

## Personaalse uurimistoetuse järeldoktorigrandi taotluste hindamisjuhend

### Guidelines for Evaluating Personal Research Funding Applications for Postdoctoral Grants

#### I Introduction

The award of personal research funding for postdoctoral grants has been stipulated in the “Conditions of and Procedure for Personal Research Funding Applications for Postdoctoral Grants”.

“Guidelines for Evaluating Personal Research Funding Applications for Postdoctoral Grants” is a document which specifies the evaluation criteria set forth in the “Conditions of and Procedure for Personal Research Funding Applications for Postdoctoral Grants”.

#### II Relevant terms

1) **Personal research funding** means funding 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). Personal research funding comprises three categories of grants corresponding to different levels of a research career: postdoctoral grants, start-up grants, and team grants:

- A **postdoctoral research grant** is a grant to support launching a research career of persons with a doctoral degree or equivalent qualification at strong research and development institutions or high level research groups. There are two types of postdoctoral grants:
  - a grant for a postdoctoral researcher coming to Estonia;
  - a grant for a postdoctoral researcher going abroad.
- A start-up research 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 in continuing their research career at an Estonian R&D institution, ensuring high-quality research, leading a strong

research group, and educating the next generation of researchers (incl. doctoral students).

- 2) A **research project** is a description of research activities with a clearly defined and justified research problem/topic and the methodology to address this problem/topic.
- 3) A **Principal Investigator (PI)** is a researcher who applies for a team grant, start-up grant, or postdoctoral grant (i.e., postdoctoral fellow) and has received consent from the host institution.
- 4) A **host institution** is an Estonian R&D institution that has signed an employment contract with the researcher for implementing the postdoctoral project if such a contractual relationship did not already exist at the time of awarding the postdoctoral grant.
- 5) A **collaborating institution** is a foreign R&D institution where the outgoing postdoctoral fellow will carry out the postdoctoral project.

### III Criteria for applying

#### 1. Postdoctoral fellow

A **postdoctoral fellow** is a person who:

- 1) has been awarded a doctoral degree or 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. 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 by the time the project is scheduled to begin;
- 2) has neither undertaken doctoral studies nor obtained a doctoral degree, including the cotutelle agreement, at the same institution where the postdoctoral grant will be implemented, and has not previously received postdoctoral research funding from the Estonian Research Council (hereinafter *Council*);
- 3) has studied or worked in Estonia for at least 12 months by the submission date of the application.

A **postdoctoral supervisor** is a researcher who has a doctoral degree or equivalent qualification. The supervisor has an employment contract with the host institution (or with the foreign collaborating institution). The supervisor cannot be the same person who has been the supervisor of the applicant's doctoral dissertation.

## 2. Application

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

- 1) information about the postdoctoral fellow and the supervisor of postdoctoral research;
- 2) the title of the research project;
- 3) a short summary of the project;
- 4) the period of the project;
- 5) the scientific background to the project;
- 6) the main objectives of the research project, hypotheses and/or research questions, description of methods, and the work plan, incl. tentative annual work plans and the availability of research infrastructure for achieving the objectives of the project. If other members of the research staff are involved, their roles and distribution of tasks should be described;
- 7) the expected results and their potential applicability, importance for Estonian research, culture, society, and economy as well as possible directions for future research;
- 8) a comment on whether the research project requires a review or approval from a human ethics or bioethics research committee (if the corresponding approvals have been obtained by the application deadline, applicants are asked to attach them to the application) and whether the project necessitates compliance with the Nagoya Protocol, resulting in the need for the due diligence declaration;
- 9) a confirmation that the principles of research ethics will be adhered to (incl. as they have been stipulated by the institution with which the PI has a contractual relationship) and an explanation about how the data of the project will be managed;
- 10) the postdoctoral fellow's previous research activity indicating the PI's personal contribution to the publications linked to the application (or of a selection from thereof) and the supervisor's R&D activity during the last 10 years.

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

## IV Evaluation

Grant applications will be evaluated by the Evaluation Committee of the Council based on the well-reasoned opinions of individual reviewers and the Expert Panel. The following evaluation criteria will be considered:

- 1) justification for and feasibility of the research project, incl. objectives, methods, resources, and infrastructure;

- 2) potential applicability of the expected results, taking the specifics of the research field into account;
- 3) the qualification of the postdoctoral fellow;
- 4) the qualification of the supervisor;
- 5) ethical issues and data management;
- 6) importance for Estonian culture, society, and economy;
- 7) justification for the grant type (experimental or non-experimental)

## **V Rating scales to be used in the review**

### **Rating scales**

A five-point rating scale is used for evaluating sections 1–4 and 6 of the application (outstanding, very good, good, satisfactory, or unsatisfactory). The evaluation is provided to a level of precision of 0.5 points, i.e. intermediate values like very good–outstanding, good–very good, etc. can be used.

