

AXA RESEARCH FUND POST-DOCTORAL FELLOWSHIPS APPLICATION GUIDELINES

The AXA Research Fund is AXA Group’s science philanthropy initiative dedicated to advancing knowledge on global risks for the benefit of society.

This guide contains all the information you need to apply for a Post-Doctoral Fellowship funded by the AXA Research Fund including a general overview of the AXA Research Fund selection process, and information on the grant agreement terms and conditions.

This guide may be used as a reference both by Institutions and candidates. The information presented within overrides any contrary terms that could be found elsewhere.

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1. Introduction

The mission of the AXA Research Fund is to **fund academic research** dedicated to **bettering our understanding of important hazards, risks and threats and our current global societal challenges** within four clusters: socioeconomic risks, environmental risks, life risks and the “Fourth Industrial Revolution”.

In 2017 the AXA Research Fund will be offering up to **twenty-five (25) Post-Doctoral Fellowships** to outstanding researchers. Each grant can be up to **one hundred and thirty thousand euros (€130,000)** at most and for a **duration of eighteen (18) to twenty-four (24) month period**. To that end, the AXA Research Fund implements **two bottom-up calls for applications addressed to the research institutions registered in the AXA Research Fund database and willing to host Post-Doctoral Fellowship candidates**. The two calls will be implemented as detailed in the Section “Timeline & Application Process”.

It is the Institution’s **remit to identify the best possible candidates** to participate in the Post-Doctoral Fellowships campaign. Candidates will subsequently be expected to submit an application presenting their research project, to be carried out in the host institution that nominated them.

The AXA Research Fund **Scientific Board**, composed of renowned international academic experts and AXA Executives, oversees the applicant selection process. It validates the **eligibility and selection criteria** as well as the **tools** used to process the call for applications. The president of the Scientific Board, delegated by the Board, acts as a jury over and decides upon the recommendations of funding based on:

- **Scientific assessments** of the research projects performed by a network of international academic experts (review panel members);
- **Budget coherence** of the proposed project taking into account the researchers’ working conditions in the host institution and “real” needs for the research;
- **Public engagement interviews** by non-academic AXA experts. The interview results are used only if they favor the candidate.

The AXA Research Fund partners with the European Science Foundation (ESF) to carry out the **scientific evaluation process**. ESF is an established, **independent and non-governmental organization** dedicated to supporting scientific endeavors. ESF conducts the peer review in accordance with the criteria defined by the AXA Research Fund.

To know more about the AXA Research Fund: <http://axa-research.org/>.

To know more about the European Science Foundation: <http://www.esf.org>.

2. Research topics supported

The research project must fall within the **scope** of the mission of the AXA Research Fund, that is, to fund basic science dedicated to developing a better understanding of global **risks**.

The following **list of topics** has been **validated by the AXA Research Fund Advisory Board**. **Only research projects with justified relevance to this list will be considered for funding.**

- ***Environmental Risks***

- Climate change.
- Natural hazards & disaster risk reduction.
- Urbanization & Resilience, Transport and Road Safety.
- Sustainable Food and Water Management.

- ***Life Risks***

- Ageing, dependency and long-term care.
- Chronic diseases.
- Well-being and prevention.
- Public Health & healthcare systems.

- ***Socio-economic Risks***

- Insurance and its influence on the Macroeconomic environment.
- Geopolitics and the dynamics of international relations.
- Sustainability of public & private welfare systems.
- Future of financial markets (low interest rate environment, climate economics...).

- ***"The Fourth Industrial Revolution"***

- The technological revolution's Social & economic impact (Medical digitization, Health innovation, Energy transition, Finance, Internet of Things, Social Networks...).
- Tools and novel approaches to scientific modelling (Bioinformatics, Data Science...).
- Data privacy & Cybersecurity, ethics, values & regulation.
- Artificial intelligence & learning.
- Human behaviors and cyber-physical interactions.

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3. Timeline & Application process

Institutions are invited to submit their applications for one of the two campaigns by:

1. **Nov. 3, 2016 for the first** and,
2. **May 30, 2017 for the second**

- ***First campaign***

| | | |
|---|-----------------------------------|------------------------|
| Application slots (host institution phase) | Requesting a slot | Oct. 5 ⇨ Nov. 3, 2016 |
| | Getting confirmation of your Slot | Nov. 9, 2016 |
| | Submitting Candidate names | Nov. 9 ⇨ Dec. 6, 2016 |
| Research proposal (Applicant Phase) | Research proposal submission | Nov. 9 ⇨ Dec 6, 2016 |
| | Deadline for submission | Dec 6, 2016 |
| | Rebuttal Phase | Feb. 1 ⇨ Feb. 7, 2017 |
| | Public engagement interview | Feb. 27 ⇨ Apr. 5, 2017 |
| | Results announcements | Apr. 24, 2017 |

Please note that all deadlines above are 12 p.m. CET time.

