# 2024 2nd Round Academia Sinica

# Funding Opportunity Announcement Seed Grant for Grand Challenge Program

The Academia Sinica **Grand Challenge Program** is established to encourage its researchers to pursue **innovative** solutions for **critical problems** in science and humanities that have broad and lasting **impact**. To catalyze and cultivate ideas still in the early stage of development, shorter term **Seed Grants** are provided to fund exploratory projects for 1-2 years. Successful applicants are expected to deliver key results within that one year or two that would substantiate the ideas proposed and allow them to undertake a more extensive investigation.

Interested Investigators are requested to submit a concise proposal that would clearly describe i) the specific problem to be solved, ii) the innovative ideas and approaches to be taken, iii) the impact of the work if the goals are realized, and iv) the overall plans to test the ideas, its feasibility, scientific or technical challenges, potential risks and key deliverables, along with any alternative plans to de-risk. The applications will be critically reviewed based on these criteria, based on which the applicants are advised to prepare the proposal accordingly.

### 1. Grant Categories

1. Individual GCS Project, by a single individual Principal Investigator (PI).

2. **Team** GCS Project, coordinated by a Program Director, who also serves as the PI and can invite any number of Co-PIs and/or collaborators.

### 2. Application Process

### 2.1 Eligibility

- 1. GCP Project Principal Investigators (PIs) must be AS full-time Research Fellows of any rank, or AS jointly-appointed Research Fellows of any rank with an AS full-time Research Fellow serving as a Project Co-PI.
- 2. PI can invite non-Academia Sinica scientists to participate in the project and serve as co-PI, if necessary.
- 3. Collaborators enlisted should be justified in the proposal and each is required to provide a Supporting Letter delineating their expertise and specific roles in the projects.

#### 2.2 Deadlines and Important Reminders

- 1. The application deadline is **September 18, 2024.** The Project PI should log into the online application system at <a href="https://asms.sinica.edu.tw">https://asms.sinica.edu.tw</a> using the PI's SSO account and follow through the application steps as instructed. Proposals from Division of Life Sciences and Division of Mathematics and Physical Sciences should be written in English, adhering to the guidelines and format specified within the document template provided (<a href="https://asms.sinica.edu.tw">Appendix 1</a>), with a Research Plan describing the following four major aspects: 1) **the problem to be solved**, 2) the **innovative ideas proposed**, 3) **the potential impact of the work**, and 4) **plans to test the ideas**.
- 2. In preparing the proposals, applicants should keep in mind the following review criteria: i) the significance of the problem to be addressed, ii) the degree of innovation, iii) the extent of anticipated impact, and iv) the feasibility of the research plan. Although this Program will emphasize the first three criteria and take more risks on unproven methodologies and hypotheses,

a major strategic flaw will not convince the reviewers. The project should also be deemed internationally competitive by the reviewers.

Furthermore, successful applicants should have relevant expertise, demonstrate that the project is part of their major career goal, and will devote sufficient effort to the project. Applicants are advised to read the Review Criteria (Appendix 2) before starting to write their proposals.

- 3. Applicants may be invited to make oral presentations and answer questions during the review process.
- 4. Any research project involving biological and/or genetically engineered materials, animal experiments or human subjects must obtain approval from the appropriate authorized AS committees. If the official approval document cannot be submitted at the time of grant application, proof of having applied for approval must be provided instead.
- 5. Please note that, in accordance with the regulations of Academia Sinica (Lett No. 1111401198, dated September 19, 2022), "Research staff (including research technical personnel) shall not engage in research related to the scope of a subject matter of technologies that have been exclusively licensed with the use of funds from the public sector."
- 6. Academia Sinica actively encourages researchers to learn and adopt new tools, including advanced AI-driven software applications, to enhance research quality, ensure thorough consideration of supporting background information, and improve work efficiency. However, the applicant is solely responsible for the accuracy of all content, writing quality, and adherence to academic research integrity standards.

