

LISA 1

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Järeldoktorigrandidaotluste hindamise juhend Guidelines for Evaluating Postdoctoral Grant Applications

1. Introduction

“Guidelines for Evaluating Postdoctoral Grant Applications” is a document which specifies the evaluation criteria set forth in the directive “Conditions and Procedure for Postdoctoral Grants” by the Estonian Research Council (hereinafter *Council*).

2. Relevant terms

Research grants are funding instruments allocated for a high-quality research and development (R&D) project carried out by a person or a research group working at an R&D institution, incl. the research scholarships for students (as specified in the Organisation of Research and Development Act). There are three categories of grants corresponding to different levels of a research career: postdoctoral grants, start-up grants, and team grants:

- A **postdoctoral grant** is a grant aimed at supporting the launch of a research career of the people with a doctoral degree or equivalent qualification at strong R&D institutions or among highly qualified research groups. There are two types of postdoctoral grants:
 - a grant for a postdoctoral researcher coming to Estonia (incoming postdoctoral grant);
 - a grant for a postdoctoral researcher going abroad (outgoing postdoctoral grant).
- A start-up grant is a grant aimed at supporting researchers with initial research experience to launch their independent research career at an Estonian R&D institution, to set up their research group, and to contribute to educating the next generation of researchers (incl. doctoral students).
- A team grant is a grant aimed at supporting researchers working at Estonian R&D institutions in continuing their research career, ensuring high-quality research, leading a strong research group, and educating the next generation of researchers (incl. doctoral students).

A **collaborating institution** is a foreign R&D institution where the outgoing postdoctoral fellow will carry out the postdoctoral project.

3. Criteria for applying

3.1. An **outgoing postdoctoral fellow** is a person who:

- 3.1.1. has obtained a doctoral degree or equivalent qualification no more than five years prior to the 1st of January of the year of the call. If the applicant has been on pregnancy, maternity or parental leave, or in compulsory military service after obtaining the doctoral degree, the period of qualification is extended by the corresponding period in full months and is rounded up to the higher number of months. In justified cases, the Evaluation Committee may consider eligible an applicant who does not have a doctoral degree or equivalent qualification at the time of submitting the application, provided that the

applicant will obtain a doctoral degree or equivalent qualification before entering into the grant contract;

3.1.2. has undertaken doctoral studies at and has obtained a doctoral degree from an Estonian university and has not previously received postdoctoral research funding from the Estonian Research Council (hereinafter *Council*);

3.1.3. has studied or worked in Estonia for at least 12 months by the closing date of the call.

3.2. A **postdoctoral supervisor** is a researcher who:

3.2.1. has a doctoral degree or equivalent qualification;

3.2.2. has an employment contract with the collaborating institution.

3.2.3. The supervisor cannot be the same person who has been the (co-)supervisor of the applicant's doctoral dissertation.

4. Processing Grant Applications

The application process takes place in the Estonian Research Information System (hereinafter *ETIS*). The submission of the application and the communication with the applicant is conducted via ETIS.

5. Application

The application for a postdoctoral grant (hereinafter *application*) shall include the following:

- 5.1. information about the postdoctoral fellow, the supervisor of postdoctoral research, and as an exception and in justified cases, the co-supervisor of postdoctoral research. The qualification of the co-supervisor will not be evaluated;
- 5.2. a letter of confirmation from the collaborating institution;
- 5.3. the title of the project in Estonian and in English;
- 5.4. a summary of the project in Estonian and in English;
- 5.5. the requested grant period;
- 5.6. the grant type and amount applied for pursuant to the fixed amounts set out in the "Guidelines for Budgeting Grant Applications" as well as the justification for the budget, incl. the distribution of direct costs;
- 5.7. the scientific background of the project, incl. the interdisciplinarity and intersectorality of the project (if applicable);
- 5.8. the main objectives of the project, hypotheses (excl. justified exceptional cases), methods, and the work plan together with risk reduction measures and a back-up plan, incl. tentative annual work plans and the availability of the infrastructure necessary for achieving the objectives of the project. If the exception for implementing the project partially in Estonia is applied for, the work plan has to include the time periods of working in Estonia as well as the activities undertaken in Estonia;
- 5.9. the expected results and their potential applicability, importance for Estonian research, culture, society, and/or economy as well as the impact on the career opportunities of the postdoctoral fellow;
- 5.10. an explanation about how the results of the project will be disseminated to the wider public;
- 5.11. an explanation about how the compliance with ethical issues will be secured during the implementation of the project and a comment on whether the project requires a licence from a specific ethics committee or the licence has already been obtained, and if the project necessitates compliance with the Nagoya Protocol, an explanation about which genetic resources will be used