- ***Second campaign***

| | | |
|---|-----------------------------------|--------------------------------------|
| Application slots (host institution phase) | Requesting a slot | Apr. 27 ⇨ May 30, 2017 |
| | Getting confirmation of your Slot | June 2, 2017 |
| | Submitting Candidate names | June 2 ⇨ Jul. 3, 2017 |
| Research proposal (Applicant Phase) | Research proposal submission | June 2 ⇨ Jul. 3, 2017 |
| | Deadline for submission | Jul. 3, 2017 |
| | Rebuttal Phase | Aug. 31 st ⇨ Sep. 6, 2017 |
| | Public engagement interview | Sep. 18 ⇨ Oct. 20, 2017 |
| | Results announcements | Nov. 13, 2017 |

Please note that all deadlines above are 12 p.m. CET time.

4. Eligibility criteria

• *Host Institution*

- The AXA Research Fund partners with **academic institutions only**.
- Host institutions must be **registered** in the AXA Research Fund's **database**.
- Institutions located within **defined geographical scopes** are eligible for funding. Based on the decision of the AXA Research Fund Advisory Board, two groups of countries have been defined as follows:

| NON FOCUS COUNTRIES | | | |
|---|------------------------------------|--|--|
| Europe | Central & Latin America | Africa & the Middle East | Asia Pacific |
| - Member states of the European Union - Iceland - Norway - Switzerland | - Argentina - Chili - Mexico | - Algeria - Cameroon - Gabon - Israel - Ivory Coast - Lebanon - South Africa | - Hong Kong - Singapore - Taiwan |

| FOCUS COUNTRIES | | | |
|-----------------|-------------------------|--|---|
| Europe | Central & Latin America | Africa & the Middle East | Asia Pacific |
| | - Brazil - Colombia | - Bahrain - Egypt - Morocco - Nigeria - Oman - Qatar - Saudi Arabia - Senegal - Turkey - United Arab Emirates | - China - India - Indonesia - Malaysia - South Korea - Philippines - Thailand - Vietnam - Japan |

• *Candidate*

- Only candidates **without a permanent academic position** are eligible.
- The applicant must have been **awarded his/her first PhD** (or equivalent doctoral degree) **before the beginning of the Post-Doctoral grant** and **within the 3 years** preceding the deadline for the submission of their research proposal.
- **The eligibility period** may be **extended up to 6 years** in the event of documented career breaks. Eligible career breaks may in particular include:
 - **Maternity / Paternity leave:** For maternity and paternity leave, the effective elapsed time since the award of the first PhD will be considered reduced by **6 months for each child born** after the PhD award.
 - **Long-term illness, clinical qualification or national service.** The effective elapsed time since the award of the first PhD will be considered reduced by the documented amount of leave taken for each event that occurred after

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the PhD award. If relevant, documentation regarding career breaks should be annexed at the end of the application.

- For candidates presented by institutions located in **non-focus countries**, **past, present or planned international mobility is mandatory**.
 - **Research projects**
- The application must be **submitted in English, on time, online, and complete**. It must **respect the template structure** and the **page limit**.
- The **research topic** must fall **in the scope** of the **eligible thematic focus** as listed above and documented in the “relevance to risk” justification.
- The candidate must put forward a **free standing independent research project** involving **full-time work** for the duration of the fellowship (with an exceptional acceptance of up to 20% time dedicated to teaching).
- Proposed projects must **address academic research** and **not “Research & Development”**. Programs are considered R&D when they pursue an objective of systematic application of knowledge or understanding, directed towards the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements. This includes specific technology development, as well as clinical trials. Please note that translational research is not considered ineligible as long as the research work conducted is mainly fundamental.
- Projects must **deal with research that conforms to the AXA Group Compliance and Ethics Guide** (<https://www.axa.com/en/newsroom/publications/compliance-ethics-guide>) which includes (but is not limited to):
 - Research violating national regulations.
 - Research having direct military use.
 - Research having potentially dangerous environmental impacts.
 - Research relying on the artificial production of highly infectious pathogens with potential for large scale harmful/lethal effects for humans and research involving gain of function.
 - Biomedical research conducted without the fully informed consent of the participant.
 - Research on embryonic stem cells (incl. animal, with inferred subsequent human application).
 - Research processing private personal data without the informed consent of the concerned parties (incl. genetic information).
 - Research activities aiming at human cloning.
- **Cases of scientific misconduct** such as **fabrication, falsification, plagiarism** or **misrepresentation of data** will be considered as breaches of fundamental ethical principles and the **proposals concerned will be excluded**.

