Guidelines for applicants
Table of Contents

1. Objectives of the AFR bi-lateral programme .................................................. 2
   1.1. Introduction .................................................................................................. 2
   1.2. FNR’s Vision, Mission and Strategic Priorities .............................................. 3
   1.3. Objectives of the AFR programme .................................................................. 3
2. General Principles of the AFR-bilateral programmes ........................................... 4
   2.1. Eligibility ..................................................................................................... 4
   2.2. Selection Criteria .......................................................................................... 5
   2.3. Supervision .................................................................................................. 5
   2.4. Training and mobility .................................................................................... 6
   2.5. Project Characteristics ................................................................................... 6
   2.6. Good practice in Research, Legal and Ethical Requirements ...................... 7
   2.7. Intellectual Property Rights .......................................................................... 9
3. Evaluation process ............................................................................................... 10
4. AFR-PhD Application ......................................................................................... 10
   4.1. Application submission procedure ............................................................... 10
   4.2. Application procedure .................................................................................. 10
   4.3. Completing the Online Application Form .................................................... 12
   4.4. AFR 2017 Call timeline ................................................................................. 13
   4.5. Contact details ............................................................................................. 13
1. Objectives of the AFR bi-lateral programme

1.1. Introduction

Doctoral training in Luxembourg has considerably evolved over the past years. Important milestones were the first attribution of doctoral degrees by the University of Luxembourg in 2006, the transition from fellowships to employment contracts under the AFR PhD grant scheme since 2008, the establishment of Doctoral Schools at the University of Luxembourg since 2012, the introduction of FNR's new PRIDE funding scheme supporting doctoral programmes as well as the introduction of the National Quality Framework for Doctoral Education, both in 2015.

PhD training is funded by the FNR under a variety of funding schemes, in particular the AFR PhD individual grants, the AFR-bilateral programme for PhD grants with selected partner research institutions abroad, the PRIDE scheme (www.fnr.lu/pride), the AFR-PPP scheme for public-private partnerships (http://www.fnr.lu/private-public-collaborations-innovation/national-programmes), and doctoral positions funded in the framework of the FNR's multiannual programmes, i.e. CORE, OPEN, INTER, ATTRACT and PEARL.

Positions are openly announced by the institutions via the Euraxess job portal in Luxembourg.

This specific call is dedicated to the cooperation between Luxembourg based research institutions and research institutions and universities from Singapore. By offering PhD- and Postdoc grants conducted jointly in Luxembourg and Singapore, the FNR wants to foster bilateral research collaboration and strengthen networking activities and links between public research institutions of both countries.

Jointly with the Luxembourg institutions involved in doctoral training, the FNR has defined a national quality framework for quality standards for doctoral training.

Applicants under the AFR scheme and their supervisors are expected to have read and to comply with the quality standards defined in the National Quality Framework for Doctoral Training, available on FNR’s website.

Furthermore, the FNR general Guidelines apply for applicants under the AFR scheme, in particular the FNR Requirements for Principal Investigators and supervisors with FNR funded projects.

Changes to the previous call: New OPEN ACCESS Guidelines

As of 1 January 2017, costs for project related publications can be refunded through the FNR’s “Open Access Fund”, and if fulfilling the FNR requirements. This does not apply to conference proceedings, PhD theses, book chapters and scientific monographs, although the FNR recommends Open Access publishing whenever possible. Please refer to the Open Access Fund guidelines for details.
1.2. FNR’s Vision, Mission and Strategic Priorities

**FNR’s vision:** to establish Luxembourg as a leading knowledge-based society through science, research and innovation, thereby contributing to the country’s economic diversification and future prosperity.

**FNR’s mission:** to set up a sustainable world-class research system in Luxembourg that will generate societal and economic impact in key strategic areas.

**FNR’s strategic priorities:** the FNR sees itself as a driving force for Luxembourg’s innovation capabilities and focuses on the three following strategic objectives to foster research with impact:

- **Attaining scientific leadership in key areas.** By setting the highest quality standards, the FNR contributes to establishing international research excellence in Luxembourg. By attracting and training the most talented scientists, the FNR helps to build critical mass in key research areas, thereby supporting economic development and societal progress.