- and whether the project requires the due diligence declaration or the due diligence declaration has already been submitted;
- 5.12. a summary, which is optional, of a project on the same subject matter that has been submitted during the previous call(s) describing the changes made compared to the previous application(s) and explaining if the changes stem from the feedback given by the reviewers;
 - 5.13. an explanation about which data will be generated during the implementation of the project and how the data will be managed;
 - 5.14. a description of the applicant's previous R&D activities;
 - 5.15. a description of the supervisor's R&D activities and experience in supervising doctoral students and postdoctoral fellows during the past 10 years;
 - 5.16. if necessary, additional documents;
 - 5.17. a confirmation that the principles of research ethics and good research practice will be adhered to during the conception and implementation of the project.

Please keep in mind that the applicants have a limited number of characters they can use to describe each part of their project.

6. Evaluation process

- 6.1. The grant applications will be evaluated by
 - 6.1.1. at least two independent reviewers;
 - 6.1.2. the Expert Panel who shall rely, although non-binding, on the evaluations and scores of the reviewers;
 - 6.1.3. the Evaluation Committee who shall rely, although non-binding, on the evaluations and scores of the reviewers and the Expert Panel.
- 6.2. All applications are to be evaluated according to the same rules and procedures and all of them are treated equally. The final ranking list of the applications is formed by taking into consideration all relevant information and by comparing the applications in this particular call in field-specific (incl. sub-field-specific) ranking lists.
- 6.3. An overview of the bibliometric indicators of the supervisor as an additional material for evaluation could be used by the Expert Panel and by the Evaluation Committee for providing background information when evaluating the applications.

7. Evaluation criteria and rating scale to be used for reviewing postdoctoral grants

7.1. Evaluation criteria

When evaluating the applications, the following guiding questions are to be used for explaining the opinions clearly and for justifying the ratings. Please comment on all criteria.

Criterion	Guiding questions	Rating scale
1. Justification for and feasibility of the research project, incl. objectives, methods, risk assessment, resources, and infrastructure	1.1. Is the application well justified and clearly outlined and does it contain well-defined hypotheses (excl. justified exceptional cases) and research questions? 1.2. Are the proposed methods adequate and up-to-date? 1.3. Is the research plan clear and appropriate for its stated purpose and the elaboration on tasks justified and appropriate?	From 1 to 5

	<p>1.4. How well does the applicant acknowledge potential scientific or methodological problem areas as well as the need for risk reduction measures and a back-up plan?</p> <p>1.5. Does the research environment, incl. the research infrastructure, support achieving the objectives of the proposed project?</p> <p>Other comments on criterion 1.</p>	
<p>2. Scientific relevance and potential applicability of the expected results, taking the specifics of the research field into account;</p>	<p>2.1. How well does the applicant describe the expected contribution of the project to the development of the research field significantly?</p> <p>2.2. Has it been clearly outlined where and how the expected results of the project could be used and is there potential for further research?</p> <p>Other comments on criterion 2.</p>	From 1 to 5
<p>3. The qualification of the applicant</p>	<p>3.1. What are the merits and scientific expertise of the applicant?</p> <p>3.2. Are the competences of the applicant appropriate and sufficient for the proposed project?</p> <p>3.3. Does the applicant demonstrate the potential to lead independent research and show maturity (The quality and results of the applicant's previous research activities; experience in (international) cooperation; the number and quality of publications; experience in participating in research projects (home and abroad), attending conferences; skills obtained and other research-related activities?)</p> <p>Other comments on criterion 3.</p>	From 1 to 5
<p>4. The qualification of the supervisor</p>	<p>4.1. Is the supervisor's experience in supervising postdoctoral fellows and doctoral students sufficient for supporting the project?</p> <p>4.2. Does his/her research and results during the past 10 years indicate a sound qualification for supervising the postdoctoral fellow? (The number and quality of publications, the experience in supervising doctoral students and postdoctoral fellows; the scope of managing and/or participating in domestic and/or international R&D projects, and other research-related activities.)</p> <p>Other comments on criterion 4.</p>	From 1 to 5
<p>5. Ethical issues</p> <p>The applicants are required to consider the potential risks related to ethical issues of any procedure in the research projects. The applicants are asked to describe how the</p>	<p>5.1. Has the applicant sufficiently, carefully, and properly assessed whether the project raises the issues of research ethics (e.g., questions related to human participation or involvement of animals; diversity issues; political, religious, societal, historical, and other sensitive topics, environmental intervention, etc.)?</p>	0 or 1