Where applicable, an undifferentiated rating scale (appropriate, not appropriate) is used for evaluating sections 5 and 7 of the application.

The numeric values for evaluating sections 1–4 and 6 in the drop-down menu are as follows:

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

The marks for evaluating sections 5 and 7 are as follows:

- Appropriate;
- Not appropriate.

The final score can range from 5 to 25 points.

### **Threshold**

Research projects which receive less than three points for sections 1, 2, 3, 4, or 6, and/or are assessed as “not appropriate” in section 5 and/or in section 7 do not qualify for funding.

*When evaluating applications, reviewers should take the following guidelines into account.*

## **VI Evaluation criteria to be used for reviewing postdoctoral grants**

Please comment on all criteria.

## **1. Justification for and feasibility of the research project, incl. objectives, methods, resources, and infrastructure**

### **Guiding questions**

Is the application well justified and clearly outlined and does it contain well-defined hypotheses and research questions?

Are the proposed methods adequate and up-to-date? Is the research plan clear and appropriate for its stated purpose and the elaboration on tasks justified and appropriate?

Does the research environment, incl. research infrastructures, support achieving the objectives of the proposed research project?

Other comments on Section 1.

### **Rating scale for Section 1:**

#### **Outstanding**

The application addresses crucial/cutting-edge research questions or a knowledge gap; the objectives have been very clearly articulated and are justified; the hypotheses and research questions are very well elaborated.

The application includes highly original methodology and/or design; the methods have been very clearly described, are up-to-date and highly relevant for achieving the objectives. The research plan has been very clearly described and is relevant for achieving the objectives; the tasks have been very well justified and are appropriate.

The research environment and infrastructures fully support achieving the objectives of the proposed research project.

#### **Very good**

The project addresses an important research question or a knowledge gap; the objectives have been clearly articulated and are justified; the hypotheses and research questions have mostly been elaborated well.

The application includes original methodology and/or design; the methods have been clearly described, are up-to-date and relevant for achieving the objectives; the research plan has been clearly described and is relevant for achieving the objectives; the tasks have been clearly justified and are appropriate.

The research environment and infrastructures support achieving the objectives of the proposed research project.

### Good

The application addresses a worthwhile research question or a knowledge gap; the hypotheses and research objectives need some additional elaboration.

A methodologically sound study; the methods have been articulated and are justified, up-to-date and/or innovative to some extent; the research plan needs some clarification; the tasks could be implemented, but certain improvements and adjustments are necessary.

The research environment and infrastructures generally support achieving the objectives of the proposed research project.

### Satisfactory

The application addresses a knowledge gap, but justification needs additional clarifications and adjustments; the hypotheses and research questions need major additional elaboration.

A methodologically sound study, but some areas require revision; the methods have been somewhat articulated and seem justified, but are not very up-to-date and/or innovative; the research plan needs some revision; certain, but not all, tasks can be implemented.

The research environment and infrastructures support achieving the objectives of the proposed research project only partially.

### Unsatisfactory

The research topic has been poorly defined and the application lacks clear hypotheses and research questions.

The methods are inadequate for achieving the overall goal and are neither up-to-date nor innovative; the research plan and elaboration on tasks need profound revision.

The research environment and infrastructures do not support achieving the objectives of the proposed research project.

## 2. Potential applicability of the expected results, taking the specifics of the research field into account

### **Guiding questions**

Does the project significantly contribute to the development of the research field?

Are the expected results of the project potentially applicable and is there potential for further research?

Other comments on Section 2.

## **Rating scale for Section 2:**

### **Outstanding**

The expected results of the project are innovative or distinctive compared to existing knowledge and could have a substantial impact in the context of the research field.

The expected results have clear potential applicability and there are very clear possibilities for further research.

### **Very good**

The goals of the project are ambitious and the expected results could have a substantial impact in the context of the research field.

The expected results have potential applicability and there are feasible possibilities for further research.

### **Good**

The expected results of the project could have some impact in the context of the research field.

The expected results have potential applicability and there are some possibilities for further research, but their feasibility is somewhat unclear.

### **Satisfactory**

The possible impact of the expected results of the project has not been addressed clearly.

The expected results have limited potential applicability. The project addresses some possibilities for further research, but their feasibility is questionable.

