



Guidelines for 2018 Program of NSFC

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Notice on Application

1. Requirements for Applicants

1.1 Science and technology personnel who work on fundamental research and fulfill the requirements mentioned in the first clause of Article 10 in Regulations, if not employed by an institute or his/her employer is not the host institution of NSFC, the applicant should consult with a host institution registered on NSFC and get the permission from the registered host institution for him/her to apply for General Program and Young Scientist Program, but not for other types of programs.

Personnel in this category, when applying for programs, shall fill in the information of his/her employer institution truthfully on the basic information sheet of the application form, introduce his/her previous research work in detail on his/her curriculum vitae and provide a paper contract with signature/stamp of the host institution as an attachment along with the application.

2. Requirements for Drafting Application Form

2.1 A pilot program has been conducted on paper-free application for Key Program and Excellent Young Scientists Fund. Host institution needs to affirm the electronic application and attachment materials online. If an application is approved, then the page with signatures and official stamp of the application form needs to be submitted along with the Project Plan of the granted proposal. The information on this page should comply with the same information on the electronic application form.

2.2 The start date on the application form should be January 1, 2019. The conclusion date should be December 31, 20xx in accordance to the requirement about funding period of the submitted application. On-station postdoctoral researchers, if apply for relevant types of programs, shall fill in the date as December 31 of the year stated in the application in accordance with the commitment he/she made to the host institution.

2.3 Applicants and main participants shall use a same Identification Card of them for project application.

In filling in names of the applicant and participants, the applicant should ensure the consistence of the name in the form with that on the Identification Card; the characters in the name should be normative.

3. Responsibilities of the Host Institution

3.1 The host institution should organize the application tasks in accordance with the Regulations, the Guidance, the Funding Administrative Regulations of NSFC Host Institution, relevant Notice and Announcement of Application Acceptance, Management Measures of related types of programs, Financial Administrative Regulations of NSFC Funded Program, Notice on Budget

Formulation, and Instructions on Budget Formulation for NSFC Funded Programs.

Notice on Formulation of Budget Sheet

1. General Requirements
 - 1.1 The formulation of the budget should comply with the basic principles of Financial Administrative Regulations of NSFC Funded Program. And follow the principle of “Target Relevancy, Policy Correspondence, Economic Rationality”. All budget expenditure items, programs and standards shall comply with the spirit of the above mentioned three basic principles.
2. Budget Items
 - 2.1 Equipment costs: refer to the costs for purchasing or building specialized instruments and equipment, upgrading and remolding of the existing equipment, and leasing equipment from external institutions.
 - 2.2. Material costs: refer to the costs for purchasing, transporting, stevedoring and sorting out of essential raw materials, supplementary materials, low-value consumables, and so on, used during the project period.
 - 2.3. Testing and processing costs: refer to the costs paid to aid to external organizations (including the independent economic accounting department in the applicant’s institution) for testing, examining, analyzing and processing tasks during the research process of the project.
 - 2.4. Fuel and powering costs: refer to those paid for water, electric, natural gas and fuel used for large-scale instruments and specific science equipment if these can be calculated independently.
 - 2.5. Travel expenses/Conference expenses/International collaboration and exchange costs: refer to travel expenses in other areas or local traffic expenses resulting from the processes of performing scientific experiments, scientific investigations, business researches and academic exchanges during the project period, conference expenses resulting from organizing academic discussion, consulting and coordinating the research work, and expenses for the researchers’ overseas travels and travels to HK/Maocao/Taiwan, and for foreign or HK/Maocao/Taiwanese experts’ travelling to mainland China for work relevant to the research project. The upper limit of all these costs is 10% of the direct cost for which no estimation and calculation is required.
 - 2.6. Publishing/literature/information dissemination/intellectual property issue expenses: refer to costs resulting from publishing, literature research and printing, specific software purchasing, literature retrieval, professional communication, patent application and other intellectual property affairs.
 - 2.7. Labor costs: refer to the costs paid to graduate students, post-doctoral fellows, visiting scholars, and researchers temporally hired for the project, and the costs for buying social insurance for these people.
 - 2.8. Expert consulting costs: refer to the costs paid to the consultant experts

temporally hired for the project.