- **Turning public research into a competitive advantage for Luxembourg.** The FNR supports the advancement of Luxembourg’s knowledge-based economy by supporting industry-informed research, by reinforcing co-operation between public research and innovative industries and by facilitating the commercial exploitation of research results.

- **Anchoring Science and Research in Society.** The FNR promotes the active involvement of researchers and scientists in addressing current and future societal challenges. To ensure that research is established sustainably in the public consciousness as an important pillar of Luxembourg’s knowledge society, the FNR supports an active exchange between scientists and the public at large.

1.3. Objectives of the AFR programme

In line with FNR’s vision, mission and strategic priorities, the key objectives of the AFR programme are stated as follows:

- Attract and train the most talented doctoral candidates from any nationality in Luxembourg

- Support excellent Luxembourg stemming doctoral candidates to undertake their PhD training abroad

- Enhance high quality standards for PhD training in Luxembourg, by ensuring that the principles of the National Quality Framework for Doctoral Training are respected in the framework of the AFR programme.

The AFR programme has a bottom-up approach, *i.e.* proposals in all domains of research and technological development are eligible for funding. The programme targets the most talented researchers to be trained in high quality research environments that ensure an optimal PhD training.
2. General Principles of the AFR-bilateral programmes

2.1. Eligibility

The AFR call for bi-lateral PhD projects has no thematic limitations. The aim of this call is to foster the cooperation between Luxembourg based public research institutions and one or several of the following public research institutions from Singapore:

- National University of Singapore, NUS
- Nanyang Technological University, NTU
- Singapore Management University, SMU
- Singapore University of Technology and Design, SUTD
- Singapore Institute of Technology, SIT
- Agency for Science, Technology and Research (A*STAR)

The majority of the research activities will need to be carried out at a Luxembourg based eligible research institution (see section 2.1.2), i.e. more than 50 % of research time is spent in Luxembourg, under an employment contract. Additionally at least 20% of the research time needs to be spent at one or several of the above-mentioned Singapore public research institutions.

Applications have to be written in English.

2.1.1. Eligible Applicants

The AFR call for bi-lateral PhD projects is open to all researchers, regardless of their nationality.

Applicants need to hold a university degree of a recognised higher education institution, allowing them to enter into doctoral training. Please note that Medical Doctor (MD) studies are not taken equivalent to PhD studies and are not eligible within the AFR PhD scheme. If an applicant does not hold a degree yet at application stage, she/he must have obtained the degree prior to the start of the PhD research project and, in addition, she/he must join a statement by their current supervisor addressing this issue.

Applicants for the AFR PhD scheme can already be enrolled in their PhD, but they must not be enrolled for more than one year prior to the deadline.

2.1.2. Eligible Host Institutions

The Host Institution (HI) is the institution (and the research group) where the AFR beneficiary performs the major part of her/his research work. PhD grants provided by the FNR are aimed at Host Institutions to employ AFR beneficiaries to conduct their research work. The following institutions are eligible HI for this call:

1) Public institutions performing research in Luxembourg
2) Non-profit associations and foundations performing research in Luxembourg having obtained a special authorization from the Ministry for Higher education and Research.¹

¹ For more information on eligibility, please consult the following webpage: http://www.fnr.lu/en/about-us/beneficiaries
The Host Institution must offer scientific guidance and training as well as a research environment in line with the principles defined in the National Quality Framework for Doctoral Training (available at the FNR’s website: https://www.fnr.lu/guidelines).

Host institutions in Luxembourg are only eligible if they can offer an employment contract for the duration of at least three years of a PhD project.

The proposal must be signed by the person authorised to legally commit the Host Institution of the involved applicant (see ‘Joint Declaration’ available as a template in the AIMS online system).

The involved public research institutions from Singapore are denominated ‘Collaborating Institution(s)’. Additional Luxembourg based institutions which play a major role in the execution of the PhD project should be listed under ‘Collaborating Institution(s)’ as well.