# 3. Funding Period and Other Requirements

- 3.1 Applicants can request for either one- or two-years' funding.
- 3.2 Actual funding may be adjusted on a yearly basis based on budget availability and progress. Failure to demonstrate satisfactory progress will result in premature termination of funding support.
- 3.3 Grant Acceptance and Requirements prior to Project Execution
  - 1. Project PI and co-PI(s) of a successful grant application must sign and undertake to abide by the terms as stipulated in the Project Execution Agreement, and complete the Conflict-of Interest declaration process, prior to commencing the project;
  - 2. Approval from the authorized AS committees must be obtained and submitted before commencing any project involving biological and/or genetically engineered materials, animal experiments or human subjects. Should there be any change in the experimental content or subject matter during the project period, appropriate amendment or new application must be filed for approval;
  - 3. In accordance with the AS Research Ethics regulations, all personnel who directly perform any AS-funded research activity should receive at least one hour of research ethics training every three years. Such training must be completed within six months of joining the research project, or within the duration of the project for a project lasting less than six months;
  - 4. In cases where an AS, a non-AS Project PI (inclusive of Project co-PI) or a non-AS project participant is found to be in violation of academic ethics or conflict of interest regulations, the "Code of Ethics for Academia Sinica Research Fellows and Research Specialists" will apply.
  - 5. Project PI must declare that the research content of this project including the research, development, production of products or services, does not entail the use of anything within the scope of any technology under exclusive licensing or patented technology of AS. The scope of the intellectual property right that might derive from the research in this proposal falls beyond the scope of any exclusive licensed technology or related patents.

### 3.4 Report and Evaluation

- 1. For a 2-year project, a brief progress summary report must be submitted within the ninth month during the first year. Additional oral presentations may be arranged as needed for the PI to discuss progress and problems.
- 2. A final written report to the AS Department of Academic Affairs and Instrument Services is due upon completion of each project.

# 4. Application Materials to be submitted

The applicant should first maintain and update the PI's personal data by logging into the online application system at <a href="https://asms.sinica.edu.tw">https://asms.sinica.edu.tw</a> using the PI's SSO account before proceeding to complete the online application.

- 4.1 Complete the online application process by September 18, 2024.
  - 1. Complete **online** the required information, including the project category, **title**, executive **summary**, **keywords**, the **budget** requested, and the **current and pending support** of each PI and co-PI.
  - 2. Use the document template provided (Appendix 1) to prepare the **2-page Research Plan**, and the **personal track record** of each PI and co-PI, adhering to the format and rules specified within. The research plan and supporting letter (if any), along with the personal track record, should be uploaded as a **single PDF** electronic file via the online system.
- 4.2 Grant Office contact information:

Ms. EG Chen

Email: grandchallenge@gate.sinica.edu.tw

Tel: 2787-2612

Department of Academic Affairs and Instrument Service

# 申請 113年度第二梯次本院「關鍵突破種子計畫」簡要中文說明

# 壹、計畫類型:

關鍵突破種子計畫型別分為下列兩類:

- 一、個人型研究計畫
- 二、單一整合型研究計畫

## 貳、計畫申請作業

### 一、申請人資格

- (一) 研究計畫之(總)主持人需為本院須為本院專任研究人員;或為本院合聘之研究人員·但 須有本院專任研究人員擔任共同主持人。
- (二) 計畫主持人可邀請非本院專家學者參與研究團隊,擔任該計畫共同主持人。
- (三) 若因執行本計畫另需邀請協同參與或合作研究人員·計畫主持人可於申請書說明其必要性·並檢附該協同參與或合作研究人員同意提供協助與支持該計畫或合作意願之說明信函 (supporting letter)。

