Ministry of Science and Technology Grant Proposal
Frontier Science Research Program

1. General Information

Application Number:

Research Project Title	Chinese	
	English	

Department for Proposed Area of Research	☑ Dept. of Life Sciences（生科司尖端科學研究計畫）

Project Discipline	

Principal Investigator (PI)	Name (English)		Name (Chinese)	
	Position (English)		Position (Chinese)	

Institution & Department	

Project Entire Period	From 8/1/2015 to 7/31/2020

Type of Research	☐ Pure basic research ☐ Oriented basic research ☐ Applied research ☐ Experimental development

Does this research project include the following?   (Check as applicable and attach relevant consent forms.) ☐ Human Studies/ Human Specimen   ☐ Human Embryo/ Human Embryonic Stem Cell ☐ Gene Recombination   ☐ GMO Field Trial   ☐ Microbes in Risk Group 2,3,4 ☐ Animal Studies(Must also attach a description of the 3R ethical principles of animal experiments)

Corresponding Person	Name:_____(Chinese)_____(English) Mailing Address in Chinese: _____ Telephone: (Office)_____ (Home/Mobile)_____ Fax:_____ E-mail:_____

Principal Investigators' Affidavit:

The research proposed in this grant application has not been financially supported by any funding agency.   I am aware that any withholding, falsification, or misrepresentation of information could result in administrative actions such as the dismissal of an application or the suspension and /or termination of an award, as well as other possible punitive actions.

Signatures -- Principal Investigator（PI）:   Date:

Co-PI of the Project, if any:

2. Check List

check/page

(1) General Information (Form FS01) …………..……………………………..……... ☐– 1

(2) Check List (Form FS02) …..………………..…………..……...…..…..... ☐– 2

(3) Requested Budget for Entire Term of Project Period (Form FS03)…….…..…..… ☐– 3

(4) Key Professional Personnel (Form FS04)………………………….…….….….... ☐–

(5) Personnel Expenses (Form FS05)……………………………….………..……... ☐–

(6) Consumable Expenses (Form FS06)………………………………....……. ☐–

(7) Equipment Expenses (Form FS07)…………………………………….…….….... ☐–

(7-1) Grant Proposal of Large Instrument (Form FS07-1) ……………………....… ☐–

(8) Travel Expenses for International Destinations-Overseas Studies (Form FS08)….... ☐–

(9) Travel Expenses for International Destinations-International Conferences (Form

FS09)..…………………………………………………………….……….… ☐–

(10) Advanced Instrumentation Usage Fee (Form FS10)………..………………..… ☐–

(11) Previous and Current Research Projects and Submitted Proposals (Form FS11).... ☐–

(12) Keywords and Abstract in Chinese (maximum 500 characters) (Form FS12) …... ☐–

(13) Keywords and Abstract in English (maximum 500 words) (Form FS13)………… ☐–

(14) Contents of Grant Proposal (Form FS14)………..……………….………… ☐–

(15) 科技部個人資料表 (Form FS15)…………..…………..……......…..…......... ☐–

(16) Curriculum Vitae (Form FS16)……………………………….….……..…... ☐–

(17) Reprints of within 5 papers……………………………………….…….............. ☐–

Remarks:
(1) Use Times New Roman font, 12-point type, and single-spacing.
(2) Page limit for Contents of Research Proposal (except CV) is 50 pages.
(3) Proposal that does not meet these format requirements mentioned will automatically be rejected.

3. Requested Budget for Entire Term of Project Period:

Currency unit: NTD (1 USD $\cong$ 30 NTD)

Budget Categories \ Project Year		First year from __/__to__/__ (M M / Y Y)	Second year from __/__to__/__ (M M / Y Y)	Third year from __/__to__/__ (M M / Y Y)	Fourth year from __/__to__/__ (M M / Y Y)	Fifth year from __/__to__/__ (M M / Y Y)
General Expenses						
Personnel						
Consumables						
Hosting Expenses for Foreign Researchers						
Equipment						
Travel Expenses for International Destinations						
Joint Research & Overseas Studies						
International Conferences						
Overhead						
Total for Each Year						
Advanced Instrumentation Usage Fee						
Postdoctoral Research Fellows	Domestic or Foreign	____ persons	____ persons	____ persons	____ persons	____ persons
	Mainland China	____ persons	____ persons	____ persons	____ persons	____ persons

Indicate support from the participating institutions or other organizations (including industrial support). Leave space blank if not applicable.

