

Review Criteria for Academia Sinica Type 1 and 2 Grants

Academia Sinica currently provides four different competitive funding opportunities categorized as either Type 1 or 2 grants. The **Career Development Award** and **Investigator Award** are individual five-year Type 1 grants (funding capped at ≤5M NTD per year) targeting, respectively, Assistant Research Fellows and more senior Principal Investigators. A good track record and past performance is advantageous, but the nature of the problem to be addressed, the innovative ideas proposed, the feasibility and potential impact, are all equally important review criteria.

The **Thematic Research Program** is a legacy Type 1 grant that can be tackled by an individual investigator (capped at ≤5M NTD per year) or a collaborative research team with complementary expertise (capped at ≤8M NTD per year). This program emphasizes the importance of the scientific or societal problem to be addressed, the feasibility of the research plan and deliverables within the three-year funding period. The **Grand Challenge Program** is a 4+1 year Type 2 grant (capped at ≤20M NTD per year) more recently established to encourage investigators of all ranks to pursue innovative solutions for critical problems in science and the humanities. Grand Challenge projects should have broad and lasting impact, and in their review, there is less emphasis on preliminary results and more focus on original and visionary thinking that will accelerate academic breakthroughs. In both Thematic Research and Grand Challenge Program grants, principal Investigators are free to assemble an integrated collaborative research team as needed to achieve the proposed goals in the most productive ways.

To aid Principal Investigators in preparing grant applications, the **review criteria** for the four aforementioned grants are provided below; slight program-specific differences highlighted where appropriate. **Reviewers** will be asked to provide a thorough evaluation based on the following specific bullet-point questions and rank the proposal accordingly on a scale of 1–5:

1. How significant is the specific problem to be addressed?

- What is the specific problem to be addressed?
- Is the specific problem important to science and/or society? For proposals addressing major diseases, why is it important to better understand or overcome the particular major disease?
- Has the problem been identified by others before?
- Has the problem been solved before?
- To what extent is the proposed problem a continuation of the PI's previous work?
Note: For Career Development Award only.

2. To what extent is the idea innovative?

- What are the novel elements in this application?
- What are the closest ideas published by others to date?

3. What is the extent of anticipated impact?

- If the project succeeds, to what extent will the outcomes impact the solution to the problem identified?
Note: The impact can be scientific or in practical applications, or contributing to prevention or treatment of a particular major disease.
- Will the impact be game-changing and transformative?
- What are the remaining issues important to solving the problem, but not addressed by the applicants?

4. How feasible is the Research Plan and proposed approach?

- Has the applicant(s) thought through the problem thoroughly?
- Has the applicant(s) identified the risks involved and provided plans to de-risk?
- Are there any major flaws in the proposed approach to the problem?
*Note: Preliminary results are not required for the **Grand Challenge Program** to encourage new ideas and directions. However, applications with major scientific/technical strategic flaws will not be favorably considered*
- Can the applicants deliver significant results during project period? How feasible are the proposed timeline and the projected milestones?
- Are different components or specific aims well-integrated and synergistic?

5. Do the applicants have relevant expertise? Are they committed?

- Does the applicant have an **adequate** (for *Career Development Award*) or **strong** (for all other grant types) record in conducting cutting edge research and deliver impactful results?
*Note: Past performance is an important consideration for **Investigator Award** grant*
- **For Career Development and Investigator Award** - Is there evidence that the applicant is committed to deliver impactful results in 3–5 years? *For Career Development Award* - Is the proposed project **likely to develop into** a major component of their career? *For Investigator Award* - Is the proposed project a major component of their career?
- **For Thematic Research and Grand Challenge Programs** - Is there evidence that the applicants are committed to deliver impactful results during the project period? Is the proposed project a major component of their research?
- Do all the component leads have significant roles?
Note: applicable only to integrated collaborative team projects

6. Is the proposed project internationally competitive?

- How does the quality of this application compare with the top level globally?

Applicants are advised to prepare their proposals so that Reviewers can easily identify the answers to each of the questions. The score sheets and evaluation reports from all solicited **ad hoc Reviewers** will be compiled and forwarded to a standing **Review Panel**. Two Panel members will be assigned to critically evaluate each of the shortlisted applications based on the same review criteria. The Panel members will be asked to take into consideration the assessments by ad hoc reviewers but are free to provide independent critique and counter arguments, particularly during the final round-table discussion.

All Reviewer's comments will be redacted and provided to the applicants after the completion of the review process.

Note: Please refer to the funding opportunity announcements and other relevant documents available online including the guidelines provided in the application forms and templates, for additional requirements and details for each grant type. There may also be slight differences in carrying out the review process among the three Divisions but the major points to be considered will be similar.