2.9 Other Expenses: refer to those other than the costs mentioned above.

3. Externally Transferred Funds for Collaborative Research

3.1 If the applicant and participants of the program are not from the same institution, the institution of the participants is regarded as collaborative research institution.

3.2 Both parties of the collaboration should sign the collaborative research agreements (or contracts) and have specific explanation in the budget statement about the money that will be transferred to the institution of the participants. The collaborative research agreements (or contract) may be kept in the host instruction for future checking.

3.3 The applicant for the collaborative research and participants should formulate their own budgets according to research tasks born by each of them (be referred to as sub-budget). After reviewed and approved by each institution, the sub-budgets should be summarized into a total budget. The sub-budgets in the application should be at least signed by the participants whereas those in the project plan shall be signed and stamped by the participants and the collaborative institutions.

Programs funded in a fixed-amount method can be exempt from submission of sub-budgets which can be archived for future checking in the host institution. The sub-budgets of the programs funded in a cost-compensated method shall be submitted as attachments of total budget.

3.4 During the implementation of the project, the host institution shall transfer the collaborative research funds in time based on the budget and agreements (or contract).

3.5 Collaborative research with agreement reached by both parties to avoid external transfer of funds, can be exempt from signing collaborative research agreements (or contract) and formulating sub-budgets if the condition is explained in the budget statement.

4. Other Issues

4.1 According to the Notice [2016] No.50 published by the General Office of CPC and General Office of State Council, expenditure standards for travel expenses and conference fees shall be formulated by host institutions according to the principle of Seeking the Truth from Facts, Simple and Efficient, and Economize. Applicants for the programs shall formulate the budget for travel expenses and conference fees based on the internal standards formulated in their host institutions.

4.2 For projects funded in a cost-compensated method, NSFC would have a specific review on the budget and determine the funding amount based on the need of the program. The budgets for collaborative externally transferred funds, equipment purchasing, laboratory testing, processing, and labor costs must be specified in detail list, otherwise, the budget will be objected.

All detailed statements of the budget should be only those legally funded by the foundation.

- 4.3 The statistics of the budget should be measured in “Ten Thousand Yuan” and be rounded to two decimal places. Those expenditures measured in “Yuan” should be rounded to single digit. Foreign currencies shall be converted into RMB according to the spot current exchange rate published by The People’s Bank of China.

Regulations on upper limit number of Applications

1. Regulations on the upper limit number of all types of applications
 - 1.1 In each year, an applicant can only submit one application for a program in a category except the programs like the integrated and strategic research programs in Major Research Program, and International (Regional) Joint Programs. Neither are two applications for a same Joint-funding Program be accepted.
 - 1.2 Principle investigators who received General Program funding (including one-year program), Key Program, Major Program, Major Research Plan (integrated program and strategic programs are excluded), Joint Funding Program (referring to the same Joint Funding Program), Regional Science Funding Program (including one-year program), International (Regional) Joint Research Program (except for those with specific instructions) and Research Program for National Major Research Instruments and Facilities, cannot be function as a principal applicant of an application for the same type of program in this year.
 - 1.3 If applicants apply for Research Program for National Major Research Instruments and Facilities (recommended by the relevant department) and Center Program of Basic Science in the same year, the two applications would be totaled as 1 program.
2. Regulations on the total number of applying and granted programs by senior professional researchers

For people with senior professional position (title), the total number of applying (functioning as PI or participant) and undertaking (functioning as PI or participant) programs should not be more than three. The regulation applies to the following programs: General Program, Key Program, Major Program, Major Research Plan (integrated program and strategic programs are excluded), Joint-funding Program, Young Scientists Fund, Regional Science Foundation, National Science Foundation for Distinguished Young Scholars of China, Key International (Regional) Joint Research Program, Trans-organizational International (Regional) Joint Research Program with more than 2 million direct costs for each project (functions as PI), Research Program for National Major Research Instruments and Facilities (including undertaking Specific Program for Basic Research on Science Instrument

and National Major Science and Research Instrument and Equipment Research and Construction Program), Outstanding National Key Laboratory Research Program, and Emergency Management Program with a funding period of more than one year (except for those with specific instructions, Bureau (Office)-entrusted Mission, and Soft Topic Research Program).

