

Instructions for reviewing funding applications

Special funding for research into COVID-19 vaccines and pharmaceutical development Contents

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1. Role of experts and the Academy of Finland

The Academy of Finland funds cutting-edge and innovative research aiming at significant scientific breakthroughs. Our funding is based on open competition and independent peer review. We grant funding to the best researchers and research teams as well as to the most promising junior researchers through several funding instruments. Experts are invited to review the scientific excellence of the submitted funding applications. In most cases, the applications are reviewed in expert panels. However, external reviewers may be used to support the panel review or as independent reviewers.

After receiving the panel review reports, decision-making bodies (research councils or subcommittees) make the final funding decisions. The decisions are based on a peer review of scientific quality (and in a case of panel review, the panel ranking), but factors related to science policy may also influence the decisions. Examples of such factors are the promotion of equal opportunities for all genders, the advancement of junior researchers' careers and impact beyond academia.



2. Confidentiality and ethics

According to the Finnish Act on the Openness of Government Activities, research plans, abstracts, progress reports and reviews are confidential documents. Application documents should therefore be handled and stored with due care and confidentiality.

The Academy of Finland is committed to following the guidelines of the Finnish Advisory Board on Research Integrity for responsible conduct of research. The guidelines also apply to reviewing funding applications, research programmes and scientific disciplines. All reviews must be handled confidentially, competently and impartially, based on the criteria set for the review process. Care must be taken to ensure that the review complies with general stipulations about conflicts of interest. Prior notice must be given if a reviewer has economic or other affiliations or significantly different schools of thought in relation to the applicant under review. This is a way to avoid conflicts of interest.

As a reviewer, you are not allowed to disclose any information concerning application documents or reviews to outsiders, nor are you allowed to use this confidential information to your own benefit or anyone else's benefit or disadvantage. You may not reveal to outsiders that you are assessing the research plan of a particular researcher. If you are contacted by anyone, including the applicant, who has questions about the application or reviews, please advise them to contact the Academy of Finland.

Reviewers are guilty of research misconduct if they misappropriate research ideas from applications. The quality of the review is not a research-ethical issue unless the review has been conducted carelessly, which may give an appearance of a review that deliberately either underrates or overrates the applicants under review.

Disclosing the contents of research plans to third parties or contacting applicants personally without explicit agreement to do so are also regarded as instances of inappropriate behaviour on the part of reviewers.



Once the review has been completed, you are required to destroy all application documents and any copies made of them, or to return them to the Academy. Confidentiality must also be maintained after the review process has been completed. Reviews are confidential documents, but applicants will have access to the review reports on their own application after the funding decisions have been made. The draft reviews and external draft reviews are also confidential documents unless otherwise stated in the applicable legislation or required by court order.

After the funding decisions have been made, the Academy will publish a list of names, current positions and institutions of all individual reviewers and panel members used in the call. In addition, the applicants will see the names of all panel members in the panel review report. If requested, the names of reviewers that have supplied the draft reviews will also be disclosed to the applicant (under the Finnish Act on the Openness of Government Activities).

3. Conflicts of interest

As a reviewer you are required to declare any personal interests according to the criteria below. You must disqualify yourself if you can in any way benefit from the approval or rejection of the application. You must also disqualify yourself in the following circumstances:

- You have collaborated with the applicant (e.g. you have co-authored and published an
 article or manuscript with the applicant in the past three years, been involved in the
 preparation of the application, or are involved in the publication or application of the
 results).
- You have been a superior, subordinate or instructor of the applicant in the past three years.
- You are applying for the same post as the applicant.
- You are applying for funding from the Academy from the same funding instrument.
- The applicant is a close person to you. A close person is:



- a) your spouse (also de facto), child, grandchild, sibling, parent, grandparent or a person otherwise close to you (e.g. fiancé/e or a close friend), as well as their spouses (also de facto)
- b) a sibling of your parent or his/her spouse (also de facto), a child of your sibling, or your previous spouse (also de facto)
- c) a child, grandchild, sibling, parent or grandparent of your spouse as well as their spouses (also de facto), or a child of a sibling of your spouse
- d) or a half-relative comparable to the above-mentioned persons.

You are also disqualified if your impartiality may be endangered in any other way, or if you feel that you have a conflict of interest and are therefore disqualified to review the application.

If you identify any conflicts of interest, please notify us as soon as possible.

4. Reviewer's declaration

Please acknowledge that by accepting the task of a reviewer you guarantee not to disclose the information you receive and not to use it for anybody's benefit or disadvantage as stated in section 2 above (Confidentiality and ethics). Further, you affirm that you will immediately notify the Academy if you have a conflict of interest in one or more applications.

5. Review

How to review applications in the Academy's online services

Please use the Academy of Finland's online services to review applications. Review reports are completed in the online services. You can access the items of the research plan directly from the corresponding review form questions. However, we do expect you to read the full application. You can find the review instructions and all our review forms under <u>Guides for reviewers</u> on our website.



Reviewing funding applications

Written reviews: Evaluative comments are particularly valuable to the decision-making bodies. After the funding decisions have been made, the applicants can access the review report on their own application. The review also provides the applicant with important feedback. Reviewers should therefore:

- write evaluative rather than descriptive comments (avoid copying text directly from the application)
- write comments under each sub-item
- write coherent comments in the passive voice.

Numerical evaluation: The consistency between the numerical rating and the written comments is particularly important. The numerical evaluation of the sub-items and final rating is made with a rating scale ranging from 6 (outstanding) to 1 (poor).

