

Guidelines for evaluating postdoctoral grant applications

I Introduction

The award of postdoctoral grants has been stipulated in the „Terms and Conditions for Postdoctoral Funding Applications“.

These „Guidelines for evaluating postdoctoral grant applications“ is a document which specifies the evaluation criteria set forth in the „Terms and Conditions for Postdoctoral Funding Applications“.

The aim of postdoctoral grant is to support PhD degree holders or those with equivalent qualification to continue their independent research careers in strong research groups, and to support research in the interests of Estonian science, society, and economy.

The grant period is from 12 months to 24 months.

II Relevant terms

1) **The Postdoctoral grant** is funding for a researcher of a research and development institution to carry out a *postdoctoral project*, of which there are two types:

- a grant for a postdoctoral researcher coming to Estonia;
- a grant for a postdoctoral researcher going abroad.

The Estonian Research Council (hereinafter *Council*) has the right to establish every year priorities with regard to research and development areas and types of grant.

- 2) **A Postdoctoral project** is a description of an academic research study that has a clearly defined research topic and uses basic or applied research to investigate the topic.
- 3) **An applicant** is a researcher who has been awarded a doctoral degree or an equivalent qualification within the past five years as of the deadline for the submission of grant applications. In case the applicant was on pregnancy leave, parental leave or in compulsory military service (or equivalent alternative service) after the award of the doctoral degree, the period of qualification is extended by the corresponding period in full months, rounded up to the higher number of months.

The applicant has not undertaken doctoral studies nor obtained a doctorate, including the cotutelle agreement, in the same institution where the postdoctoral grant will be implemented, and has previously not received postdoctoral research funding from the Estonian Research Council (hereinafter Council) or the Estonian Science Foundation.

- 4) **A postdoctoral supervisor** is a researcher who has a doctoral degree or equivalent qualification and is a leader or principal investigator of a large-scale research project (i.e. an institutional research grant, personal research grant, a European framework programme project, etc.). The supervisor has an employment contract with the host institution (or with the foreign collaborating institution). The supervisor cannot be a person who has been a supervisor of the applicant's doctoral dissertation.
- 5) **A Host institution** is an Estonian research and development institution that has signed a work contract with the researcher for implementing the postdoctoral project if such a contractual relationship did not already exist at the time of awarding a postdoctoral grant.
- 6) **A Collaborating institution** is a foreign research and development institution where an outgoing postdoctoral fellow will carry out the postdoctoral project.

III Application

The application for funding a postdoctoral project (hereinafter *application*) is submitted in English and shall include the following:

- 1) the title of the postdoctoral project in Estonian and in English;
- 2) details of the applicant and the supervisor including research and development activity during the last 10 years;
- 3) the host institution and collaborating institution (if relevant) of the postdoctoral project;
- 4) a short summary of the postdoctoral project in Estonian and in English;
- 5) the period of requested funding;
- 6) the general theoretical background to the postdoctoral project, previous research and the connection to the applicant's and supervisor's related research;
- 7) the main objectives of the research project, hypotheses, methodology, and the anticipated timeframe for completion per annum;
- 8) information on considerations how ethical issues involved in the proposed research will be followed (an explanation of how ethical requirements for any animal and human testing will be followed and fulfilled), and whether the corresponding approvals are available or needed from a human ethics committee or an authorization committee for animal experiments;
- 9) the expected results and their potential applicability, as well as possible future research directions;
- 10) a description of the quality and sufficiency of the infrastructure and research environment at the host or collaborating institution for carrying out the research project; and
- 11) the expected impact and importance for Estonian science, society, and economy.

IV Evaluation

Postdoctoral grant applications shall be evaluated by the Evaluation Committee of the Estonian Research Council based on the well-reasoned opinions of the individual reviewers and expert committees. The following evaluation criteria will be considered:

- 1) The merits of the postdoctoral project and expected outcomes, taking into account the specifics of the research field and their applicability;
- 2) The qualification of the applicant and supervisor;
- 3) The quality of research environment at the host or collaborating institution and the sufficiency of the infrastructure to achieve the project's goals;
- 4) The need for and benefits of the postdoctoral project for the development of Estonian science, society, and economy.