The collaborating institution(s) will not employ the AFR beneficiary but commits to offer scientific guidance as well as office and/or laboratory space, if applicable.

If deemed necessary, other institutions may be involved and should be listed under “other collaborations”.

2.2. Selection Criteria

The applications will be assessed according to the following selection criteria:

- **Scientific/technological quality of the proposal**
  - Excellence/originality
  - Feasibility of project idea

- **Applicant’s profile/potential**
  - Curriculum Vitae (grades of diploma, reference letter/s, achievements, incl. international or intersectoral mobility experience)
  - Motivation to engage into the PhD

- **Quality of the Host Institution and collaborating institution, supervision and training**
  - Supervisor’s and co-supervisor’s track record
  - Training and research environment
  - Organisation of the joint supervision and exchange

- **Potential impact of the project for Luxembourg**

A detailed description of the selection process is provided in the “AFR bilateral Peer Review Guidelines”.

2.3. Supervision

The supervision support and training offered to the PhD candidate as well as an excellent research framework of the PhD project are key elements for a successful completion of the doctorate.

Host institutions are expected to have clear rules and quality standards defining who is entitled to supervise a PhD candidate in their institution and how to ensure quality control.
The FNR requirements for principal investigators and supervisors within FNR funded projects apply and are available on the FNR website.

2.4. Training and mobility

The training programme for the AFR candidate should respond to well-identified needs.

A coherent doctoral training programme should be based on four pillars:

- training through research in the framework of an original doctoral research project,
- training provided through an existing structured doctoral training programme, e.g. Doctoral School, Doctoral Programme or equivalent at a university,
- any other scientific training activities tailored to the needs of the individual candidate, in particular participation in international scientific conferences, summerschools, research stays, etc.
- any other non-scientific skills enhancing the candidate’s career development.

Successful candidates will have at their disposal a total budget of 6000€ for a tailor-made individual training during their PhD, in addition to the courses offered free of charge by their doctoral school or programme.

The PhD training programme should ensure an adequate balance between scientific and transferable skills’ training.

In order to expose the candidates to different disciplines, sectors or schools of thought, the mobility of doctoral candidates should be promoted through offers of short-term international, intersectoral or interdisciplinary research visits. During their secondment, especially to the Singapore collaborating institution, the candidates keep their employment contract with the host institution.

2.5. Project Characteristics

Latest possible start for projects is 1st September 2018. The FNR reserves the right to review its funding decision if the start of the project is delayed beyond this date.

Employment contracts are the rule. AFR PhD Grants are aimed at Host Institutions to employ AFR beneficiaries to conduct their research studies. FNR pays to the Host Institution a maximum contribution to the annual salary costs of 41 158 € / year\(^2\) (salary index as of 1\(^{st}\) January 2017). A topping-up by the employer is possible up to a maximum gross salary of 58 002 €/yr. If the salary paid by the employer exceeds this amount, the project is no longer eligible for AFR funding.

The salary contribution will be paid until the PhD degree has been awarded with a maximum duration of 4 years.

PhD candidates funded through AFR will need to be enrolled with a degree-awarding institution (either the University of Luxembourg or an academic institution abroad) at the start of their project.

\(^2\) in case the official Luxembourg salary index changes, the above-mentioned FNR contribution will be adapted automatically by the FNR.
Travel allowance

A one-off travel lump sum, to be paid to the PhD candidate at the start of her/his AFR grant, based on the airline distance between the beneficiary’s residence at the application deadline or start of the grant, and her/his Host Institution:

<table>
<thead>
<tr>
<th>Distance (km)</th>
<th>Fixed-amount contribution (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 500</td>
<td>250</td>
</tr>
<tr>
<td>500-1000</td>
<td>500</td>
</tr>
<tr>
<td>1000-1500</td>
<td>750</td>
</tr>
<tr>
<td>1500-2500</td>
<td>1000</td>
</tr>
<tr>
<td>2500-5000</td>
<td>1500</td>
</tr>
<tr>
<td>&gt; 5000</td>
<td>2000</td>
</tr>
</tbody>
</table>

Furthermore 10,000€ are foreseen to cover travel back and forth to Singapore as well as accommodation costs in Singapore.