Supporting Institution	Items Funded (Personnel, Equipment, etc.)	Amount of Funding	Funding Period	Evidence of Support

Signature of the administrator of PI's department:_____

(or attach other evidence of support)

4. Key Professional Personnel:

(1) Indicate "staff type" in the following order: principal investigator (PI), collaborating principal investigator (co-PI), assistant investigator, and postdoctoral research fellow.

Staff Type	Name (In Chinese and English)	Institution/ Department	Position	Role in Project	Percent of Effort*

Percent of effort is defined as the percentage of the hours devoted to this project to the total working hours per week. For instance, 50% means this individual will devote a half of his/her working hours to this research project each week.

(2) If requesting funds for postdoctoral research fellows , indicate the followings for each year of the project:

1) Field(s) of specialization

2) Role and research work

3) Contribution or impact on this research project

4) Standards of performance evaluation

5) If a candidate of postdoctoral research fellow has already been selected, provide candidate's name and attach personal information and curriculum vitae (Form FS15 & Form FS16).

5. Personnel Expenses:

For "type/rank" indicate full-time research assistant (already holding master's, bachelor's, technical college, or high school degrees), part-time research assistant (including Ph.D. students, master's students, undergraduate students, lecturers, and teaching assistants) or temporary staff.

Currency unit: NTD

Type/Rank \ Salary \ Project Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	Total amount for Entire term of Project Period
Full-time Assistants Rank, Number and Amount of NTD:						
Part-time Research Assistants Rank, Number and Amount of NTD:						
Subtotal for Each Year & Total of 5 years:						

6. Consumable Expenses:

(1) Complete this form for all consumables (excluding research equipment), books and miscellaneous expenses needed for executing this research project.
(2) For "description" indicate product specifications, functions, and relevant information.
(3) If proposing institution provides support or funding, indicate in "remarks" column.
(4) Complete the table with separate pages for each year.

Currency unit: NTD

Item	Description	Unit ("Piece," Batch", "Box," etc.)	Quantity	Unit Price	Amount	Remarks
Total						

7. Equipment Expenses:

(1) Complete this form for necessary equipment directly related to this research project costing over NT$10,000 with service life over two years. Indicate subtotals for each piece of equipment in the "Amount" column.

(2) Attach price appraisal form for equipments above NT$200,000.

(3) If proposing institution or another organization provides funding for equipment, indicate supporting institution and amount funded.

(4) For each piece of instrument or equipment costing NT$600,000 provide detailed information of specifications and functions (including sensitivity, accuracy, etc.), important features, and significance for this project. If funding for this equipment is granted, the PI should maintain it and allow other researchers outside this research project to make full use of it, provided that such use does not interrupt the research work described in this proposal.

(5) Please also fill out Form FS07-1 for any instrument which unit price is equal or over 10 million NTD on this proposal's purchase list. The approved item will be granted separately from this proposal as an instrument-grant project.

(6) Complete the table with separate pages for each year.