Excellent Young Scientists Fund and National Science Foundation for Distinguished Young Scholars of China are not subjected to the limitation at the application stage; however, the applications that have been successfully submitted or approved for funding should be subject to this limitation.

Only one instrument research program is allowed. The applied programs include: Research Program for National Major Research Instruments and Facilities (including Specific Program for Basic Research on Science Instrument and National Major Science and Research Instrument and Facilities Research and Construction Program) and Specific Research and Development Program for National Major Science Instrument and Facilities being in the charge of Ministry of Science and Technology. A person who is undertaking the Specific Research and Development Program for National Major Science Instrument and Facilities is not allowed to apply for all other types of programs other than National Science Foundation for Distinguished Young Scholars.

Basic Science Center Program is not subject to the above limitation regulation at application stage. If the application is approved for funding, the PI and participants are not allowed to apply for all other types of programs other than National Science Foundation for Distinguished Young Scholars until the program is finished.

General Program

Division 1 of Physical Sciences

Funding areas of this division include: condensed matter physics, atomic and molecular physics, optics and acoustics, and new research fields resulted from the reciprocal interactions of these four disciplines with other disciplines.

According to the status and needs of discipline development, emphasis should be placed on experimental methods and experimental techniques with innovative thinking. Encouragement should be given to new computational methods and development of simulation software which are closely related to experimental physics and highly explorative. Attentions are also should be paid to key and basic physics topics related to the major national needs and to new physics concepts and methods in cross-cutting areas. Particularly encouraged are investigations of those issues being of great significance in science but have not yet become a hot physical topic. Also, fundamental physics research of physic devices is encouraged. Supports are also given to research on exploration of new fields and directions.

In condensed matter physics, emphasis is placed on bizarre quantum

phenomena in associated electronic systems, quantum phenomena and quantum effects in various low-dimensional and small-scale systems (devices), device physics and advanced characterization techniques and methods, structures and physical properties of surfaces, interfaces and films; physical issues on structure, performance, preparation and application of advanced materials. Encouragements should be given to research on basic physics problems and experimental methods related to soft matter, life sciences and other interdisciplinary projects, in particular, to the research on physics topics on materials and devices with significant application prospects.

In atomic and molecular physics and optics, attention is paid to the structure and dynamics of atoms, molecules and clusters, cold atom molecular physics and its physical issues in the interaction with the light field, complex interactions of atoms and molecular systems, laser-atomic-molecule interactions, ultra-fast and super-photo-physics, transmission of light in new optical media and its properties, physical issues in quantum-frequency standards, quantum metrology and quantum information, atomic-molecule precision spectroscopy, physics and methods of precision measurement, high-resolution, high-sensitivity and high-precision laser spectroscopy and its applications, as well as the research on basic physics topics in micro/nano photonics, photo-dynamics and surface plasmonics. Emphasis is also put on light field regulation and its application, relevant cross-cutting research. In addition, the frontier physics in optoelectronics and photonics is also a significant research direction.

In the field of acoustics, projects should be combined with the major needs of social development and investigate key topics of basic acoustics topics. Emphasis will be placed on physics acoustics, marine acoustics, ultrasound and acoustics, noise and control, new acoustic materials and devices, acoustic transducers, and acoustic issues in information science and biomedicine.

