The aim of the Academy of Finland’s Centre of Excellence Programme is to strengthen Finnish research by raising its level, contributing to its regeneration and promoting its societal impact.

Please provide both written feedback and numerical ratings to each of the following items.

The numerical evaluation of the sub-items and final rating is made with a rating scale ranging from 6 (outstanding) to 1 (poor).

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (outstanding)</td>
<td>Demonstrates exceptional novelty and innovation. Has potential to substantially advance science at global level. High-gain project that may include risks.</td>
</tr>
<tr>
<td>5 (excellent)</td>
<td>Is extremely good in international comparison – no significant elements to be improved.</td>
</tr>
<tr>
<td>4 (very good)</td>
<td>Is in general sound but contains a few elements that could be improved.</td>
</tr>
<tr>
<td>3 (good)</td>
<td>Is in general sound but contains important elements that should be improved.</td>
</tr>
<tr>
<td>2 (fair)</td>
<td>Contains flaws. Is in need of substantial modification or improvement.</td>
</tr>
<tr>
<td>1 (poor)</td>
<td>Severe flaws that are intrinsic to the proposed project or the application.</td>
</tr>
</tbody>
</table>

1 Quality of research described in the plan

1.1. Scientific quality, novelty and innovativeness of the research

Significance of the project; objectives and hypotheses; ambitiousness and state of the art of objectives (possible novel concepts and approaches or development across disciplines); scientific impact of the research; potential for breakthroughs or exceptionally significant outcomes; etc.

- See item 1 Aim and objectives in the research plan.

1.2. Implementation of the research plan

Feasibility of the project (bearing in mind the extent to which the proposed research may include high risks); materials, research data and methods; human resources and management of the research tasks; research environment including research infrastructures; identified potential scientific or methodological problem areas and mitigation plan; etc.

- See item 2 Implementation in the research plan.

1.2.1. Research consortium

Significance and added value of the consortium for the attainment of the research objectives

- See item 2.4 Added value of consortium in the research plan.
- A consortium is a fixed-term body of subprojects and a collaboration of research projects that work at different sites or institutions under a joint research plan that is implemented in systematic collaboration. A consortium application is reviewed as a single research plan.
1.3. Responsible science (to be reviewed in the call step 2) (no numerical rating)
Has the applicant considered the following aspects of responsible science properly in the application? Please, provide further comments if responsible science aspects have not been properly considered.
- See item 4 Responsible science in the research plan.
- Academy of Finland is committed to research integrity for responsible conduct of research and promoting the principles and practice of equality and non-discrimination and open science. See instructions for reviewing for further information.

1.3.1. Research ethics
- Yes
- No, please comment

1.3.2. Promotion of equality and non-discrimination within the project or in society at large
- Yes
- No, please comment

1.3.3. Open access of the research publications
- Yes
- No, please comment

1.3.4. Data management and open access to data
- Yes
- No, please comment

2 Competence of the applicant(s), quality of research collaboration

2.1. Competence of the applicant(s) and the complementary expertise of the applicant’s research team (project personnel) Sub-rating (1–6)
Merits and scientific expertise of the applicant (in case of consortium: applicants) in terms of implementation of the project; complementary expertise of the research team (i.e. project personnel directly working/funded for the project); competence of the applicant(s) in terms of supervising phd candidates or postdoctoral researchers; support for researcher training within the project; etc.
- See item 3.1 Project personnel and their relevant merits in the research plan.
- See CVs of the applicants in the application form
- See attached lists of publications.
- When reviewing consortium applications, competence of all principal investigators should be reviewed.
- Academy of Finland is a signatory of the DORA declaration. See instructions for reviewing for further information.

2.2 Significance of research collaboration Sub-rating (1–6)
Significance of national and/or international research collaboration (i.e. collaborators engaged to the project via their own funding) including complementary expertise and research environment of the collaborators in terms of implementation of the project; etc.
- See item 3.2 Collaborators and their key merits in terms of the project in the research plan.
- See attached Letter(s) of commitment(s)
3 Overall assessment and rating

3.1. Sustainable development and societal impacts of the project (to be reviewed in the call step 2) (no numerical rating)

- See item 4.4. Sustainable development in the research plan.
- See item 5 Societal effects and impact in research plan.
- Please comment on the societal effects and impact, including principles of sustainable development. However, these should not affect the scientific review/rating or ranking of the application. Instead, they will be considered as an additional factor when the funding decisions are made.

3.2. Main strengths and weaknesses of the project, additional comments and suggestions (no numerical rating)

Please list major strengths and weaknesses of the application as well as any additional comments.

- Please give an overall assessment for the application including lists of strengths and weaknesses as well as any additional comments. It is important to comment on both the strengths and the weaknesses of the application.

Strengths:
Weaknesses:
Comments:

4. Overall rating Rating (1–6)

- Please note that the final rating should not be a mathematical average of the sub-ratings. For example, the application should not be penalised if it has a slight weakness in one evaluation item that is later strengthened in another item (e.g. lack of some expertise in a local team but compensated through international collaboration).

Ranking (to be reviewed in the call step 2)

Your application was ranked [ordinal number]th of all the [number] [Funding instrument name] applications reviewed in this panel. Only applications with the final rating of 5 or 6 were ranked. Altogether, [Funding instrument name] applications addressed to Research Council for [Research Council name] were reviewed in [number] panels.