

## 中央研究院 111 年度「關鍵突破種子計畫」計畫書

### 2022 Academia Sinica Grand Challenge Program Seed Grant Application Form

計畫類別 Project Category	<input type="checkbox"/> 1.個人型 Individual Project <input type="checkbox"/> 2.單一整合型 Integrated Team Project		
計畫名稱 Project Title	中文:		
	English:		
計畫(總)主持人 Project PI	中文:	職稱 Position	
	English:	申請單位 Affiliation	
計畫共同主持人 Project Co-PI(s)	中文 / English:		職稱/單位 Position/Affiliation
	1.		
	2.		
	3.		
4.			
計畫經費 單位: 新臺幣千元 Total Budget Unit: thousand NTD	第一年 Year 1:		第二年 Year 2:
計畫聯絡人 Project Contact Person	Email:		
	Tel:		
計畫關鍵詞 Keywords	中文:		
	English:		

**中央研究院 111 年度「關鍵突破種子計畫」計畫書**  
**2022 Academia Sinica Grand Challenge Program Seed Grant**

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計畫名稱 (中文):

Project Title (English):

計畫(總)主持人 Project PI / 申請單位 Affiliation:

計畫類別 Project Category: |  個人型 Individual Project |  單一整合型 Integrated Team Project |

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### 1. Summary Statements

Please address each of the following questions in short statement(s) of less than 100 words:

i) What is the grand challenge problem to be addressed? Which part of the problem will be solved?

ii) How are you going to solve the problem you identified? How innovative is your approach?

iii) How transformative and what is the extent of anticipated impact, if it works.

### 2. Research Plan

Based on the summary statements above, elaborate further i) the **specific problem to be solved**, the state-of-the-art and the current bottleneck; ii) the **innovative ideas proposed**, the novel elements, to what extent is the approach innovative, and what are the closest ideas published by others to date; iii) the **potential impact of the work**, how it may lead to a breakthrough and transform the field if the project is successful; iv) **plans to test the ideas**, the specific aims and their respective research approaches, the scientific or technical challenges, potential risks and key deliverables, along with any alternative plans to de-risk. Also briefly describe the international competitiveness of your project, the organization and complementary expertise of the team you assembled (for integrated team project).

*This section including references is limited to **two** pages in total (1 inch or 2.54 cm margins for all sides, single spaced, font: Times New Roman or Calibri, 11 point).*

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### 3. Budget Plan and Justification

年度 Year		1	2	
業務費 Operating Expenses (A)	教育訓練費 Training	International		
		Domestic		
		Mainland China		
	旅費 Travel	International		
		Domestic		
		Mainland China		
	臨時人員酬金 Personnel Salary			
	研究相關耗材費用 Consumables			
業務費總額 Total (A)				
機械(儀器)設備費 Equipment (B)	非資訊相關 Non-Computer Item			
	資訊相關 Computer-related Item			
	設備費總額 Total (B)			
獎補助費 Graduate Student Stipend (C)				
總金額 Total (T) = (A)+(B)+(C)				

\*單位: 新臺幣千元 \*Unit: thousand NTD

Briefly justify the total budget requested and how it will be distributed among the co-PIs and PIs for integrated team projects.

*The Total Budget Plan (using Table above) and the descriptive justifications to be provided should not exceed **one** page.*

#### 4. Personal Track Record and Biographical Sketch (for PI and each co-PIs)

##### 4.1 Summary of Previous Research Accomplishments

- (1) Summarize and highlight your previous research accomplishments in the **last five years**.
- (2) List all publications and other output resulting from recently completed (2020-2021) and current Academia Sinica Grant supports that have specifically acknowledged the AS funding source. Do not include manuscripts in preparation or submitted.

*Limit to **one** page for the descriptive item (i).*

##### 4.2 Current and Pending Grant Support

List any current (ongoing) and pending projects/proposals funded by Academia Sinica and external agencies. Applicants must fully disclose if similar proposal has also been submitted to MoST or other funding agencies at the time of submitting this proposal to AS, with the extent of overlaps, amount and any cost-sharing item requested fully described and justified here to avoid duplicated funding. Subsequently, applicants must pro-actively inform the AS grant program office if the funding decision of any pending application is known before the outcome of this application is announced. Any incomplete or inaccurate information will adversely affect the consideration of this proposal.

For each of the current/pending grants, provide the following details:

- (1) Funding Agency and Project Type:
- (2) Grant Title and number:
- (3) Status:  Current (ongoing)  Pending (expected date of funding decision: YYYY/MM)
- (4) Research Role:  Project PI  Subproject PI  Project co-PI  Subproject co-PI
- (5) Project Period: \_\_\_\_\_ (YYYY/MM) to \_\_\_\_\_ (YYYY/MM)
- (6) Funding Amount in thousands of NTD

Year	Total Project Amount	Individual Project Amount

- (7) Is there any relationship between this project/proposal and the Grant Program you are applying?  
 No  Yes (if yes, go to item 8)
- (8) Describe and justify any overlap with current application (in less than 500 words)

##### 4.3 Biographical Sketch

Use the template provided in the next page to prepare your **Biographical Sketch**, which should include among others:

- i) a **Personal Statement** - brief self-introduction of research path/career in 200-300 words;
- ii) **Contributions to Science** - a summary of major research achievements by referring to selected key publications and other forms of contributions, their significance and impact;
- iii) **Complete/Selected List of Recent Publications** - selected key publications can be combined with a more complete list of publications in the last 5 years, but keep to the total page limit

*This section including list of publications should not exceed **four** pages for each PI and co-PI. Alternative CV format can be used for PIs from Division of Humanities and Social Sciences but please keep to same page limit.*

## BIOGRAPHICAL SKETCH

NAME: 中文姓名:

INSTITUTE/RESEARCH CENTER:

Current POSITION:

EDUCATION (Begin with baccalaureate or other initial professional education)

INSTITUTION AND LOCATION	DEGREE	DURATION MM/YY-MM/YY	FIELD OF STUDY

EMPLOYMENT (Include postdoctoral training)

INSTITUTION AND LOCATION	POSITION TITLE	DURATION MM/YY-MM/YY	FIELD OF STUDY

**I. PERSONAL STATEMENT**

A brief self-introduction of research path/career, 200-300 words

**II. HONORS**

Include professional distinctions and service, honors and selected speaking invitations

**III. CONTRIBUTIONS TO SCIENCE**

Summarize major research achievements and describe their significance and impact

**IV. LIST OF PUBLISHED WORK**

Provide a complete or selected list of recent (last 5 years) publications to keep within the total 4-pages limit. Earlier key publications can also be provided here, or under item III above.