5. Evaluation criteria

The AXA Research Fund peer review evaluation process has been carefully designed to **assess scientific excellence irrespective** of the **gender** and **nationality** of the Post-Doctoral Fellow or any **other potential biases**. The evaluations are monitored to **guarantee transparency, fairness and impartiality** in the treatment of proposals.

The **evaluation criteria** are at the **core of the scientific assessment** process. When designing and writing their applications, candidates are strongly urged to **keep these criteria in mind** to make sure that their **research proposals** provide all the **information** required to **allow reviewers** to reach an **informed opinion** on each of the criterion.

Research proposals will be assessed against the **four evaluation criteria** below. Each criterion has **equal weight** and will be **marked on a scale of five** as follows:

| Score | Wording | Definition |
|--------------|----------------|--|
| 5 | Excellent | All relevant aspects of the assessment criteria successfully addressed. Any shortcomings are minor |
| 4 | Very good | Assessment criteria very well addressed/met, although certain improvements are still possible |
| 3 | Good | Assessment criteria well addressed/met, although improvements would be necessary |
| 2 | Fair | Assessment criteria broadly addressed, however there are significant weaknesses |
| 1 | Poor | Assessment criteria addressed in an inadequate manner, or there are serious inherent weaknesses |
| 0 | - | The assessment criteria are not addressed |

- **Scientific excellence and innovativeness**
- **Definition and structuration of the scientific case:** is the scientific case well-presented and argued? Are objectives clearly defined?
- **Progress beyond the state of the art:** based on a commanding knowledge of relevant literature, does the research project have the potential to create new knowledge? How will the project fill a knowledge gap in its research field?
- **Innovative nature of the concept proposed:** originality of the proposed question; use of novel technologies and methodologies; innovative applications of existing methodologies and technologies in new areas.
- **Quality of the research environment & feasibility**
- **Work plan and planning:** is the project work plan well-structured and presented? Are deliverables/output/expected results well defined? Are ambitions likely to be achieved within the project's timeframe?
- **Appropriateness of the methodology:** Is the intended methodology adequate? Is the use of infrastructure and specific equipment well addressed? Has the required preliminary and preparatory work been fulfilled? Are significant risks addressed?

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- **Host environment and supervisor:** Have the host laboratory and the supervisor demonstrated excellence in the proposed topic? Does the host lab possess the means required to implement the work plan?
- **Appropriateness of the budget:** Is the budget balanced and well justified? Will the funding requested enable the work plan to be realized?
 - **Impact of the research**
- **Better understanding of important hazards and risks:** How will the proposed research contribute to better addressing a well identified risk and, to a larger extent, to the understanding/modeling/mitigation/prevention of a major risk?
- **Impact of the research on society/communities:** How will the research project contribute to better lives and living conditions?
 - **Applicant's profile**
- **Academic excellence and a proven track record in accordance with the stage of the candidate's career.**
- **Demonstrated expertise relevant to the research proposed.**
- **Personal commitment.**
- **Potential for independence of research.**
- **Internationally mobile candidates presented by institutions located in focus countries** (past, present or planned mobility is mandatory for non-focus country candidates).
- **Communication skills** as assessed by non-academic AXA experts, and demonstrated through interactions with a non-academic audience (interviews with media, presentations in conferences with a broad public etc.).

6. Selection process

- **Application documents**

All information listed below is required to be filled in online (cf. "Full Proposal" application - Step2):

- **General information** (to be completed online)
 - **Personal data** and **current affiliation** of applicant
 - Mandatory complementary information: PhD related information, previous institution, career breaks, international exposure, planned host institution.
 - **Research project details**: Risk cluster, project title, start and end date, keywords, abstract, relevance of application to main risk, ethical issues.
 - **Names, institutions and email addresses of 2 referents**: Referents will be contacted to submit their reference letters (1 page max.). The applicant's Post-Doctoral advisor writes the first letter and the second letter has to be written by a different referent, preferably the applicant's previous advisor.
- **Application template** (upload completed template, PDF format, 4MB maximum)
 - **Research project and innovativeness** (5 pages max.): long term objectives and specific aims; progress beyond the state-of-the-art; innovative nature of the research proposed; proposal bibliographical references (1 page max).
 - **Research plan** (7 pages max.): methodology incl. a description of the materials and methods or experimental strategies; work packages and tasks (1 page max.); Gantt chart; Budget (1/2 page max.); Short description of the host laboratory/group with 10 most relevant publications in the past 3 years (1 page max.); Short bio of the future supervisor of host institution with main publications (1 page max.).
 - **Impact of the research** (2 pages max.): contribution to a better understanding of important hazards and risks; impact on society/communities.
 - **Applicant**: Career Statement (1 page max.); Detailed CV, incl. participation to colloquia (2 pages max.); Extended list of the most relevant publications (2 pages max.); Other documentation (optional -5 pages max.).

