

2023 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.

While any other self-proposed research topics are welcome, a particular focus theme singled out for the current round of calling for proposals is: “**Exploring Future Society**”. Taiwan’s society is facing immense transformations and challenges closely connected to what is happening worldwide. Exploratory Seed Grant proposals are now invited to investigate significant issues that will shape our future society and its links to the world from historical, current affairs, or future policy perspectives. Interdisciplinary collaborative proposals in the humanities, social and natural sciences are particularly welcome. Research projects of interest may cover, but are not limited to, the following topics:

- Declining birthrates and aging societies
- Healthcare systems
- Social welfare
- Income distribution
- Industrial mobility
- Regional revitalization
- Immigrant society
- Disasters and refugees
- Ethnic relations
- Environmental sustainability
- Mental health and wellbeing
- Collective memory and identity
- Impact of new technologies
- Any topic related to the politics, economy, law, education, language, culture, and values of future society

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.
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2. Application Process

2.1 Eligibility

1. Program Directors/PIs must be an Academia Sinica Research Fellow of any rank.
2. PI can invite non-Academia Sinica scientists to participate in the project and serve as co-PI, if necessary.
3. Additional collaborators enlisted, if any, should be justified and each is required to provide a Supporting Letter delineating their expertise and specific roles in the project.

2.2 Deadlines and Important Reminders

1. Application deadline is **September 15, 2023**; 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 ([Appendix 1](#)), 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 encourages researchers to learn various new tools, including advanced AI-driven applications, to enhance research quality, ensure thorough considerations of supporting background information, and improve work efficiency. However, the responsibility for the accuracy of all content, writing quality, and adherence to academic research integrity standards rests solely with the applicant.
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3. Funding Period and other Requirements

3.1 Applicants can request for either one- or two-years' funding.

3.2 Grant **Acceptance** and **Requirements** prior to Project Execution

1. Program Directors/PIs and co-PI(s) of a successful application must sign and 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. Project PI found to have violated research ethics will be subject to actions recommended by the AS Ethics Committee.

3.3 **Report** and **Evaluation**

1. For 2-year's project, a brief progress summary report must be submitted within a month after completion of the first year. Additional oral presentation by PI to discuss progress and problems may then be arranged.
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

1. Complete the online application process by **September 15, 2023**. Log into the online application system at <https://asms.sinica.edu.tw> using the PI's SSO account and follow through the steps as instructed. Applicant should first maintain and update the personal data of the PI and co-PI(s), then fill in online the required basic information including the project category, title, the budget requested, executive summary, and keywords. Use the document template provided ([Appendix I](#)) to prepare the Full Proposal, adhering to the format and rules specified within. Each of the required items including research plan, supporting letter, recent research accomplishments, and personal track record with a list of current and pending grant support, should be uploaded as ONE PDF electronic file via the online system.
2. Upon completion of the online application process, an automatic confirmation email will be generated and sent by the system to acknowledge receipt, which can be used as proof of submission.
3. Grant Office contact information:
Email: grandchallenge@gate.sinica.edu.tw
c/o Ms. EG Chen (Tel: 2787-2612)
Department of Academic Affairs and Instrument Service

申請 中央研究院 112年度第二梯次「關鍵突破種子計畫」簡要中文說明

臺灣社會正面臨許多重大的變遷與挑戰，也與全球的景況息息相關。本次「關鍵突破種子計畫」除一般自發性的創新研究主題外，特別徵求擬針對臺灣社會未來發展之重要議題進行研究，並思考臺灣與全球關係的種子計畫。無論針對問題的歷史成因、現況的深入研究、未來趨勢的預測，或是對於政策的反思與建議，都適合申請本計畫。本計畫主要邀請人文社會學者參與，也鼓勵人文社會學與科技的整合型計畫。研究重點包括（但不限於）以下各面向：

- 少子化、高齡化的社會
- 醫療、照護
- 社會福利
- 所得分配
- 產業移動
- 地方創生
- 移民社會
- 災難與難民議題
- 族群關係
- 環保與永續議題
- 健康身心靈與幸福感
- 歷史記憶與認同
- 新科技的影響與衍生的問題
- 政治、經濟、法律、教育、語言、文化與價值等相關議題

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)主持人需為本院專任助研究員(含)以上。
- (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) 申請時程為即日起至 **112 年 9 月 15 日** 止，數理組及生命組之計畫書應以英文撰寫，格式請見 **附件 1**；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) 研究計畫中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、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) 計畫主持人及共同計畫主持人如涉有違反學術倫理之情事者，依「中央研究院各級倫理委員會設置及作業要點」處理。

三、執行進度與成果報告

(一) 二年期計畫應於執行滿第一年後的一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) 所敘明之步驟，於 **112 年 9 月 15 日** 前完成線上申請。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、經費需求、摘要、關鍵字等基本資料。計畫內容、支持說明信函、近期研究成果、目前正執行與申請中之計畫件數及經費補助情形等，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、完成線上申請後，申請人將即時收到系統自動發送之確認回函，可作為收件之存證。

三、學術及儀器事務處「關鍵突破計畫」辦公室電子郵件聯絡方式：

grandchallenge@gate.sinica.edu.tw

承辦人：陳羿君女士 (電話：2787-2612)