### **Unsatisfactory**

The project does not contribute to the development of the research field.

The expected results have no potential applicability. No possibilities for further research have been considered in the project.

## **3. The qualification of the postdoctoral fellow**

### **Guiding questions**

What are the merits and scientific expertise of the postdoctoral fellow? Are the competencies of the postdoctoral fellow appropriate and sufficient for the proposed project? Does the

postdoctoral fellow demonstrate the potential to lead independent research and show maturity? (The quality and results of the postdoctoral fellow's previous research activities; the quality and capacity of his/her previous research and results (at the international level), the number and quality of publications; experience in participating in research projects (home and abroad), attending conferences; skills obtained and other research-related activities, and how the project will contribute to the training of the applicant and promote his/her research career.)

Other comments on Section 3.

### **Rating scale for Section 3:**

#### **Outstanding**

The applicant has excellent potential for successfully implementing the proposed research plan; publications and/or monographs are at a very good international level; articles have been published in respectable peer-reviewed journals or in proceedings indexed in the leading databases in the field; monographs have been published by international top publishers; the applicant is highly experienced in participating in international collaborative projects, conferences, and other research-related activities.

#### **Very good**

The applicant has very good potential for successfully implementing the proposed research plan; articles have been published in peer-reviewed journals or in international proceedings; monographs have been published by acknowledged publishers; the applicant is experienced in participating in international collaborative projects, conferences, and other research-related activities.

#### **Good**

The applicant has good potential for successfully implementing the proposed research plan; some articles have been published in peer-reviewed journals or in international proceedings; monographs have been published by national publishers; the applicant has some experience in participating in international collaborative projects, conferences, and other research-related activities.

#### **Satisfactory**

There is questionable potential for successfully implementing the proposed research plan; the applicant's research and publishing records are very weak; the competencies of the applicant do not support the achievement of the established objectives; the applicant has some experience in participating in national collaborative projects, conferences, and other research-related activities.

### Unsatisfactory

There is insufficient potential for successfully implementing the proposed research plan; the applicant's research and publishing records are very weak; the competencies of the applicant do not support the achievement of the established objectives; the applicant has not participated in any collaborative projects, conferences, or other research-related activities.

## 4. The qualification of the supervisor

### **Guiding questions**

Is the supervisor's experience in supervising postdoctoral fellows and doctoral students sufficient for supporting the project? Does his/her previous research and results 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.)

Other comments on Section 4.

### Rating scale for Section 4:

#### Outstanding

The supervisor is among the leaders in his/her field; publications and/or monographs are at an outstanding international level; articles have been published in the best peer-reviewed journals or in proceedings indexed in the leading databases in the field; monographs have been published by internationally acknowledged publishers. The supervisor has been very successful in obtaining additional funding (grants, sponsored research, etc.). The supervisor has a long and thriving experience in supervising postdoctoral fellows and doctoral students; there is a very good complementarity between the proposed project and the supervisor's field of research.

#### Very good

The supervisor is renowned in his/her field; publications and/or monographs are at a very good international level; articles have been published in respectable peer-reviewed journals or in proceedings indexed in the leading databases in the field; monographs have been published by internationally acknowledged publishers. The supervisor has been successful in obtaining additional funding (grants, sponsored research, etc.). The supervisor has a long experience in supervising postdoctoral fellows and/or doctoral students; there is good complementarity between the proposed project and the supervisor's field of research.

#### Good

The supervisor is well known in his/her field; articles have been published in peer-reviewed journals or in international proceedings; monographs have been published by acknowledged publishers; the supervisor has obtained some additional funding (grants, sponsored research, etc.) in the past; the supervisor has supervised postdoctoral fellows and/or doctoral students;

there is fair complementarity between the proposed project and the supervisor's field of research.

### **Satisfactory**

The supervisor is not well known in his/her field; articles have been published in journals and in proceedings which are not indexed in the leading databases in the field; no monographs have been published; the supervisor has obtained very little additional funding (grants, sponsored research, etc.); the supervisor has supervised only a few postdoctoral fellows and/or doctoral students; there is poor complementarity between the proposed project and the supervisor's field of research.

### **Unsatisfactory**

The supervisor's research and publishing records are weak; there is insufficient potential for successfully implementing the proposed research plan; the competencies of the supervisor do not support the achievement of the proposed objectives; the supervisor has not been successful in obtaining additional funding (grants, sponsored research, etc.); the supervisor has not supervised postdoctoral fellows and/or doctoral students before; there is poor complementarity between the proposed project and the supervisor's field of research.