- **Detailed step-by-step**

- **Step 1 – Registering and requesting a slot**

To apply for our schemes, academic institutions must be preregistered on our platform (<https://institution.axa-research.org/> - available mid-September 2016 at the latest). Institutions are invited to appoint a single point of contact ("Operational Contact") who will handle relations with the AXA Research Fund. **Preregistration is to be done at least 5 days before the opening of the campaign.**

Host institutions first indicate their interest in participating in the program, along with the number of fellows they wish to present. The AXA Research Fund reviews their profiles, and, depending on the available funding, allocates slots to the selected host institutions. The number of slots corresponds to the number of candidates the institution will be allowed to present.

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- **Step 2 – Application**

The Institution's operational contacts nominate their candidates by entering their names & email addresses online. Candidates are then invited by the European Science Foundation (ESF) to submit their research proposals and are provided with the necessary information to access the application form.

- **Step 3 – Rebuttal**

Candidates will have the opportunity to respond online to the ESF experts' pre-assessment of their applications before they are reviewed by the AXA Research Fund panels. The main purpose of the rebuttal is to provide applicants with the possibility to comment on any potential misinterpretations or misunderstandings that may have been made by the experts while initially assessing their proposals. This rebuttal step is strongly recommended.

- **Step 4 – Scientific assessment**

The evaluation of the scientific quality of research proposals is implemented in a fully independent manner by the European Science Foundation. The ESF will set up Review Panels (gathering between 45 and 55 members) in charge of assessing all proposals. Review Panels are composed of renowned scientists and scholars from all over the world with a broad view and knowledge across domains covered by their respective panel. Review Panel members are independently identified, invited and appointed by the ESF office to ensure a balanced coverage of disciplines and scientific cultures.

- **Step 5 – Public engagement interview**

Two AXA experts will, in parallel to the evaluation of the proposal, interview candidates during 20 minutes. Their role is to help the AXA Research Fund assess their ability to share their research project with a non-academic audience, in particular:

- Potential to act as a spokesperson in public debate;
- Popularization and pedagogical skills;
- Ability to highlight the value of the research project to society.

- **Step 6 – Selection & results publication**

The Scientific Board of the AXA Research Fund selects applications to be funded based on the scientific case, panels' assessments and communication skills (only if in favor of the candidate). If despite the above criteria the number of applications is above available grants, other criteria could be considered, such as focus countries, topic relevance, distance to risk or international mobility of the applicant.

As soon as the Board has taken its decision, the AXA Research Fund informs the Institution through the Institution's representative. Results of the campaign will also be made available online (<http://www.axa-research.org/>). In parallel, the announcement will also be reflected on the dedicated platforms for applicants and institutions, where the outcomes will be published.

7. Grant and Agreement terms and conditions

Each project selected by the Scientific Board and funded by the AXA Research Fund is a combination of a candidate, a project and a host Institution. Thus, the candidate is expected to carry out the project as described in the proposal, and as acted in the grant agreement. Furthermore, it is expected that the candidate establishes and concludes the funded research project in association with the original host institution (applicant's legal entity).

Upon written acceptance of the grant offer by the selected candidate, the AXA Research Fund will liaise with the Operational Contact of the grantee's host institution to set in motion the contracting process. Grantees will be kept updated by their Operational Contacts throughout the contracting process.

- ***Duration of the agreement***

Due to the ground-breaking nature of frontier research projects, it is expected that **all projects start within 12 months** of final results publication date. The AXA Research Fund reserves the right to cancel a grant if the proposed start date goes beyond this limit.

The agreement period covers the granted research project period. Should the AXA funding not be entirely spent at the end of the agreement, either remaining funds are paid back to AXA, or the Institution requests a non-financial extension in order to let the Post-Doctoral fellow finish his/her project.

Should the Post-doctoral fellow leave the host institution before the end of the project, remaining funds should be paid back to AXA. In exceptional circumstances, the institution could request to finalize the research project with the unspent funding.

- ***Amount & payment of grant***

Payment of the grant is dependent on (i) the agreement signing, and (ii) the Post-Doctoral Fellow taking up the AXA Post-Doctoral Fellowship.