Division 2 of Physical Sciences

Division 2 of Physical Sciences mainly supports research in the fields of basic physics, particle physics, nuclear physics, nuclear techniques and their applications, accelerator physics and detector technology, plasma physics and synchrotron radiation methods and technologies.

In basic physics, focuses are placed on the research of originality or interdisciplinary, and significant theoretical problems resulted from scientific practice and experiments in the frontiers of modern physics.

In particle physics and nuclear physics, supports will be given to innovative theoretical and experimental research, especially to the physics research related to the large-scale scientific experimental devices that are being operated, upgraded, built and approved at home and abroad, with the focus on the combination of theory and experiment. It is expected that the domestic research in these two fields will be directed into the directions related

to the latest physical experiments and the understanding of important physical laws through the guidance of NSFC, such as the phenomenological theory in particle physics and its experiments, nuclear physics and nuclear astrophysics under extreme conditions, and the other inter-disciplinary issues.

Funds in the fields of nuclear technology, accelerators and nuclear detectors, low-temperature plasma and synchrotron radiation, are aimed to distill fundamental research directions that may deepen the understanding of the objective laws, accelerate the research progress of the studied area, and offer important application prospects by developing key technologies and innovations in methodologies. Key funding projects would be the research exploring various types of strong-radiations characterized with instantaneous, high-energy, and high-power, such as charged particles, neutrons, X/γ ray, electromagnetic field, etc. And those addressing the laws and mechanisms underlying the interactions of materials. Emphasis should be put on physics and key technology research on new acceleration principles in accelerators, detectors and plasma, nanometer micro-bundles, high-power particle beams, high-current accelerators, plasma sources, and various advanced radiation sources. Efforts should be made to support new nuclear detection technologies and methods characterized with large area, high count rate, high time resolution, low background, and weak signals, as well as the research on related nuclear electronics.

In nuclear fusion and plasma physics, the aim is to pay more attention to the exploring research on the scientific issues and new diagnostic approaches related to the current large-scale devices, especially those basic physical issues related to the current world leading "advanced magnetic confinement fusion", "inertial confinement fusion", as well as the computer simulation and experimental research on various types of plasma.

To make more effective use of limited resources, scientific researchers in all fields of the country are encouraged to make full use of the large national science devices and the existing small and medium-sized equipment platforms to conduct appropriate scientific research, and lead research work into a virtuous circle of sustainable development. Encouragement will be given to high-resolution diagnosis and detection methods with independent innovation, and research essential for the development of accelerators, nuclear detectors, and gravitational waves detection (including the development of necessary experimental equipment, detectors and diagnostic equipment). The funding amount for direct costs of such programs may be increased if necessary. Programs involving more young scientists would be given preferential support under the same conditions.

Materials Chemistry and Energy Chemistry

Materials Chemistry is the science that studies the design, preparation, structure, performance and application of materials. It is a bridge between Chemistry and Materials Science, Life Science, Medicine, and Information

Science. It is an application-oriented branch of chemistry and is the molecular basis of new material systems. Materials chemistry uses chemical principles and methods to design new materials in the atomic and molecular levels, develop preparation technology and investigate structure-activity relationship, and achieve macro-performance control of materials through structure-function transfer, integration and coordination in multi-scale and multi-level. It also creates new materials with high performance and multi-functions and the applications of them in energy, health, environment and information areas.

Materials chemistry focuses on the precise preparation of new materials with specific functions. It accurately constructs and controls the structure and properties of materials, cares for the multidisciplinary cross-cutting and synthesis, emphasizes the association between structure and performance, by means of a variety of characterization techniques in investigating the molecular basis, principles and laws of material system.

Materials chemistry should focus on the discovery of functional materials, put emphasis on basic research on material molecules characterized with electricity, light and magnetism features, and the research on materials research relevant to biology, medicine, and pharmacy. Attention should be paid to the structure and preparation of advanced materials designed with artificial intelligence, and emphasis should be put on the materials chemistry methods and principles in the digital processing (such as 3D printing) of advanced materials. Energetic materials chemistry should focus on the basic topics on storage, release and application of high-density chemical energy, and pay attention to the design and preparation of new energetic materials such as total nitrogen structure, ionic and coordination type.