V Specifications of the evaluation criteria to be used for reviewing postdoctoral grant applications

When evaluating applications, the reviewers should take into account the following specifications of the evaluation criteria. Please make comments for all criteria. All ratings must be justified.

1. The merits of the postdoctoral project and expected outcomes, taking into account the specifics of the research field and their applicability

1.1. General theoretical background, relevance and novelty of the project. The application is evaluated for its general (international) level, interest to science as well as its potential for the creation of new knowledge taking into account the specifics of the research field and in compliance with good scholarly practice, including the maintenance of adequate research records.

1.2. Main objectives, hypotheses, methods, the degree of elaboration of the project plan and its time frame. The application is evaluated for its level of elaboration (comprehensiveness, versatility, etc.); the validity of the planned methodology and its appropriateness for implementing the project; whether the planned activities and timeline of attaining the objectives are realistic; the quality of the infrastructure and research environment available for carrying out the postdoctoral project at the host institution or collaborating institution.

1.3. Expected results, their potential applicability, and possible future directions of research.

The application is evaluated for the degree to which the prospective results will make a substantial contribution to the development of science, technology, and/or society as well as for the feasibility of exploitation.

1.4 Are there any ethical issues involved in the proposed research and if so, have they been adequately considered and addressed in the application. The applicants are required to consider the ethical risk of any procedure within a research project which involves human participation or personal data, including a description of how the principles of voluntary participation, informed consent, confidentiality and anonymity of subjects will be followed, and a statement on how such data will be stored and protected. Use of research methods that require review or approval from a human ethics committee or an authorization committee for animal experiments, should be also clearly indicated in the application. If the corresponding approvals are available at the time of submission of the application, the applicant is asked to attach them to the application.

Other comments on Section 1.

Overall assessment of application's justification and scientific quality.

2. The qualification of the applicant and supervisor

2.1. The quality and results of the applicant's previous research activities, his/her capacity to carry out the proposed project, and experience in (international) research-related cooperation. The quality and capacity to carry out his/her work is evaluated in the light of the applicant's previous research and results (on international level), the number and quality of publications, etc. The applicant's experience is evaluated by the scope of participation in research projects (home and abroad), participation in conferences, skills obtained, and other research-related activities, and how will the project contribute to the training of the applicant and promote his/her research career.

2.2. The quality and capacity of the supervisor to carry out this project is evaluated in the light of the supervisor's previous research and results (on international level), the number and quality of publications, number of successfully supervised doctoral dissertations, the scope of managing and/or participating in domestic and/or international R&D projects, and other research-related activities.

Other comments on Section 2.

Overall competence and expertise of applicant and the supervisor.

3. The quality of research environment at the host or collaborating institution and the sufficiency of the infrastructure to achieve the project's goals

Only the expert committee and the Evaluation Committee, not by external reviewers, will evaluate this section.

The evaluators answer and comment on the following:

1.1. *Should the project be considered experimental or non-experimental?*

1.2. *Is the infrastructure and research environment at the host or collaborative institution appropriate and sufficient for achieving the objectives of the proposed research project?*

Other comments on Section 3.

Overall assessment of the quality and adequacy of research environment.

4. The need for and benefits of the postdoctoral project for the development of Estonian science, society, and economy

Only the expert committee and the Evaluation Committee, not by external reviewers, will evaluate this section.

4.1. Does the project have impact on the development of Estonian science, society, and economy?

Other comments on Section 4.

Overall impact on the development of Estonian science, society, and economy.

5. Overall assessment of the application

The overall assessment of the application is not the mathematical average of the scores for sections 1-4 but the justified assessment of the application by the Evaluation Committee.

Main arguments underlying the scores as well as main strengths and weaknesses have to be pointed out here.

VI Rating scales to be used in the review

Rating scales

A five-point rating scale will be used in evaluating sections 1, 2, and 4:

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

And a two-point rating scale in evaluating section 3:

- Meets the needs (1);
- Does not meet the needs (0)

The evaluation is provided to a level of precision 0.5 points, i.e. intermediate values like very good – outstanding (4.5), good – very good (3.5), satisfactory – good (2.5) and unsatisfactory – satisfactory (1.5) can be used.