Currency unit: NTD

Type	Equipment (English/Chinese)	Description	Quantity	Unit Price	Amount	Funding requested from	
						MOST	Other Institutions
Total							

7-1. Grant Proposal of Large Instrument:

Ministry of Science and Technology
Grant Proposal of Large Instrument

I. General Information

Project Term	From_____ _____ _____to _____ _____ _____ （MM/DD/YY）			
Institution/Department				
Principal Investigator(PI)		Position		
Research Project Title	Chinese			
	English			
Instrument Name	Chinese			
	English			
Person in charge of Instrument		Position		
Research Project Discipline which this is affiliated with (ref: "Discipline Code Table")	Discipline Code	Discipline		

Applicant, PI (Signature):_____Date:_____

Dean of Research and Development (Signature): _____Date:_____

President (Signature): _____Date:_____

II. Budget Request:

i. Any budget request for an instrument, which unit price is equal or over 10 million NTD, must be directly affiliated with the PI's research project.   Please fill out the corresponding "subtotal" with the sum for peripheral apparatuses listed.

ii.   A quotation is required for each intended purchase.

iii. Please provide the name of institute, the amounts of matching fund, and the documentary proofs for each matching fund item.

Currency unit: NTD

Category	Instrument/ Device (in Chinese/English)	Description	Quantity	Unit Price	subtotal	Budget Request	
						Fund from MOST	Matching funds from others (please include institute name and the amount)
合			計				

Matching funds from others(go to the next page if none): matching funds should be listed with discretion (the matching funds listed below shall have first priority in use)

Institute	Matching Item	Matching Amount	Executive year	Documentary proof

III.   Instrument Introduction (please describe specifications, funtions, and applications of instruments, auxiliary parts, and peripheral apparatus)

IV.   The association between the instrument and research project (Please state the need, necessity and urgency of this purchase in detail)

V.   Survey of domestic instruments (Please provide the current number of divices with

identical functions and their operation status)

VI. Project PI's expertise in relation with the instrument (research achievement and experiences with the same or similar instruments)

VII. Instrument operation planning within the project term

VIII. Planning of instrument maintenance and management

IX. Space Arrangement (Please describe the location, space, and vicinity, etc.)

X. Post-project maintenance and operation strategy (Please state any plans for research and/or service purposes)

XI. Training program for instrument operation and maintenance (Please list student trainees, full-time and part-time technicians, operation schedules, and training courses)

XII. Other applications and potential users of the instrument

XIII. Experiences on MOST instrument operation and management

8. Travel Expenses for International Destinations-Overseas Studies:

（Skip this form if the proposal without travel expenses for International Destinations-Overseas Studies.）

(1) Principal Investigators and relevant personnel involved in project may apply funding for carrying out international joint research, field study, experiment, survey, samples collection, and use of research facilities overseas.

(2) Describe the itinerary, proposed budget, duration, and destination for each person traveling abroad. In case that receiving parties should bear the living expenses of visitors from abroad as agreed through bilateral arrangement, please do not include the spending.

(3) Amount of funding provided for subsistence, airfare and other expenses for international travel can be found at the following website: http://law.dgbas.gov.tw/LawContent.aspx?id=FL020312

(4) Convert all currencies into NT dollars and specify exchange rate.

(5) Fill in separate pages for each year.

9. Travel Expenses for International Destinations-International Conferences:

(1) Principal Investigators and relevant personnel involved in project may apply international travelling expenses for attending international academic conference held overseas.

(2) Describe the nature of conference, proposed budget, venue and duration.

(3) Please refer to the following website for information about amount of funding regarding international airtickets, daily allowance and others.
http://law.dgbas.gov.tw/LawContentDetails.aspx?id=FL017584&KeyWordHL&StyleType=1

(4) Briefly describe any participation in international conferences in the past three years. Indicate conference title, dates, venue, sponsoring organization, and title of conference paper presented therein. For any publications resulting from the conference, provide name of journal or publication, volume, page number, and date of publication.

(5) Fill in separate pages for each year.

10. Advanced Instrumentation Usage Fee:

（Skip this form if the proposal without Advanced Instrumentation Usage Fee.）

(1) If requesting use of MOST-funded advanced instrumentation, indicate the affiliated organization, name of the instrument, purpose of usage, contribution to project, and requested budget.

(2) For guidelines on advanced instrumentation usage and costs, consult the MOST's website: Advanced Instrumentation Information Management System (http://vi.most.gov.tw/nsc-vi/index/default.action).

