



Leaders in Innovation Fellowship



Applicant Guidance Notes – Leaders in Innovation Fellowships programme

The Royal Academy of Engineering and are seeking applications from researchers, with strong entrepreneurial potential, to take part in their Leaders in Innovation Fellowships programme. This is a residential training programme in innovation and technology entrepreneurship that will take place, in the UK.

<https://grants.raeng.org.uk>

Introduction

Working with a select number of partner countries, the objectives of The Royal Academy of Engineering's *Leaders in Innovation Fellowships* (LIF) programme are:

- to build the capacity of researchers for entrepreneurship and commercialisation of their research;
- to create international networks of innovators and technology entrepreneurs.

The programme is aimed at researchers who are about to develop, or are in the process of developing, a business proposition for their innovation. A select cohort of researchers from the same country will benefit from a focussed period of training in the UK, access to expert coaches, and opportunities for international networking. In the short term they will develop, with the support of the programme, a commercialisation plan for their innovation. In the long term they will benefit from access to an international network of peer innovators, in taking their commercialisation plan forward.

The programme builds on the expertise of The Academy in supporting technology entrepreneurs within the UK through a variety of fellowships and prizes. Fellows supported through this programme will benefit from connectivity to The Academy's Enterprise Hub, a network of technology innovators, researcher entrepreneurs, and senior industrialists driving and supporting world class innovation.

The programme is part of the broader UK *Newton Fund* which seeks to build international science and innovation partnerships that promote the economic development and welfare of developing countries.

The Programme

Fifteen successful applicants ('LIF Fellows') will be invited to attend a ten-day residential programme, in the UK, arranged and supported by the Academy.

Week 1 – An activity based learning week combined with external visits and master class sessions.

The first week of training involves getting familiar with Business Modelling and Customer Markets along with visits to a UK University Incubator and a site visit to an Industry Partner. The groups will start working with their coaches to start to develop their business plans.

Week 2 – Intensive training programme in entrepreneurship and innovation leadership

The second week is more classroom style leaning with a training programme hosted by the Royal Academy of Engineering. It consists of a **training programme in innovation leadership**, delivered by expert trainers, and based on existing training programmes of the Academy for UK researchers. The course will focus on skills and knowledge in:

- Operations and leadership;
- Finance, IP and regulation;
- Presenting and pitching to investors and customers;
- Negotiation skills.

Importantly, over the course of both weeks, there will be time for each fellow to develop their own **business plan and pitch decks**, while receiving guidance and coaching. The week will conclude with a competitive pitch session to a panel of expert judges including senior Academy Fellows.

During the programme, LIF Fellows will also benefit from opportunities to network with coaches, representatives of technology driven organisations, and each other. All participants in the LIF programme will automatically join an international network of innovators and coaches clustered around the Academy's [Enterprise Hub](#).

Please note that the residential programme will be conducted entirely in English.

Dates and Location

As well as the training and mentoring programme, international flights, airport transfers and other UK travel incurred by the programme, all hotel accommodation, breakfast and evening meals will be paid for by The Academy.

However, please note that successful applicants will be responsible for arranging, and paying for their travel insurance and visa, as required, and covering any other expenses incurred during the programme.

Follow-on support

After the two-week residential programme, we begin the follow-on support aspect of the programme lasting up to 6 months. This will comprise of the individual coaches from the residential training continuing to provide mentoring and advice to allow LIF fellows to achieve some of the jointly established goals set when designing the business plan in London. In-country events to keep LIF fellows engaged with the Academy will also be included in the programme.

Eligibility Criteria

Through their research, applicants must have developed (or co-developed), or be in the process of developing (or co-developing) a new technological innovation. Applicants should have the ambition to take a leading role in creating a new business to commercialise this innovation.

Specific eligibility criteria are as follows:

- Applicants must be citizens of, or have full resident status in their respective Newton Partner Country.
- The applicant's innovation can be any new product, technology or service, based on research in engineering defined in its broadest sense to encompass a wide range of fields, including: agricultural technology, biotechnology, chemical engineering, civil engineering, computer science, design engineering, electrical and electronic engineering, ICT, materials science, mechanical engineering, and medical engineering.
- The innovation should have the potential to benefit the applicant's country, or other developing countries, in terms of improving social welfare and driving economic growth.
- The primary application of the innovation must **NOT** be in the defence or military sector.