Energy chemistry is the science using chemical principles and methods to investigate energy conversion, storage, transmission and utilization. Its basic task is to study new energy conversion and storage mechanisms, design new materials, construct new devices and establish new methods to achieve green and efficient use of energy.

Energy chemistry should focus on efficient green utilization of fossil resources, as well as the design and preparation of materials for efficient solar cells, and the photoelectric conversion process of device assembly and integration. It should emphasize on the selection and conversion of biomass and biofuel batteries. It should enhance research on preparation chemistry, storage materials and efficient energy conversion for non-fossil liquid fuels, hydrogen energy and other clean energy. The emphases of electrochemical energy should be various types of power and energy storage batteries, and energy storage devices for wearable and microelectronic systems. Attention should be paid to research on the development of energy conversion and storage materials, such as electrolytes, battery separators, and storage materials for optimizing phase change energy, and electrode materials. It should focus on conversion process of thermoelectricity, optoelectronics, optothermal and of other important new energy.

Biomass energy is an emerging renewable energy source. It focuses on green chemistry research in the process of materialization and utilization of biomass and mainly investigates the small-molecule platform compounds prepared by selective deagglomeration of biomass molecular, as well as the directional conversion of their platform compounds and preparation of new energy and material chemicals; it also investigates gasification synthesis and catalytic pyrolysis of biomass to produce high-quality liquid fuels and so on.

Division 3 of Life Sciences

Biophysics, Biochemistry and Molecular Biology

Biophysics is an inter-field discipline studying life phenomena and biology issues by means of the theories and methods of physics. Biochemistry and molecular biology are disciplines studying the chemical composition of biological body and the chemical changes in the life processes, and investigating life phenomena and laws of life processes and activity at molecular levels. The main funding scope of this discipline includes: 1) the structural calculation and prediction method of biological macromolecules and complexes, protein crystallography, nuclear magnetic resonance spectroscopy, bio-mass spectrometry, electron microscopy, and small-angle scattering; protein complexes and membrane protein structural biology research, and the development of new structural biology methods for the determination of the structure and function of biological macromolecules such as proteins; 2) research on the interaction between biological macromolecules (including biological macromolecules and active small molecules); 3) research on the effects of post-translational modification of protein on its stability and function; 4) biochemistry of proteins and peptides, as well nucleic acids, and enzymology; 5) glucose and lipid metabolism and molecular mechanisms studies on the regulations of protein and nucleic acid metabolism; 6) research in computational biology, bioinformatics, system biology and synthetic biology; 7) the interactions between biological membrane lipid and membrane proteins and regulatory mechanisms of the interactions; 8) polysaccharide and sugar complex; 9) mechanisms of effects of environmental and physical factors on living organisms, as well as the impact of microgravity, space radiation and other spatial factors on organisms; 10) new methods and technologies in biophysics, biochemistry and molecular biology, including the development of new structural biology methods for the structural determination and functional studies of biological macromolecules such as proteins.

Based on the submitted applications and funding allocation in the recent three years, the following areas are known with many more submitted and granted applications: structural biology and interactions of biological macromolecules. Structural biology is an important area in this discipline, in which protein crystallography is still the most commonly used research method.

