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KINNITATUD

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## Sissetuleva järeldoktoritoetuse taotluste hindamisjuhend

### Guidelines for evaluating incoming postdoctoral grant applications

#### 1. INTRODUCTION

The award of postdoctoral grants has been stipulated in the „Guidelines for incoming postdoctoral grant applications“.

These „Guidelines for evaluating postdoctoral grant applications“ is a document which specifies the evaluation criteria set forth in the „Guidelines for incoming postdoctoral grant applications“.

The purpose of postdoctoral grants is to supplement Estonian research and development institutions and businesses with young and talented researchers, who have studied or worked in foreign countries and have acquired skills and knowledge for conducting research and development.

The grant period is from 12 months to 24 months.

#### 2. RELEVANT TERMS

Postdoctoral grant is a grant awarded to researchers coming from a foreign country to an Estonian research and development institution, undertaking or higher education institution for implementation of a specific research and development project.

Postdoctoral project is a description of scientific research, which includes a clearly defined research problem and a specification of basic or applied research to be used for resolving the problem.

Postdoctoral fellow is a researcher who has obtained his/her first doctoral degree or equivalent qualification in the R&D field in which the application is to be processed no more than five years prior to 1 January of the year of the call. If the postdoctoral fellow has been on parental leave or in compulsory military service (or equivalent alternative service) after obtaining his/her 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. The postdoctoral fellow has completed his/her doctoral studies and has been awarded a doctoral degree in a foreign country by the time the grant agreement is signed. The postdoctoral

fellow has not completed doctoral studies in and been awarded a doctoral degree, incl. under a cotutelle agreement, by the institution that applies for the postdoctoral project;

Postdoctoral supervisor has an Estonian doctoral degree or equivalent qualification and has an employment contract with the host institution. The supervisor cannot be the same person who has been the (co-)supervisor of the postdoctoral fellow's doctoral dissertation.

### **3. THE APPLICATION INCLUDES:**

- the host institution of the postdoctoral project grant;
- details of the postdoctoral fellow and the supervisor;
- the title of the postdoctoral project;
- a project summary;
- the requested grant period;
- envisaged budget of the postdoctoral project
- the general theoretical background to the postdoctoral project, previous research and development activities of the postdoctoral fellow and the supervisor and links with the postdoctoral project;
- the main objectives of the research project, hypotheses, description of methods, and the annual research plans;
- information on considerations how ethical issues involved in the proposed research will be followed. 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 or a bioethics research committee, should be also clearly indicated in the application. If the corresponding approvals are available at the time of submission of the application, applicants are asked to attach them to the application;
- explanation about how the data of the project will be managed;
- the expected results and their potential applicability, as well as possible future research directions;
- a description of the quality and adequacy of the infrastructure and research environment at the host institution for achieving the objectives of the research project; and
- the expected impact of the postdoctoral project on the development of Estonian research, culture, society and economy.

#### **4. EVALUATION PROCESS**

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

4.1.1. criterion 1 - the scientific quality and justification of the application;

4.1.2. criterion 2 - the qualification of the postdoctoral fellow and the supervisor and the capacity to implement the project;

4.1.3. criterion 3 - impact of the project on the development of Estonian research, culture, society, and economy.

**4.2. Individual reviewers will only evaluate criteria 1 and 2 of the previous list.**

4.3. A five-point rating scale is used in evaluating 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.

4.4. The final score can range from 1 to 5 and is calculated as a weighed average from criteria 1, 2 and 3. Criterion 1 and 2 will contribute 40% of the final score and criterion 3 will contribute 20%. The score for each criterion will be given by the Evaluation Committee.

4.5. Research projects which receive less than 3.5 points do not qualify for funding.

#### **5. EVALUATION CRITERIA AND DESCRIPTION OF THE RATING SCALES**

Please comment all criteria!

##### **5.1. Criterion 1 – the scientific quality and justification of the application.**

###### **5.1.1. The scientific quality and novelty of the application**

Is the application characterized by a conceptually innovative approach? Is the application well-justified and clearly outlined and does it contain well-defined hypotheses and research questions?

- Unsatisfactory - the proposed topic has been exhaustively studied. There is limited likelihood of new knowledge generation. The research topic is poorly defined and the application lacks clear hypotheses and research questions;
- Satisfactory - the research ideas are somewhat original and innovative at the national level; the application addresses a knowledge gap, but justification needs additional

clarifications and adjustments; the hypotheses and research questions need major additional elaboration;

- Good - the research ideas are original and partially internationally competitive; the application addresses a worthwhile research question or knowledge gap; the hypotheses and research objectives need some additional elaboration;
- Very good - the research ideas are original and innovative, internationally competitive and cutting-edge nationally; the project addresses an important research question or knowledge gap; the objectives are clearly articulated and justified; the hypotheses and research questions are mostly well elaborated;
- Outstanding - the research ideas are highly original and innovative; an internationally competitive research project; the application addresses crucial/cutting-edge research questions or knowledge gap; the objectives are very clearly articulated and justified; the hypotheses and research questions are very well elaborated.

### 5.1.2. Methods and research plan

Are the proposed methods adequate, up-to-date and/or innovative? Is the research plan clear and appropriate for its stated purpose and the elaboration of tasks justified and appropriate?

