to focus on three to five research results to achieve. Each of them should be clear, very well-defined, and measurable (e.g. patents filed; standard formulated; new technology developed, etc.).
- It is necessary to identify new research trends, methodologies or angles that are the criteria to reach innovative proposal.
- In terms of filling the application proposal, it is important to make sure that the team composition is rational and suitable.

#### NMP

Those willing to try in any case to participate in Mega Projects are recommended to focus on the four Mega Projects which explicitly encourage international cooperation, namely:

- Prevention and treatment of HIV/AIDS, viral hepatitis and other major communicable diseases
- Development of major new drugs
- New generation broadband wireless mobile communication networks
- Water pollution control and treatment technologies

It is also important to identify the key major players within each of these Mega Projects. This is mainly because many applications and consortia under Mega Project must be organised by key influential actors in the field, therefore having a large impact to decide the final composition of their consortium team.



Finally, additional recommendations for **Chinese researchers** for identifying the research topic in H2020 are listed below:

#### H2020

- The benefits for Chinese researchers in applying to H2020 are related with the access to advanced knowledge, data and up-to-date technology, and allows an upgrade of the research quality of each partner in the consortium.
- The evaluation of all applications is received from both the CFM and the H2020. Chinese applicants should follow the notifications published by MoST within few months after the specific CFM deadline.
- It is important to keep track of the latest call for applications from the MoST website: [http://most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2019/201904/t20190423\\_146203.htm](http://most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2019/201904/t20190423_146203.htm)



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48. Strengthening preparation [https://ec.europa.eu/info/law/track-law-making\\_en](https://ec.europa.eu/info/law/track-law-making_en)
49. Talented Young Scientist Program  
<http://www.cistc.gov.cn/scientist/english/details.asp?column=927&id=89358>
50. The EU Health Programme [https://ec.europa.eu/health/funding/programme\\_en](https://ec.europa.eu/health/funding/programme_en)
51. Thousands Talents Programme <http://www.1000plan.org/>