In studies of protein structure, applications for research on structure and function of protein complexes and membrane proteins have increased year by year; the number of TEM research teams and applications rapidly increased; researches on the structure of biological macromolecules using nuclear magnetic resonance spectroscopy did not change in terms of application numbers. In the interactions between biological macromolecules, many studies focused on the interactions between proteins in various important signaling pathways, identifying and discovering new components of signal transduction networks and revealing their function in signal transduction. In nucleic acid biochemistry, there is increasing number of applications studying non-coding RNA and RNA post-transcriptional modification and multiple functions and regulatory mechanisms of RNA-protein interactions in the life activities; in the structure and function of bio-membrane, transmembrane signal transduction and transmembrane transport of substances, quality of submitted applications was high though number was not so. Applications for research on structural calculation and theoretical prediction of biological macromolecules and bioinformatics reflected the characteristics and trends of interdisciplinary and integrative biology research; research on ionization, electromagnetic radiation and other biological effects on organisms and mechanisms was relatively superficial; In proteomics, the innovativeness of programs submitted in 2017 still needs to be improved; researches on polysaccharide and sugar complex have made good progress in methodologies for sugar chain structure determination; projects in environmental biophysics are relatively less competitive in an overall view; of them, the number of research programs in acoustic biophysics, photo biophysics and space biology fields are relatively small. Research on new technologies, new methods of biophysics and molecular biology involves a wide range of fields. Although the majority of submitted proposals deal with general methods rather than pioneering new technologies or methodologies, some of them showed innovative ideas on developing interdisciplinary approaches, and new technologies and methods in recent years, which should be encouraged and supported.

As disciplines targeting biomolecules and emphasizing methodologies, biophysics, biochemistry and molecular biology will continue to encourage and support the research on the law of life phenomena and life processes at levels of molecules and the spatial structure of molecules, emphasize and support attempts and researches on bioinformatics and systems biology including synthetic biology by taking advantage of the thoughts and methods in mathematical, information science and other interdisciplinary subjects. Glycogen biology, lipid biochemistry and other disciplines with less competitiveness but great biological significance would be given support and encouragement, in a certain extent. In view of the current situation of the rapid development of space science in China, environmental biophysics and space biology will also be given preferential supports.

Biomechanics and Tissue Engineering

Biomechanics and Tissue Engineering are cross-discipline subjects between life science and other fields. The main funding areas in these disciplines include: Biomechanics and Biorheology, Biomaterials, Tissue Engineering, Bioimages and Bioelectronics, Bionics and Nanobiology.

Biomechanics and Biorheology mainly involve: mechanics in molecular and cellular levels, Biology-Mechanics-Chemistry Coupling, Mechanics and Rheological properties and mechanisms in Tissue, Organs, and Systems, Simulation and Modeling in Biomechanics and Biorheology, and Biomaterial mechanics.

Biomaterials research mainly involves regenerative medicine and biomaterials in Tissue Engineering, implantation, interventional and artificial biomaterials, Drugs, Gene carrier biomaterials, Surface/interfaces and their biological effects of biomaterials, as well as the biocompatibility and safety of biomaterials.

Tissue Engineering mainly involves the regeneration and construction of normal human tissues and organs, the in vitro model system of anomalous hyperplasia tissues such as tumors, and new technologies and methods related to research on tissue engineering such as bioreactor, biological manufacturing, and the new system of microtissue/organ construction.

Bioimaging and bioelectronics mainly involve the detection and analysis of biomedical signals, biomedical imaging and image analysis, biomedical sensing and analysis, micro-/nanochips, biomedical devices and systems.

Bionics mainly involves structural bionic, chemical composition bionics and functional biomimetics of biomaterials and related bionic preparation technologies, methods, and principles of organism tissue/organ-related biomimetic devices and systems.

Nano-biology mainly involves nanobiology detection, nanocarriers and delivery, nano-biological effects, and nano-biosafety.

Judging from the submitted applications in recent years, the development of above branches is of disequilibrium. In biomechanics and biorheology, applications in 2017 focused on cellular and molecular biomechanics, bone and joints, biomechanics of sports, and cardiovascular biomechanics; whereas few applications touched the biomechanics of other tissues and organs. Biomaterials is a relatively mature branch of the field in which applications in 2017 focused on the implantable and interventional biomaterials, biomaterials for the delivery of genes and drugs, material surface and interface, biocompatibility and safety. In Tissue Engineering, applications for 2017 focused on the tissue engineering of bone and cartilage tissues, oral tissues, and neural tissue, stem cell transplantation, as well as tissue regeneration; whereas few proposals investigated the tissue engineering of other important organs and new technologies and methods in Tissue Engineering. In Biological Images and Bioelectronics, the overall number of applications is few. Similarly, there was not many applications in Bionic (less than 10 projects). In terms of

the quality of funded proposals, most of the programs based on a good foundation and put forward specific scientific questions. However, some problems still exist: lack of originality, lack of substantive cross-cutting cooperation among different disciplinary branches, and few proposals were long-term consecutive basic research in a consistent research direction and of application-orientation.