<p>principles of voluntary participation, informed consent, confidentiality, and anonymity of the subjects will be followed. The use of research methods that require a review or approval from a specific ethics committee should also be clearly indicated in the application (the need for such approvals will be checked by the Expert Panel). If the project necessitates compliance with the Nagoya Protocol, the applicant has to be aware of the fact that he/she has to obtain the due diligence declaration.</p>	<p>5.2. Has the applicant provided a description of the action plan whenever appropriate to address the legal requirements of research ethics (e.g., ethics committee approvals, specific research protocols, etc.) and described how the requirements are to be met during the course of the project?</p> <p>5.3. Has the applicant sufficiently, carefully, and properly addressed potential research integrity risks which may arise during the project (e.g., credentials and questions of authorship, ownership of data and intellectual property, etc.)?</p> <p>Other comments on criterion 5.</p>	
<p>6. Data management</p> <p>The applicants are expected to describe which data will be created, managed, collected, and protected; which methods and standards will be applied; will the data be shared or made public and in which way; how the data will be stored during the period of the project and preserved after the end of the project. The applicants are expected to consider the issues related to the secure storage of data either obtained or used during the period of the project and make them available based on the open data principles (if not restricted due to data protection requirements).</p>	<p>6.1. Has the applicant sufficiently, carefully, and properly described data management issues, incl. data storage and back-up, data protection, data ownership, (institutional) open data politics, etc.)?</p> <p>6.2. Has the applicant provided a description of the action plan whenever appropriate to address the legal requirements of data management (e.g., the collection, management, storage, and destruction of sensitive data; field-specific data protection requirements, etc.) and described how the requirements are to be met during the course of the project?</p> <p>Other comments on criterion 6.</p>	0 or 1
<p>7. Importance for Estonian research, culture, society, and/or economy; research career development perspectives</p> <p><i>This criterion will be evaluated only by the Expert Panel and the Evaluation Committee</i></p>	<p>7.1. Has the applicant adequately (considering the specifics of the research field and topic) described and justified the importance of the project for Estonia (incl. outside academia)?</p> <p>7.2. Does the project have other impact/relevance not described by the applicant?</p>	From 1 to 5

	<p>7.3. Does the project include cooperation between R&D institutions and/or government authorities and/or enterprises in Estonia (if applicable considering the specifics of the research field and topic)?</p> <p>7.4. Has the applicant clearly and sufficiently planned the activities for his/her future research career development (development of skills, training, etc.)?</p> <p>7.5. Have the plans for public outreach (dissemination of the results among the wider public outside academia) been sufficiently considered?</p> <p>7.6. Is the topic significant in the Estonian context?</p> <p>Other comments on criterion 7.</p>	
<p>8. Justification for the grant type (experimental or non-experimental)</p> <p><i>This criterion will be evaluated only by the Expert Panel and the Evaluation Committee</i></p>	<p>8.1. Has the grant type been appropriately clarified and is it justified?</p> <p>8.2. Is estimation of the project costs realistic against the objectives?</p> <p>Other comments on criterion 8.</p>	<p>0 or 1</p>

7.2. Rating procedure

7.2.1. A **five-point rating scale** is used for criteria 1, 2, 3, 4, and 7. The evaluation is provided to a level of precision of 0.5 points.