Training allowance

The FNR strongly encourages complementing basic academic training with additional training targeting skills development to increase the employability and career prospects of researchers. A specific budget for scientific and non-scientific training of up to 6,000 € per PhD candidate is available to cover costs (e.g. travel to scientific conferences, conference registration fees, summer/winter schools, field work).

2.6. Good practice in Research, Legal and Ethical Requirements

Research should respect fundamental ethical principles, including those described in the Charter of Fundamental Rights of the European Union.

Research in the framework of AFR PhD is consistent with ethical and data protection standards and approved by the competent committees.

Institutions make available their ethical and data protection guidelines as well as guidelines for research integrity. Institutions ensure that PhD candidates have adequate training in the rules concerning ethics and responsible conduct in research. Institutions ensure that supervisors take the prime responsibility for their PhD candidates to conduct research according to the established standards of the research field.

Legal and Ethical Requirements

- **The Ethical Issues Table** in the smart form of the proposal provides a guide to what are considered to be ethical issues. If the answer to any of the questions of the Ethical Issues Table is YES, the applicant must provide a brief description of the ethical issue involved and how it should be dealt with appropriately in section 1.5. of the Project Description.

The following special issues should be taken into account:

**Informed consent**: When describing issues relating to informed consent, it will be necessary to illustrate an appropriate level of ethical sensitivity, and consider issues of insurance, incidental findings and the consequences of leaving the study. Particular attention must be paid to properly inform study participants about the complex research procedures. If children are involved in a research activity it is necessary to obtain their assent and the permission of their parents.
Recruitment of patient cohorts: For the recruitment of patient cohorts equitable selection of patients should be ensured. The inclusion/exclusion criteria as well as the power calculations underpinning the recruitment targets will need to be described.

Collection and use of human derived material: The type and amount of biological materials to be taken from study participants and the manner in which biological materials will be taken including safety and invasiveness of the procedures for acquisition need to be specified. The measures employed to protect the privacy of and minimize risks to participants the length of time the biological materials will be kept, how they will be preserved, location of storage, and process for disposal, if applicable need to be described. Any anticipated linkage of biological materials with information about the participant, if applicable will need to be described. One should note that downstream research on human derived material (such as somatic cells for the generation of iPS cells and derivatives) could also raise ethical concerns (e.g. large-scale genome sequencing may evoke concerns about privacy and confidentiality). Appropriate confidentiality protections and consent for the downstream use of the material will need to be ensured.

Data protection issues: Unnecessary collection and use of personal data needs to be avoided. The source of the data, describing whether it is collected as part of the research or is previously collected data being used need to be described. Issues of informed consent for any data being used should be considerer. Anonymity of the participant must be ensured by adhering to state of the art anonymisation/pseudonymization protocols.

Use of animals: Where animals are used in research, the application of the 3Rs (Replace, Reduce, Refine) must be convincingly addressed. Numbers of animals should be specified. Describe what happens to the animals after the research experiments.

Human embryonic stem cells: Research proposals that will involve human embryonic stem cells (hESC) will have to address all the following specific points:

- the applicants should demonstrate that the project serves important research aims to advance scientific knowledge in basic research or to increase medical knowledge for the development of diagnostic, preventive or therapeutic methods to be applied to humans;
- the necessity to use hESC in order to achieve the scientific objectives set forth in the proposal. In particular, applicants must document that appropriate validated alternatives (in particular, stem cells from other sources or origins) are not suitable and/or available to achieve the expected goals of the proposal. This latter provision does not apply to research comparing hESC with other human stem cells;
- the applicants should take into account the legislation, regulations, ethical rules and/or codes of conduct in place in the country(ies) where the research using hESC is to take place, including the procedures for obtaining informed consent;
- the applicants should ensure that for all hESC lines to be used in the project were derived from embryos;
- the donor(s)’ express, written and informed consent was provided freely, in accordance with national legislation prior to the procurement of the cells;
- that result from medically-assisted in vitro fertilisation designed to induce pregnancy, and were no longer to be used for that purpose;
- the measures to protect personal data and privacy of donor(s), including genetic data, are in place during the procurement and for any use thereafter. Researchers must accordingly present all data in such a way as to ensure donor anonymity;
• the conditions of donation are adequate, and namely that no pressure was put on the donor(s) at any stage, that no financial inducement was offered to donation for research at any stage and that the infertility treatment and research activities were kept appropriately separate.