In 2018, the discipline will continue to encourage scientists to conduct systematic and multidisciplinary research in the fields of biomechanics and biorheology, biomaterials, tissue engineering, bio-imaging and bioelectronics, bionics, and nanobiology. Particularly, it encourages and supports basic research that combines theoretical exploration and practical applications in the field of biomechanics of tissues and organs (especially for those other than bone and cardiovascular tissues). Encouragement will be also given to in-depth explorations on the interactions between biomaterials and the organisms, to long-term, systematic and in-depth research on key scientific issues relevant to the transformation and construction of important tissues/organs. Continual supports will be given to new technologies and methods in tissue engineering, exploring the pathogenesis and treatment of diseases using the principles and techniques of Tissue Engineering. Continue to encourage research on biomedical imaging and bioelectronics, bionics related to biomedical systems, and nano-biological testing, nano-biological reaction and safety evaluation.

Special note to applicants: research on biomaterials for non-biomedical purposes and bionics for non-biomedical applications will not be accepted in this discipline.

Excellent Young Scientists Fund

With the aim of promoting the rapid development of young scientists and fostering a group of outstanding academic leaders forwarding to the frontier of science and technology in the world, the Excellent Young Scientists Fund supports young scholars who have made outstanding achievements in basic research to choose their own research direction and carry out innovative research.

1. Applicants should meet the following requirements:

- (1) Being Chinese citizen;
- (2) Being under 38 for male (born on or after January 1, 1980) or under 40 for female (born on or after January 1, 1973);
- (3) Having good reputation in scientific ethics;
- (4) Having a senior professional title or a doctorate;
- (5) Have taken charge of basic research project or having experience of undertaking basic research;
- (6) Not being an employee of any oversea employer;
- (7) Promising to work in the host institution for more than 9 months per year during the funding period.

Chinese young scholars without Chinese nationality may apply when fulfilling the above conditions.

2. The following people are not eligible for the program:

- (1) Have been funded by the National Science Fund for Distinguished Young Scholars or Excellent Young Scientists Fund;
- (2) Are applying for National Science Fund for Distinguished Young Scholars;
- (3) On-station postdoctoral researchers or graduate students;

Special note: In 2018, a pilot project of paperless application for Excellent Young Scientists Fund will be carried out. When applying for the fund, the host institution only needs to confirm the electronic application and supplementary materials online without submitting a paper application. After the program is approved, the paper page with signatures and official stamp (in A4 size) for the application will be submitted along when the "Project plan of Funded Program". The signatures and stamp should be in accordance with those in the electronic application.

The Excellent Young Scientists Fund Program received 4,867 applications in 2017 and supported 399 of them with a total direct cost of **51.87 million yuan**.

In 2018, it is expected to support 400 projects this program. Each granted project will be given **1.3 million yuan** in a grant period of 3 years.

National Science Fund for Distinguished Young Scholars

With the aim of promoting the development of young scientists, attracting oversea talents, and fostering a group of outstanding academic leaders forwarding to the frontier of science and technology in the world, the National Science Fund for Distinguished Young Scholars supports young scholars who have made outstanding achievements in basic research to choose their research direction and conduct innovative research.