Rating scale in the review form: Q1 relevance question, Q2-4 science questions

| Grade | Science (Q2-4) | Relevance (Q1) |
|-----------------|----------------------------------|---|
| 6 (outstanding) | Demonstrates exceptional | Research of crucial relevance to users, i.e., such novelty or |
| | novelty and innovation; has | timeliness and promise that an extremely significant |
| | potential to substantially | contribution to policy or practice is likely; demonstrates |
| | advance science at global level; | exceptional novelty and innovation to address a solution |
| | is a high-gain project that may | to an important problem or a critical barrier |
| | include risks | |
| 5 (excellent) | Is extremely good in | Research of very high relevance to users, i.e., such novelty |
| | international comparison – | or timeliness and promise that a very significant |
| | contains no significant elements | contribution to policy or practice is likely; high potential to |
| | to be improved | address a solution to an important problem or a critical |
| | | barrier |
| 4 (very good) | Is in general sound but contains | Research of very high relevance to users, i.e., such novelty |
| | a few elements that could be | or timeliness and promise that a very significant |
| | improved | contribution to policy or practice is likely; high potential to |



| | | address a solution to an important problem or a critical |
|----------|-----------------------------------|--|
| | | barrier |
| 3 (good) | Is in general sound but contains | Research of relevance to users, i.e. such novelty or |
| | important elements that should | timeliness and promise that a moderate contribution to |
| | be improved | policy or practice is likely |
| 2 (fair) | Contains flaws; is in need of | Research that will add to understanding but that might |
| | substantial modification or | not be of sufficient relevance or urgency to influence |
| | improvement | policy or practice |
| 1 (poor) | Contains severe flaws that are | Research not considered relevant; proposal is in need of |
| | intrinsic to the proposed project | substantial modification or improvement |
| | or the application | |

Review criteria

The main criteria in the review are:

- 1) project's relevance to the call (Q1)
- 2) scientific quality, innovativeness and novelty value of the research as well as its impact within the scientific community (Q2)
- 3) feasibility of research plan (incl. responsible science) (Q2)
- 4) competence of applicant or research team in terms of project implementation (Q3)
- 5) quality of research environment and collaborative networks (Q3).

At all levels of the review process, please pay close attention to the potential for breakthrough research.

The Academy of Finland is committed to promoting the DORA recommendations and to not using journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions. (See DORA – San Francisco Declaration on Research Assessment https://sfdora.org/read/.)



6. Responsible science

Research ethics

The Academy of Finland requires that the Finnish Advisory Board on Research Integrity guidelines Responsible conduct of research and procedures (link takes you to the Board's website) for handling allegations of misconduct in Finland is followed in all Academy-funded research. We also require that researchers follow ALLEA's (All European Academies) European Code of Conduct for Research Integrity (link takes you to ALLEA's website) when engaging in international collaboration.

The Academy will not process a funding application if the applicant has been found guilty of research misconduct in the three years preceding the year of the call. If the Academy finds out about the misconduct during the funding period, whatever is left of the funding period will be added to the three-year limit. If the applicant appeals the decision on the misconduct, and the appeal is successful, the Academy will process the applicant's new applications following normal procedures. Read more about the ethical questions on the Academy's website.

Equality and non-discrimination

The Academy of Finland's research funding promotes equality and non-discrimination as a part of responsible science. To secure responsible reviews and decision-making, the Academy is, in accordance with its Equality and non-discrimination plan 2019-2020, committed to defining the means to support combining work and family life and the research careers of women in all funding opportunities. Therefore, career breaks that might be caused by family leaves cannot be evaluated negatively in the review.

The Academy requires that all Academy-funded research promotes gender equality and non-discrimination. Academy reviews and decision-making emphasise the importance of promoting equality and non-discrimination either in the suggested project or in the wider society. Gender is not part of the information in the applications under review.



In the review of applications, the Academy of Finland asks reviewers to pay attention to the unconscious bias that affects us all. Unconscious bias refers to a positive bias towards our "ingroup" and a negative bias towards our "outgroup". For example, when you are assessing whether the research might be groundbreaking and whether the applicant is competent enough to carry out the proposed project, pay special attention to the possible unconscious biases that you might have and that could have an impact on your review. The very act of realising hidden biases makes them less powerful.

In review (especially in panels), it is easier to detect unconscious biases in others than in yourself. We ask you to be prepared to call out bias when you see it.

Open science

The Academy of Finland is committed to promoting the principles and practices of open science to improve the quality, responsibility and social impact of science. The goal is to make all outputs produced and used in research (research publications, data, methods, and metadata) widely available for reuse. The principles of open science must be pursued with due attention to good scientific practice and law. The degrees of data openness may justifiably vary, ranging from fully open to strictly confidential. Read more about the Academy of Finland's open science policy.

When reviewing publication plans, reviewers are asked to take note of the Academy of Finland's open access policy and value the applicants' efforts to publish in OA journals or use other alternatives that secure the open access aims.

When reviewing applicants' preliminary presentations on data management and open access to research data, reviewers are asked to take note of the Academy of Finland's research data policy and value the applicants' effort to open the research data collected during the research plan. Reviewers are also asked to support well justified arguments, if the applicant states that no research data is collected or gives understandable reasons for not opening the research data.



The funded projects submit a full research data management plan after the positive funding decision has been made.

Appendix 1

Review form

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