

Foreword

The year of 2015 is the last year for implementation of the 12th Five-Year Plan. In view of the new requirement on basic research for building China into an innovative country and S & T power, the National Natural Science Foundation of China (NSFC) fully implemented the National Program for Medium and Long-Term Scientific and Technological Development (2006-2020), the 12th Five-Year Plan, and its strategy of “supporting basic research and scientific frontier exploration, supporting talent and team building, strengthening China’s original innovative capability”, and adhered to its evaluation principle of “relying on experts, promoting democracy, funding excellent research, and advocating fairness and justness” to nurture creative ideas and foster talents, further strengthen support to the development of research tools, and has made great contributions to the construction of an innovation-oriented country.

NSFC’s funding portfolio consists of 3 categories of programs with respective preferential focuses, i.e., Research Program, Talent-Training Program, and Research Environment Program, which constitute an integrated funding system of the National Natural Science Fund. The Research Program is aimed at achieving innovative results in basic research, fostering a balanced and coordinated development of disciplines with special emphasis on certain key areas, facilitating interdisciplinary research, and stimulating original innovation. Through funding young researchers to conduct independent research and assisting researchers in regions weak in basic research, Talent-Training Program is targeted at nurturing outstanding academic backbones, top talents and innovative research teams and enhancing China’s S & T competitiveness in the future. Research Environment Program is mainly intended to improve research facilities, especially to increase support for the development of indigenous scientific instruments, to boost the sharing of resources, to allocate social resources in basic research, and to optimize the environments for basic research.

As of December 9, 2015, a total of 172,952 research proposals were received by NSFC for the year 2015, among which 165,598 research proposals from 15 types of programs were submitted during the batch application period (from March 2 to 20 16:00 PM, 2015), up by of 9.35% (14,153 applications) year-on-year. The applications for the General Program increased by 23.42% (13,855 applications) year on year. The applications for the Key Program decreased by 7.27% (220 applications). The applications for the Excellent Young Scientists Fund increased by 6.22% (206 applications). The applications for National Science Fund for Distinguished Young Scholar increased by 5.71% (116 applications). For Science Fund for Creative Research Groups, the

applications decreased by 4.96% (13 applications) and for Key International (Regional) Joint Research Program, the applications decreased by 10.30% (71 applications). The applications for Special Fund for Research on National Major Research Instruments (free application) decreased by 11.66% (80 applications). In addition, the applications for the Young Scientists Fund and the Fund for Less Developed Regions have remained stable.

After compulsory review procedures and as of December 9, 2015, 16,709 projects in the General Program were approved, 625 projects in the Key Program, 20 projects in the Major Program, 402 projects in the Major Research Plan Program, 105 projects in the Major International (Regional) Joint Research Program. Furthermore, 16,155 projects were approved in the Young Scientists Fund, 2,829 projects in the Fund for Less Developed Regions, 400 projects in the Excellent Young Scientists Fund, 198 projects in the National Science Fund for Distinguished Young Scholars, 38 new projects, 30 extended projects after 3 years and 11 extended projects after 6 years in the Science Fund for Creative Research Groups, 136 projects in the Joint Research Fund for Overseas Chinese Scholars and Scholars in Hong Kong and Macao, 81 projects in the Environment Category of the Special Fund for Research on National Major Research Instruments (free application), 5 projects in the Special Fund for Research on National Major Research Instruments (department recommendation), 580 projects for Joint Funds, 107 projects in the Research Fund for International Young Scientists and 384 projects in International (Regional) Exchange Programs. For more information about the statistics and analysis of the applications and final approvals, please refer to the respective relevant sections of this Guide to Programs.

In order to give expression to the principle of openness, fairness and justness and help scientists better understand NSFC's funding policies, the Guide to Programs of the National Natural Science Fund: 2016 (here in after abbreviated as the Guide to Programs) is published to all applicants for these sections of the proper categories of programs, research areas and orientations of investigation in applying for the National Natural Science Fund with research topics proposed on their own initiative.

This Guide to Programs introduces various types of programs, of which applications will be accepted during the batch application period in 2016. Notes on application and regulations on the limits of the total number of applications for one applicant are introduced in detail. The overall funding facts and priority areas of the General Program, Key Program, the Young Scientists Fund, and the Fund for Less Developed Regions are introduced in the section of each scientific department. For the General Program, the overall funding principles and specified requirements as well as notes on applications are provided in addition to the introduction of the overall funding statistics of each scientific department. Apart from that, the trend of development, funding scopes and requirements in diverse disciplines are described by respective divisions of the scientific

departments. Other types of programs are introduced in general terms. Special requirements for each of them are introduced in the main text of this Guide to Programs.

Applications for programs which are not listed in the Guide to Programs will not be accepted during the batch application period, and the call for proposals of these programs and related guiding information will be announced at NSFC's website (<http://www.nsf.gov.cn>). Applicants are advised to pay due attention to the updating of related information.

In the consecutive procedures of application acceptance, evaluation and program management, NSFC will, in light of the Regulations on the National Natural Science Fund and relevant guidelines for program management, strive to standardize management procedures, optimize the peer review mechanism, encourage indigenous innovation, emphasize on research merits, nurture a favorable environment for research, support disciplinary intercrossing and tolerance of different academic ideas, strictly observe pertinent regulations on conflict of interest and confidentiality, and sincerely cherish the supervision from the scientific community and the general public. All scientists are welcome to submit high-quality applications for the National Natural Science Fund.

Editorial Board of *the Guide to Programs of the National Natural Science Fund: 2016*

December 10, 2015