- Unsatisfactory - the methods are inadequate for achieving the overall goal, not up-to-date nor innovative; the research plan and elaboration of tasks need profound revision;
- Satisfactory - a methodologically sound study but some areas require revision; the methods are somewhat articulated and justified, not very up-to-date and/or innovative; the research plan needs some revision; certain, but not all tasks can be implemented;
- Good - a methodologically sound study; the methods are articulated and justified, up-to-date and/or innovative to some extent; the research plan needs some clarification; the tasks can be implemented but certain improvements and adjustments are necessary;
- Very good - the application includes original methodology and/or design; the methods are clearly described, up-to-date, well-articulated and relevant for achieving the objectives; the research plan is clearly described and relevant for achieving the objectives; the tasks are clearly justified and appropriate;
- Outstanding - the application includes highly original methodology and/or design; the methods are very clearly described, up-to-date, very well-articulated and highly relevant for achieving the objectives. the research plan is very clearly described and relevant for achieving the objectives; the tasks are very well justified and appropriate.

### 5.1.3. Ethical issues

Are there any ethical issues involved in the proposed research and if so, have they been adequately considered and addressed in the application? 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.

- There are ethical issues involved and they have not been adequately addressed and the application should not be funded;
- There are ethical issues involved and they have not been adequately addressed;
- There are ethical issues involved and they have been adequately addressed;
- There are no ethical issues involved.

#### 5.1.4. Data Management

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

- Not appropriate - crucial data management issues, incl. data protection, have not been sufficiently addressed.
- Appropriate - data management issues have been sufficiently addressed
- Not applicable

#### 5.1.5 Budget of the project and level of experimentality

Is the budget appropriate for the planned research? Should the project be considered experimental or non-experimental?

- Not appropriate – the budget is not appropriate for the planned research.
- Somewhat appropriate – the budget is optimal for the planned research, but the level of experimentality is not properly chosen
- Appropriate – the budget is optimal for the planned research and the level of experimentality is properly chosen

#### 5.1.6. Infrastructure and host institution

Is the infrastructure and research environment at the host institution appropriate for achieving the objectives of the proposed research project?

- Not appropriate - the physical infrastructure and research environment at the host institution are not adequate and do not support the achievement of the established objectives;
- Satisfactory – the physical infrastructure and research environment at the host institution do not support the achievement of the established objectives well, but the project could be carried out;

- Appropriate – the physical infrastructure and research environment at the host institution meet the requirements and support the achievement of the established objectives;

## **5.2. Criterion 2 - the qualification of the postdoctoral fellow and the supervisor and the capacity to implement the project**

### **5.2.1. The individual excellence of the postdoctoral fellow candidate**

Is the postdoctoral fellow at a good (international) level in his/her respective field (in terms of the quality and number of publications, projects, conferences, patents, protected plant varieties etc.)? Do the competencies of the postdoctoral fellow support the achievement of the proposed objectives?

- Unsatisfactory - there is insufficient potential for successfully implementing the proposed research plan; the applicant's research and publishing record 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, other research-related activities or had research cooperation with the private sector;
- Satisfactory - there is questionable potential for successfully implementing the proposed research plan; the applicant's research and publishing record are very weak; the competencies of the applicant do not support the achievement of the established objectives; the applicant has little experience in participation in national collaborative projects, conferences, other research-related activities or has had a little research cooperation with the private sector;
- Good - the applicant has good potential for successfully implementing the proposed research plan; some articles are published in peer-reviewed journals or international proceedings; monographs are published by national publishers; the applicant has some experience in participation in international collaborative projects, conferences, other research-related activities or has had some research cooperation with the private sector;
- Very good - the applicant has very good potential for successfully implementing the proposed research plan; articles are published in peer-reviewed journals or international proceedings; monographs are published by acknowledged publishers; the applicant has good experience in participation in international collaborative projects, conferences, other research-related activities or has a good research cooperation with the private sector;
- 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 are published in respectable peer-reviewed journals or proceedings indexed in the leading databases of the field; monographs are published by international top publishers; the applicant has very good experience in participation in

international collaborative projects, conferences, other research-related activities or has a very good research cooperation with the private sector.

### 5.2.2. The individual excellence of the supervisor

Is the supervisor an internationally recognised researcher whose research is widely acknowledged (in terms of the quality of publications, number of citations, success in obtaining additional funding, patents, protected plant varieties etc.) and do the competencies of the supervisor support the achievement of the proposed objectives? What is the supervisor's experience in supervision of postdoctoral fellows and doctoral students?

- Unsatisfactory - the supervisor's research and publishing record 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;
- Satisfactory - the supervisor is not well-known in his/her field; articles are published in journals and 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.) or has had very little research cooperation with the private sector; 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;
- Good - the supervisor is well-known in his/her field; articles are published in peer-reviewed journals or international proceedings; monographs are published by acknowledged publishers; the supervisor has obtained some additional funding (grants, sponsored research, etc.) in the past or has had some research cooperation with the private sector; 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;
- Very good - the supervisor is renowned in his/her field; publications and/or monographs are at a very good international level; articles are published in respectable peer-reviewed journals or proceedings indexed in the leading databases of the field; monographs are published by internationally acknowledged publishers. The supervisor has been successful in obtaining additional funding (grants, sponsored research, etc.) or has successful research cooperation with the private sector. The supervisor has long experience in supervision of postdoctoral fellows and/or doctoral students; there is good complementarity between the proposed project and the supervisor's field of research;

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

### **5.3. Criterion 3 - impact of the project on the development of Estonian research, culture, society, and economy.**

*This section will be evaluated only by the expert panel and the Evaluation Committee, not by external reviewers.*

Does the project have impact on the development of Estonian society, culture, research or economy?

- Unsatisfactory - the project has no impact on the development of Estonian economy, culture, research or society;
- Satisfactory - the project has modest impact on the development of Estonian economy, culture, research or society;
- Good - the project has a potential impact on the development of Estonian economy, culture, research or society;
- Very good – the project has good impact on the development of Estonian economy, culture, research or society;
- Outstanding - the project has a significant impact on the development of Estonian economy, culture or society. The postdoctoral researcher would have a very positive impact on the development of his/her field of research in Estonia.