Other ethical issues: Other ethical issues may pertain to research conducted with/in developing countries such as through the use of local resources (genetic, animal, plant, etc) as well as research which may have an impact on the local communities (e.g. capacity building, access to healthcare, education, etc).

Dual Use research having direct military use or the potential for terrorist abuse also gives rise to ethical issues.

In case of multi-national projects, identify the countries where research will be undertaken and which ethical committees and regulatory organisations will need to be approached during the life of the project.

The application should specify any already existing authorisation or permission for the proposed work and include copies (the copies do not count towards the page limit).

The principal investigator is advised to contact the department in charge of ethical issues in its research institution for support.

2.7. Intellectual Property Rights

The FNR does not present any claim relating to intellectual property rights and the use of the knowledge gained through the activities funded through the AFR programme. In return, it is required that the involved host institutions undertake measures to protect results gained in the framework of the AFR grant.

The terms and conditions for distributing the intellectual property rights between the individual host institutions themselves and between the host institutions and the partner institutions (if applicable) are governed by specific agreement(s) to be established before the start of the grant, to the extent specified in the following principles:

• all involved institutions (host and partner) shall not undertake action of any sort and in any way that might compromise a possible protection of the intellectual property rights arising from the knowledge gained in the framework of the AFR grant;
• it must be possible for the host institutions to publish the knowledge gained in the framework of the AFR grant after a reasonable period of time; Institutions ensure that PhD theses are made publicly available, possibly after an embargo period not exceeding two years;

The revenue that the host institution make from the commercial use of the knowledge gained in the framework of the AFR grant shall be used as follows:

• to cover the external expenses associated with protecting the intellectual property rights;
• to allocate a fair share of the revenue to the inventors;
• to finance research, innovation and exploitation projects conducted by the host institution.
3. Evaluation process

The AFR PhD Peer Review process guarantees an independent, state-of-the-art evaluation of the application with the objective to select the research projects and applicants that reflect academic excellence. All proposals will be evaluated according to the four selection criteria. Special attention will be given to project proposals that raise ethical and/or data protection issues. The AFR review process consists of several stages:

- Proposals undergo an administrative eligibility check. Applicants will receive a confirmation of the eligibility or non-eligibility of the proposal. In case of non-eligibility, the reasons are indicated and the application will not be assessed.
- Eligible proposals are peer-reviewed by independent experts.
- The funding decision is formalized by the Secretary General before being communicated to the applicants.

The funding decision will be communicated to the applicants within approximately 3 months following the submission deadline.

The description of the review process and the selection criteria can be found in the publication ‘Peer Review Guidelines’ available on the FNR webpage: www.fnr.lu/AFR.

4. AFR-PhD Application

4.1. Application submission procedure

Applicants must submit their application in electronic format to the online submission system (FNR Grant Management System) https://grants.fnr.lu no later than 14:00 (CET) on the deadline, using the templates provided.

Late or incomplete applications are not eligible and the application will be turned down without further evaluation!

For technical questions regarding the FNR Grant Management System, please contact us by e-mail at tech-support@fnr.lu or call our Help Desk at +352 26 19 25 45.

4.2. Application procedure

The full proposal must be submitted electronically by the AFR candidate via the online submission system AIMS https://grants.fnr.lu before the deadline.

In section 6 of the online application, two "TEMPLATES" are provided as word files for download, i.e. the AFR Project Description and the Joint Declaration. A short project description (max. 4 pages) shall provide an outline of the PhD project idea, the hypothesis / research questions, of the innovation and expected project outcomes as well as how the problem will be tackled (methodology and work plan). It should be clear from the proposal on how the project benefits from a bilateral Luxembourg-Singapore setting.