1. Applicants should meet the following requirements:

- (1) Being a Chinese citizen;
- (2) Being under 45 in the year of application (born on or after January 1, 1973);
- (3) Having good reputation in scientific ethics;
- (4) Having a senior professional title or a doctorate;
- (5) Have taken charge of basic research project or having experience of undertaking basic research;
- (6) Not being an employee of any oversea employer;
- (7) Promising to work in the host institution for more than 9 months per year during the funding period.

Chinese young scholars without Chinese nationality may apply when fulfilling the above conditions.

2. The following people are not eligible for the program:

- (1) Have been funded by the National Science Fund for Distinguished Young Scholars;
- (2) Are undertaking the project funded by the Excellent Young Scientists Fund program (applying is allowed if the project was completed at the submission time);
- (3) Are applying for Excellent Young Scientists Fund;
- (4) On-station postdoctoral researchers or graduate students.

Notes:

To further simplify the application materials and management procedures, applications are no longer under the requirement of submitting recommendations from host institution since 2017, but still subject to the requirement of submitting the recommendations from academic committee or panel recommendations.

In 2017, the program received 2684 applications, 198 of which were funded with a total direct cost of 679.35 million yuan.

In 2018, it is expected to fund 200 projects. Each granted project will be given a direct cost of **3.5 million yuan (2.45 million yuan** for each program in math and management sciences) in a grant period of 5 years.

International (Regional) Joint Research Programs

Israel

NSFC and Israel Science Foundation (ISF) Joint Research Programs and Conferences

(1) Joint Research programs

In 2018, both parties will cooperate in the fields of life sciences and medicine, and will be jointly funding about 35 programs with a funding period of 3 years. The direct costs covered by Chinese side would be **2 million yuan/project**.

(2) Academic Conference Program

The two sides would fund around 2 bilateral academic seminars each year. The theme of the seminar would be negotiated and decided by the involving agencies of the both sides.

Research Fund for Foreign Young Scholars

The Research Fund for Foreign Young Scholars supports foreign young scholars to choose their own research topic and conduct basic research in mainland China with the aim of promoting the long-term and steady academic collaborations and exchanges between foreign young scholars and Chinese scholars.

The principle investigator may propose to renew his granted project for an additional term based on the needs of research.

Applicants should meet the following requirements:

- (1) Being under 40 in the year of application [born on or after January 1, 1978];
- (2) Having a doctorate;
- (3) Having the experience of conducting basic research projects or of postdoctoral research;
- (4) Promising to carry out the proposed research in the host institution during the project period;
- (5) Obeying Chinese laws and regulations as well as NSFC' s relevant rules while working in China.

The host institution of an applicant should meet the following requirements:

- (1) The host institution shall designate a contact person responsible for providing advice on policies to the applicant and assisting in the use of funds for the program as well as other aspects of management.
- (2) The host institution should sign an agreement with the applicant. The following content should be included in the agreement: ① title of project and the expected targets of it; ② the material amenities and work conditions offered to the applicant during the project period by the host institution; ③ agreement

on the ownership of intellectual property; ④ the working hour of the applicant in the host institution and promising to work in the host institution during the funding period.

If a granted project makes great progresses during the funding period and needs to continue, the funding period may be extended.

In 2017, a total of 155 foreign young scholars were funded with a total direct cost of 45 million yuan, of which 9 foreign scholars extended their funding period. It is expected to fund a total of 150 foreign young scholars in 2018, and 20 foreign young scholars may extend their funding period. The amount of funding for direct costs will be **about 45 million yuan**.

Funding period: one year or two years, the direct costs would be **200,000 yuan/project** for one year or **400,000 yuan/project** for two years.

Application procedures: Applicants should log in to the ISIS system to fill out the application form online meanwhile submit the following attachments online:

(1) the agreement signed by the applicant and the host institution;

(2) first pages of no more than 5 representative papers;

For details on the application and renewal of 2018 programs as well as application requirements, please refer to the website of National Natural Science Foundation of China "Special edition of Research Fund for Foreign Young Scholars".

URL: <http://www.nsf.gov.cn/nsfc/cen/gjhz/jjzb/index.html>