## **5. Ethical issues and data management**

### ***Explanation***

*The applicants are required to consider the potential risks related to ethical issues of any procedure in the research projects involving human participation or personal data. The applicants are asked to describe how the principles of voluntary participation, informed consent, confidentiality, and anonymity of the subjects will be followed as well as how such data will be stored and protected. The use of research methods that require a review or approval from a human ethics or bioethics research 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. The applicants are also 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).*

### **5.1. Ethical issues**

#### **Guiding question**

Are there any potential risks related to ethical issues involved and, if so, have they been carefully considered and sufficiently addressed?

Please choose one of the following answers:

**Not applicable**

**Appropriate** – potential risks related to ethical issues have been sufficiently addressed (please add a comment)

**Not appropriate** – potential risks related to crucial ethical issues have not been sufficiently addressed (adding a comment is obligatory).

## 5.2. Data management issues

**Guiding question**

Have data management issues, incl. data protection, been sufficiently addressed (if appropriate)?

Please choose one of the following answers:

**Not applicable**

**Appropriate** – data management issues have been sufficiently addressed (please add a comment)

**Not appropriate** – crucial data management issues, incl. data protection, have not been sufficiently addressed (adding a comment is obligatory).

***NB! Breaching ethical principles and showing insufficient consideration for data management issues may exclude the applicant from receiving the grant. This decision will be made by the Evaluation Committee by taking the opinions of the reviewers into account.***

Other comments on Section 5.

## 6. Importance for Estonian culture, society, and economy

***NB! This section will be evaluated only by the Expert Panel and the Evaluation Committee.***

**Guiding questions**

Has the PI analysed and described the importance of the project for Estonia?

Will the project increase the visibility of Estonian research?

Is the project relevant for the development of Estonian culture and/or society and/or economy?

Extra value will be added if

- the topic is significant in the Estonian context (e.g., the topic has not previously been studied, but it is very important; the topic is related to a new and rapidly evolving research field; the topic is of immediate relevance owing to its relation to current events);
- the project encourages cooperation between R&D institutions and/or government authorities and/or enterprises in Estonia;
- the project will increase the sustainability of Estonian culture, integrity of Estonian society, and competitiveness of Estonian economy.

**NB! When evaluating the application, please use the guiding questions to clearly explain and justify the rating.**

Other comments on Section 6.

#### **Rating scale for Section 6:**

##### **Outstanding**

The PI has analysed and described the importance of the project for Estonia in detail.

The project will significantly increase the visibility of Estonian research.

The project is extremely relevant for the development of Estonian culture and/or society and/or economy.

##### **Very good**

The PI has carefully analysed and clearly described the importance of the project for Estonia.

The project will considerably increase the visibility of Estonian research.

The project is relevant for the development of Estonian culture and/or society and/or economy.

##### **Good**

The PI has analysed and described the importance of the project for Estonia, but not very thoroughly.

The project could increase the visibility of Estonian research.

The project is somewhat relevant for the development of Estonian culture and/or society and/or economy.

##### **Satisfactory**

The PI has analysed and described the importance of the project for Estonia only in passing.

The project is not likely to increase the visibility of Estonian research.

The project is not necessarily relevant for the development of Estonian culture and/or society and/or economy.

### **Unsatisfactory**

The PI has neither analysed nor described the importance of the project for Estonia.

The project will not increase the visibility of Estonian research.

The project is not relevant for the development of Estonian culture, society, and economy.

### **7. Justification for the grant type (experimental or non-experimental)**

***NB! This section will be evaluated only by the Expert Panel and the Evaluation Committee and will not be scored.***

The Evaluation Committee has to comment on the following:

7.1. Has the grant type been clarified and is it justified?

7.2. Is the grant type appropriate for the proposed research project?

Other comments on Section 7.

### **Rating scale for Section 7:**

#### **Appropriate**

The grant type (amount and volume of direct costs) has been well thought out, clarified, and is justified. The grant type the applicant has applied for is appropriate for implementing the project and for achieving the stated objectives.

#### **Not appropriate**

The grant type (amount and volume of direct costs) is unclear and/or insufficiently justified. The grant type the applicant has applied for is not appropriate for implementing the project and for achieving the stated objectives.

### **Overall assessment and the final score for the application**

***NB! This section will be filled in by the Evaluation Committee.***

***The final score for the application is a sum of justified assessment scores for sections 1–4 and 6 by the Evaluation Committee.***

***The main arguments underlying the scores as well as the main strengths and weaknesses must be pointed out here.***

Overall comments on the application.