- Outstanding (5);
- Very good-Outstanding (4.5);
- Very good (4);
- Good-Very good (3.5);
- Good (3);
- Satisfactory-Good (2.5);
- Satisfactory (2);
- Unsatisfactory-Satisfactory (1.5);
- Unsatisfactory (1).

For criterion 7 (Importance for Estonian culture, society, and/or economy), the **coefficient 0.8** is applied.

7.2.2. An **undifferentiated rating scale** is used for evaluating criteria 5, 6, and 8:

- Appropriate (1);
- Inappropriate (0).

7.2.3. **The final score** can range from 4.8 to 27 points.

7.2.4. Interpretation of ratings for criteria 1, 2, 3, 4, and 7:

- Unsatisfactory (1) – the application addresses many of the aspects of the evaluation criteria inadequately and/or there are serious inherent scientific weaknesses.

- Satisfactory (2) – the application addresses most of the aspects of the evaluation criteria in very general terms and there are significant weaknesses. Major revision and clarification would be needed to significantly improve the application.
- Good (3) – the application addresses most of the relevant aspects of the evaluation criteria well, but a number of shortcomings are present. Some questions on methodology, scope, and/or relevance of the project could be elaborated on more thoroughly and more clearly. A sound research project with some issues to be considered.
- Very good (4) – the application addresses all relevant aspects of the evaluation criteria very well and only a small number of shortcomings are present. Minor revision and clarification would be suggested. A strong research project worthy of funding.
- Outstanding (5) – the application is very well elaborated and – considering the early research career level of the applicant – remarkably sound in both content and presentation. The applicant successfully addresses all aspects of the evaluation criteria, incl. the strong evidence of his/her research career development. Any shortcomings are minor. A very promising project worthy of funding.

7.2.5. Interpretation of ratings for criteria 5, 6, and 8:

- Appropriate (1) – potential risks related to ethical issues and data management issues have been sufficiently addressed (please add a comment). The requested grant type and amount are well justified.
- Inappropriate (0) – potential risks related to ethical issues and data management issues have not been sufficiently addressed (adding a comment is obligatory). The grant type is not justified and the estimation of costs is unrealistic.

7.3. Threshold

There are two types of thresholds: the qualification threshold and quality threshold.

7.3.1. The qualification threshold for criteria 1, 2, 3, 4, and 7 is 3 points (*good*) before applying the coefficient. The qualification threshold for criteria 5 and 6 is 1 point (*appropriate*). If an application receives less points than the threshold for at least one criterion, it does not qualify for funding, and limitations could be placed upon the applicant during the next call.

7.3.2. The field-specific quality thresholds for postdoctoral grant applications are as follows:

- Natural sciences 24.1 points;
- Engineering and technology 22.7 points;
- Medical and health sciences 22.2 points;
- Agricultural and veterinary sciences 22.2 points;
- Social sciences 21.7 points;
- Humanities and the arts 23.2 points.

If an application receives less points than the quality threshold, it does not qualify for funding.

8. Overall assessment and the final score of the application

This section will be filled in by the Evaluation Committee.

8.1. The final score for the application is a sum of justified assessment scores for all criteria (1-8) and the overall assessment composed by the Evaluation Committee. The main arguments underlying the scores as well as the main strengths and weaknesses will be pointed out here.

- 8.2. Based on the overall assessment and final score, the Evaluation Committee will compile a ranking list for all applications.
- 8.3. If the budget is too small for funding all the projects which qualify for funding, then the procedure shall be as follows:
- 8.3.1. the projects will be funded in the order they appear in the ranking list;
 - 8.3.2. the applications of equal standing will be ranked according to the scores received during the evaluation process in the very order of the evaluation criteria (i.e., as specified above);
 - 8.3.3. the applications which sustain equal standing after the ranking procedure described in 8.3.2. will be prioritised according to the underrepresented gender among the applicants whose applications rank above the applications of equal standing;
 - 8.3.4. the applications which sustain equal standing after the ranking procedure described in 8.3.3. will be prioritised in order to create more diversity of the R&D fields;
 - 8.3.5. the ranking of the applications which sustain equal standing for all aforementioned criteria will be decided by lot in accordance with the conditions established by the Council.