(3) Users approved for the "Advanced Instrumentation Usage Fee" should pay 10% of the usage fee to the Instrumentation Center. This 10% should also be listed as a consumable expense.

(4) This budget should be calculated separately from the total budget of the grant proposal. (Illustrate how this budget is calculated in the usage fee column.)

(5) Complete separate forms for each year.

Currency unit: NTD

Names of Advanced Instrumentation and Affiliated Organization	Descriptions	Usage Fee	Remarks
Total			

11. Previous and Current Research Projects and Submitted Proposals:

List current and previous research projects within the past **5 years** and the proposals that have been submitted to any funding organization for grant application.

Currency unit: NTD

Title of Research Project (For MOST grant applications, indicate grant number)	Role / Position	Percent of Effort	Funding or Supporting Institution	Amount of Funding	Duration (M/D/Y~ M/D/Y)	Percentage of overlapping with this proposal

12. Keywords and Abstract in Chinese (maximum 500 characters)

13. Keywords and Abstract in English (maximum 500 words)

14. Contents of Grant Proposal:

(1) Summarize achievements and/or progress of the past five years directly related to this research proposal.(Provide the results of the previous one of granted frontier science project, if any.)

(2) Describe the significance of this research proposal including prospects for academic excellence, innovations in scientific research or technological development, and impact on research field and international competitiveness.

(3) For each year of the project, specify the objectives as well as material and methods.

(4) Specify the anticipated results and accomplishments for each project year.

(5) Describe the research infrastructure in PIs' institutions including possibility of matching funds, working space, facilities, etc.

(6) Provide references.

15. 科技部個人資料表：

科 技 部 個 人 資 料 表

以下各項資料均將收錄於本部研究人才資料庫，作為學術補助獎勵等申請案之審查參考。依據政府資訊公開法第七條第五款，本部核定通過之學術補助獎勵案之主持人姓名及執行機關，均公開於本部對外網站，提供外界查詢。為促進學術交流，您的 E-mail、學歷、經歷等資料是否亦可同步公開提供外界查詢，請您圈選（同意、不同意）。

一、基本資料：

簽名：＿＿＿＿＿＿＿＿＿＿＿＿

填表日期： 20＿＿／＿＿／＿＿

身分證號碼										

中 文 姓 名		英 文 姓 名	
			(Last Name)　(First Name)　(Middle Name)
國　　　籍		性　　別 □男　□女　出生日期 19＿＿年＿＿月＿＿日	
聯絡地址	□□□□□		
聯絡電話	公)　　　　　　(宅 /手機)		
傳真號碼		E-mail	

二、主要學歷 由最高學歷依次填寫，若仍在學者，請在學位欄填「肄業」。

學校名稱	國別	主修學門系所	學位	起訖年月(西元年/月)
				自＿＿／＿＿至＿＿／＿＿
				自＿＿／＿＿至＿＿／＿＿
				自＿＿／＿＿至＿＿／＿＿
				自＿＿／＿＿至＿＿／＿＿

三、現職及與專長相關之經歷 指與研究相關之專任職務，請依任職之時間先後順序由最近者往前追溯。

服務機構	服務部門／系所	職稱	起訖年月(西元年/月)
現職：			自＿＿／＿＿至＿＿／＿＿
經歷：			自＿＿／＿＿至＿＿／＿＿
			自＿＿／＿＿至＿＿／＿＿
			自＿＿／＿＿至＿＿／＿＿
			自＿＿／＿＿至＿＿／＿＿
			自＿＿／＿＿至＿＿／＿＿

四、專長 請填寫與研究方向有關之學術專長名稱。

1.	2.	3.	4

16. Curriculum Vitae:

Please provide the following information within 4 pages:

(1) Name, Gender, Birth date.

(2) Education.

(3) Current position and relevant experience.

(4) Fields of specialty (limit to fields related to research)

(5) Major awards and honors.

(6) Significant project-related publications in the past 5 years, including technical reports, patents, periodical articles.