For documents that need to be uploaded to the online system, please respect the font and page limitations indicated in the application forms! If page limitations are not respected, the FNR retains the right to shorten the document and only forward the correct amount of pages
to the external evaluators! In order to be eligible, the valid forms of the relevant call have to be used.

Overall, the AFR application in https://grants.fnr.lu consists of the following sections:

---

**A form** to be completed online related to the sections hereafter:

- **Section 1**: Applicant's details
- **Section 2**: Host Institution's Details and Collaborating Institution's Details
- **Section 3**: Research Project and Project Framework
- **Section 4**: Legal and Ethical Requirements
- **Section 5**: Type of Grant

---

**Section 6**: ‘Attachments’ - comprising the following documents to be converted to PDF and uploaded:

- AFR Project Description (*TEMPLATE provided*)
- Motivation letter by the candidate (max. 1 page; no template provided) **=> a brief personal statement for the choice of research project and should include a rationale for the institution and the supervisor chosen**
- Applicant’s CV (max. 2 pages; no template provided)
- Copy of Passport, and copies of degree certificates and statement of courses and marks (‘relevé de notes’) (no template provided, but documents need to be in English, French or German or provided as an official translation in one of these languages)
- PhD Registration (if already available. The PhD registration can be provided later, but it needs to be available before the start of the grant)
- Supervisor(s) CV(s): max. 4 pages/CV merged into a single PDF File:
  - a list of most relevant publications (maximum 10)
  - a list of most recent publications (maximum 10)
  - a list of PhD theses (co-)supervised and currently being (co-)supervised (where possible, with time to degree, scientific impact (e.g. number of publications resulting from the PhD, etc.), and information on the doctoral graduates' further career development). Supervised PhD candidates having benefitted from FNR funding need to be highlighted.
- Support letter signed jointly by the main scientific contacts of all involved Luxembourg and Singapore research institutions. The letter should clearly demonstrate the support to the PhD project by all involved parties and should also provide details about the research environment and how the joint supervision/training of the candidate will be organized. It should clearly state how the PhD candidate fits into the involved groups’ research objectives and describe the complementarities of the Luxembourg and the Singapore project partners (max. 4 pages, no template provided)
- Additional documents (only if applicable):
. Statement by current supervisor: Mandatory for applicants not graduated at the call submission deadline
. Explanation for part-time PhD (if applicable)

. Joint Declaration by the applicant and the Host Institution (TEMPLATE provided). The template has to be downloaded, signed by the parties, converted to PDF and uploaded.

**NOTE: Incomplete applications will be turned down without further evaluation!**

### 4.3. Completing the Online Application Form

The online application foresees two steps:

. Step 1 consists of a list of “To Do’s” including completion of all sections and uploads as mentioned before, plus the final generation of the PDF file of the application as well as the completeness check.
. Step 2 consists of submitting the application.

All sections of the Online Application Form can be accessed individually.

The ‘Online Application Form’ may be saved for each section at any time and you may come back to it later. Before you submit the completed form however, you need to make sure that all mandatory questions (marked with *) have been completed. The system partially warns you of mandatory sections but put a special attention on the completeness of documents that need to be uploaded. Please also ensure that all data is correct before submission.

Please save the corresponding template to your desktop and complete it off-line. The word templates for the PhD Project description form and the joint declaration are also available on the FNR website ([www.fnr.lu](http://www.fnr.lu)), make sure you are using the right version (AFR bilateral Singapore Individual PhD Call 2017).
4.4. AFR 2017 Call timeline

July 2017       Launch of AFR Call
26 September 2017  Submission deadline
Oct-Nov 2017   Evaluation
Dec 2017       FNR funding decision
Jan – Aug. 2018 Conclusion of AFR Grant agreements
1st September 2018 Latest start of PhD projects funded under this call

4.5. Contact details

The first contact to discuss a potential PhD project shall be the potential supervisor and the coordinator of the doctoral programmes at the host institution.

For information on the AFR scheme and application modalities, please contact the Fonds National de la Recherche per email: afr@fnr.lu.