Grants are paid in four (4) installments, each installment being equal to one fourth of the total funding:

- An advance payment (as pre-financing) is made when the post-doctoral grantee starts the research project,
- 2 interim payments: respectively 12 months and 18 months after the starting of the project,
- A final payment is made at the end of the project, on the basis of actual expenditures

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- ***Use of grant***

The sole purpose of the financial grant paid by AXA is to support the research project. Therefore, the AXA funding cannot be used for administrative and infrastructural expenses.

Eligible costs are:

- Salaries of the postdoctoral fellow, internships...
- Equipment/Resources such as databases, survey costs, consumables...
- Academic activities such as conferences, workshops, field-work...
- Outreach activities beyond academic audience such as media pieces, conference to broad audience...
- Other costs directly linked to the research project.

- ***Employment contracting framework***

The AXA Research Fund requests that the Institution undertakes to:

- Legally employ the Post-Doctoral Fellow as a postdoctoral researcher in the department or the laboratory, under an employment contract that complies with current national legislation of the Institution.
- Entrust the Post-Doctoral Fellow with the research for which he/she has been given authorization to work at the host Institution,
- Provide the Post-Doctoral Fellow with the necessary resources to conduct his/her postdoctoral research,
- Appoint a Scientific Advisor to manage the Post-Doctoral Fellowship for the entire duration,
- Agree to the involvement of an AXA contact person whose role is notably to ensure regular contact between the Post-Doctoral Fellow and the AXA Research Fund with the general aim of helping the young researcher in his/her career,
- Allow the Post-Doctoral Fellow to attend meetings and seminars organized in connection with the AXA Research Fund.

The Post-Doctoral Fellow is placed under the sole responsibility of the Institution which ensures that the postdoctoral research project runs smoothly and is properly conducted.

- ***Monitoring of grant***

A report is requested from the researcher, one year after the launch of the Post-Doctoral Fellowship project that includes information on the progress of the research project, and a financial report on AXA funding expenditures. At the end of the fellowship, the researcher is also requested to fill in an Executive Summary Report to inform the AXA Research Fund of the results of the research and provide the financial report showing a statement of expenditures. Specific outputs from the project are asked to be included (e.g. publications).

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- ***Intellectual property***

The AXA Post-Doctoral Fellow remains fully independent to conduct his/her research project. Furthermore AXA will not claim any right to the ownership or use of the results coming from the research programme, and the Institution and/or the Post-Doctoral Fellow and member or his/her team keep full ownership of their results, in accordance with the legal and/or contractual provisions existing between them.

- ***Publicity on grant***

The AXA Research Fund is a philanthropic initiative and therefore the publicity on the grant is only designed to enable AXA to promote its general interest role. The title of both fellowship and researcher should include the name of "AXA". When communicating on the AXA fellowship, the Institution and the researcher should mention the support of the AXA Research Fund. Any publication should also include a unique project ID that will be provided upon request by the AXA Research Fund team.

- ***Open access policy***

The AXA Research Fund believes that providing free and unrestricted access to the scientific outputs of the research projects it supports should be a fundamental part of its philanthropic mission.

As of July 1, 2016, an Open Access policy is effective for all new agreements and granted funding. In order to build on best existing practices in this area, this policy closely follows the guidelines instituted and recently updated by the European Research Council. According to this new open access policy, the AXA Research Fund:

- **Requests** that an electronic copy of any research article, monograph or other research publication that is supported by the AXA Research Fund be deposited in a suitable repository immediately upon publication. Open access should be provided as soon as possible and in any case no later than six months after the official publication date. For publications in the Social Sciences and Humanities domain a delay of up to twelve months is acceptable.
- **Strongly encourages** funded researchers to use discipline-specific repositories for their publications. If there is no appropriate discipline specific repository, researchers should make their publications available in institutional repositories or in centralized ones.
- **Reminds** researchers supported by the AXA Research fund that open access fees are eligible costs that can be charged against AXA RF grants, provided they are incurred during the duration of the project.
- **Asks** host Institutions to cover open access fees of any research publications supported in by the AXA Research Fund, arising after the end of the project.

The AXA Research Fund supports the basic principle of Open Access to research data. Nevertheless, taking into account the fast evolution of current debates and the diversity of approaches between disciplines, no binding commitment to open



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research data will be requested. Nevertheless, the AXA RF recommends and strongly encourages all its funded researchers to follow best practices:

- By retaining files of all the research data they have produced and used during the course of their work, and that they be prepared to share these data with other researchers whenever they are not bound by copyright restrictions, confidentiality requirements, or contractual clauses.
- By seeking to establish and practice good research data management in accordance with the current best practices in their respective fields and to share their data with other researchers in a responsible way.