# 二、計畫申請時程與其他注意事項:

- (一) 計畫書應於 113 年 9 月 18 日前,至中研院學術服務管理系統
  - ( https://asms.sinica.edu.tw · 以 SSO 帳號登入 ) 依所敘明之步驟完成送件。數理組及生命組之計畫書應以英文撰寫 · 格式請見<mark>附件 1</mark> ; 人文組以該專業領域之國際學者熟悉的文字為主要考量。
- (二) 撰寫計畫書時,應著眼於欲解決的關鍵議題之重要性、所提出的思維與方法之創新突破性,及研究成果對該領域的影響力。敬請參酌本徵求的英文版說明,及適用於數理組及生命組之計畫審查基準英文說明(附件2)。
- (三) 審查過程如需申請團隊口頭報告或說明之會議安排等事宜將另行通知。
- (四)本計畫若有涉及生物材料及基因重組相關實驗、動物實驗及以人為研究對象者,應檢附相關委員會之核准文件。核准文件未能於申請時提交者,須先提交已送審之證明文件, 並於計畫審核通過前補齊核准文件。
- (五) 依據本院 111 年 9 月 19 日學術字第 1111401198 號書函規定「本院研發成果已完成專屬授權者・研究人員(含研究技術人員)不得再以公部門經費從事涉及該專屬授權標的範圍之研究」。
- (六) 本院鼓勵研究人員學習各種新的工具,包含各式人工智慧的應用,藉此提升研究品質、確保背景資料的周全性,及改善工作效率。惟所有計畫內容的正確性,撰寫品質,和遵守學術倫理規範的責任均由申請人全權承擔。

### 參、計畫補助年限與執行前需求

- 一、計畫補助年限為一或二年期。
- 二、每年實際核定經費將視當年之預算金額及前一年之執行進度而定,審查未獲通過之計畫, 應無條件終止計畫。

### 三、核定後執行前須知

- (一) 經核定通過之總主持人及共同計畫主持人須簽署相關計畫執行同意書·並於計畫執行前 完成利益衝突揭露程序;
- (二) 核定通過之研究計畫,若有涉及生物材料及基因重組相關實驗、動物實驗及以人為研究 對象者,應於提供相關委員會之核准文件後,方可核撥經費。如相關實驗內容於執行期 間有所變更,亦須重新申請或修訂審核同意文件;
- (三) 依據「中央研究院學術研究倫理教育課程實施要點」‧執行以本院預算支應之研究計畫者‧參與計畫人員每3年應接受至少1小時之學術倫理教育課程訓練‧至遲應於開始參與研究計畫之日起6個月內完成;研究計畫執行期限少於6個月者‧應於計畫執行期限內完成。
- (四) 本院計畫主持人(含共同主持人)如涉有違反學術倫理或利益衝突規範之情事者·依本院研究人員及研究技術人員倫理規約辦理;院外參與計畫人員準用前述規約辦理。
- (五) 計畫主持人應聲明本計畫研究內容沒有利用本院已專屬授權技術或相關專利之範圍·進行研發、生產產品或服務;計畫研究所產生之智慧財產權範圍不屬於已專屬授權技術或相關專利之範圍。

## 四、執行進度與成果報告

- (一) 二年期計畫應於執行第一年的第九個月內提交精簡進度摘要報告·並視需求得以安排口 頭報告討論進度及待解決之問題。
- (二) 計畫執行期滿,須向學術處提交完整執行成果報告。

### 參、申請資料

- 一、**申請流程**・請按照本院學術研究管理系統 (https://asms.sinica.edu.tw, 以 SSO 帳號登入) 所叙明之步驟・於 113 年 9月 18 日前完成線上申請。
- (一) 申請者應先於線上維護及更新計畫主持人與共同主持人之個人履歷·並填妥計畫類 別、名稱、重點摘要、關鍵字、經費需求、及目前正執行與申請中之計畫件數及經費補助情 形等資料。

- (二) 計畫內容、支持說明信函、連同計畫主持人與共同主持人之個人研究成果及貢獻‧則依計畫書(附件 1)規定之格式撰寫後‧轉存為一個 PDF 電子檔於線上系統上傳。
- 二、學術及儀器事務處 計畫辦公室 與承辦人聯絡方式:

grandchallenge@gate.sinica.edu.tw

承辦人:陳羿君女士,電話:2787-2612