National Science and Technology Council Grant Proposal Frontier Science Research Program

1. General	Info	rma	tion	А	pplication Num	ber:		
Research Pro		inese						
Title	, 	glish						
Department for Proposed Area of Research			Dept. of Life Sciences	s(生彩	+處尖端科學研	究計畫	•)	
Project Discipli	ine							
Principal Investigator	Nam (Engli Positi	sh)			Name (Chinese) Position			
LEIJ	(Engli				(Chinese)			
Institution & D	epartm	ent						
Project Entire F	Period		From 8/1/2025 to 7/	31/203	0			
Type of Research			Pure basic researchApplied research					
□ Human Stud □ Gene Recor	dies/ H nbinati	uman .on	Specimen [□ Huma □ Micro	an Embryo/ Hur obes in Risk Gro	nan Er oup 2,3		
			me: ailing Address in Chinese:	(Chines	*		(===8====)	
Corresponding	Person		lephone: (Office)					
			x:					
I am aware that	roposed t any w t the di	l in th ithhol smiss	is grant application has not lding, falsification, or misre sal of an application or the	present	ation of informa	tion co	ould result in administrative	
Signatures 🛛	Princip	al Inv	vestigator (PI):		D	Date:		
	Co-PI (of the	Project, if any:			-		

2. Check List check/page (1) General Information (Form FS01) **□**−1 (2) Check List (Form FS02) $\square - 2$ (3) Requested Budget for Entire Term of Project Period (Form FS03)..... (4) Key Professional Personnel (Form FS04)..... | |-(5) Personnel Expenses (Form FS05)..... | |-(6) Consumable Expenses (Form FS06)..... \square (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) Previous and Current Research Projects and Submitted Proposals (Form FS10).... (11) Keywords and Abstract in Chinese (maximum 500 characters) (Form FS11) (12) Keywords and Abstract in English (maximum 500 words) (Form FS12)..... \square (13) Contents of Grant Proposal (Form FS13)..... | |-(14) 國科會個人資料表 (Form FS14)..... (15) Curriculum Vitae (Form FS15)..... **—** (16) Reprints of within 5 papers.....

Remarks:

- (1) Use Times New Roman font, 12-point type, and single-spacing.
- (2) Proposal does not meet these format requirements mentioned and page limit will automatically be rejected.

Form FS03

3. Requested Budget for Entire Term of Project Period: Currency unit: NTD (1 USD \cong 30 NTD)

N		1		Currency uni	it: NTD (1 USI	$D \cong 30 \text{ NTD})$
I	Project Year	/to/	/to/	/to/	Fourth year from/to/	/to/
Budget Categories		(M M / Y Y)	(M M / Y Y)	(M M / Y Y)	(M M / Y Y)	(M M / Y Y)
General Expenses						
Personnel						
Consumables						
Hosting Expenses for Fo Researchers	reign					
Equipment						
Travel Expenses for Inte Destinations	rnational					
Joint Research & Overse	eas Studies					
International Conference	es					
Overhead						
Total for Each Year						
Postdoctoral Research	Domestic or Foreign	persons	persons	persons	persons	persons
Fellows	Mainland China	persons	persons	persons	persons	persons
Indicate support from the space blank if not applical	ole.		other organizat	tions (including	g industrial sup	port). Leave
Institution (Personne		s Funded el, Equipment, etc.)	Amount of Funding	Funding Period	Evid of Su	ence pport
Signature of the administ (or attach other evidence		department:				
	or 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.

					 -
Project Year Salary Type/Rank	1 st Year	2 nd Year	3 rd Year	4 th 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:					

Currency unit: NTD

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.

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

Currency unit: NTD

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.

						Funding re	equested from
Туре	Equipment	Description	Quantity	Unit	Amount	NETC	Other
	(English/Chinese)			Price		NSTC	Institutions
	Total						

Currency unit: NTD

7-1. Grant Proposal of Large Instrument:

National Science and Technology Council Grant Proposal of Large Instrument

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

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.

-						Cur	rency unit: NTD
	Instrument/					Buc	lget Request
Category	Device (in Chinese/English) Description	Quantity	Unit Price	subtotal	Fund from NSTC	Matching funds from others (please include institute name and the amount)
合			計				
Matching discretion	funds from ot (the matching	hers(go to the funds listed bel	next page ow shall h	if none) ave first	: matching priority in	g funds sho 1 use)	uld be listed with
Inst	itute N	Iatching Item	Matching	Amount	Execut	tive year	Documentary proof

- III. Instrument Introduction (please describe specifications, functions, 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 NSTC 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.

https://law.dgbas.gov.tw/LawContent.aspx?id=FL017584

- (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. 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.

					Curre	ency unit: NTD
Title of Research Project (For 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

Form FS11

11. Keywords and Abstract in Chinese (within 1 page)

Form FS12

12. Keywords and Abstract in English (within 1 page)

13. Contents of Grant Proposal:

Page limit for Contents of Grant Proposal is 25 pages.

- (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.

14. 國科會個人資料表:

國科會個人資料表

以下各項資料均將收錄於本會研究人才資料庫,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,本會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 會對外網站,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:_____

身分證號碼									填表日	期:	20	/	
中文姓名			茧	文	姓〉	名							
				~			(Last	Name)	(First N	lame)	(Mi	ddle	Name)
國 籍			性		別	IJ	□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-ma	ail				

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/

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(<u>西元年/月</u>)
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

15. 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.