Note that previous experience of commercialisation or involvement with technology transfer is not required.

How to Apply/submit your information

All applications must be submitted via the online Grant System, available here: <https://grants.raeng.org.uk>. The application form has five sections to complete. A CV is required as supporting documentation. A summary of the guidance notes below are also imbedded within the system itself.

Completing the Application Form

After logging in to the online Grant System and selecting the relevant scheme (Leaders in Innovation Fellowships Programme 2017/18 Cohort) you should be presented with the 'Instructions' screen. Here you will see some general instructions on how to use the system as well as the 4 sections of the application form:

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At any stage in the application process you can save your work and return to it at a later time. You can answer the questions in any order you like so you may freely skip some sections to return to later if you so wish

1. Applicant details

Please provide your name, institution, and preferred correspondence details.

This section requests additional details about yourself and your suitability for the Leaders in Innovation Fellowship Programme. You will need to answer some questions and upload your CV.

Q - Please select your Partner Country

Q – English skills

Please indicated for each skill your level, either beginner, intermediate, advanced or fluent. It is really important that you answer these language questions as honest and openly as possible.

Q- Your ambitions for the programme

What do you hope to get out of the Leaders in Innovation Fellowships programme? Which areas and activities do you expect to be supported by your country partner organisation?

Describe which aspects of the programme will be particularly valuable to you in commercialising your innovation, and explain why.

Q- Participating institution details

Please enter your relevant university or company details

Q- Do you have a valid international passport for travelling abroad?

Please indicate if you have a valid international passport which can be used to travel to the UK. If your passport does not have 6 months or more left before expiry, please note that you may not be able to travel with it to enter the UK.

Q-If yes, please enter your passport expiry date.

If you have a valid passport with 6 months or more left till expiry, please enter your passport expiry date.

Q-Are you free to travel to London, UK on the dates stated for your country of application?

Please find your country name and tick the box if you are able to travel on the date stated next to it. If you cannot travel on the date stated for your country, please select the no button.

Q-Preferred Name

Please give your preferred first name(s) and surname(s). This will be printed on your name badge and certificate of completion.

Q – Your short biography (100 words maximum)

Please give a brief narrative summary of your career and achievements. If your application is successful we will use this biography within the introductory pack for

participating Fellows and to be placed in materials for wider circulation and publicity of the Leaders in Innovation Fellowship programme.

Q – Your photograph

Please upload a passport-sized photograph. If your application is successful we will use this photo within the introductory pack for participating Fellows and to be placed in materials for wider publicity of the Leaders in Innovation Fellowship programme, please ensure it is suitable and professional.

Q - Your CV

Please upload your CV. The format and content of your CV is left to your discretion. Your CV should not exceed three (2) pages, and should be uploaded electronically as a PDF document.

Q – Special or Dietary requirements

Please notify us of any special dietary requirements you might have (that is, are there any particular foods that you cannot eat). If selected, this information will help us with ordering meals during the training. This information will not be used to inform the selection of participants for the programme.

Q-Special Assistance

Do you require any special assistance during the residential training due to a health condition or disability? Please select yes or no.

Q-Please specify the assistance you will require

Please only answers this if you selected yes in the question above.

2. Your innovation

Q - Title

Give a brief title to the name of your innovation, or the name of your proposed business.

Q - Technological sector or research area

Please select the major technological sector or research area that your innovation derives from. If it fits into more than one area, please choose one that is most relevant. You will get to specify the technology in the next question.

Q-Specific technological sector tags

You can use this question to let us know more about the specific sector your innovation belongs to. Please select all the relevant tags for your innovation.

Q – About your innovation/product/service (100 words maximum)

Please give a description of the particular science or technology that underpins your (proposed) business. Think of the following prompts when answering; Why is the proposed solution better than other existing solutions? Why are improvements necessary or desirable? How close in terms of development is the technology, product or service to market?

Q-Does your innovation promote economic development and/ or social welfare development in your country?

Please state whether the primary purpose/outcome of your innovation is to enhance your country's economic development and/or social welfare development.

Your answer should clearly identify the social and economic development problem faced in your home country, and provide an argument with a "clear line of sight" as to how your innovation will help address this problem. A page on what issues should be considered when making an argument for ODA is provided at the end of this document. Not all of these questions need necessarily be answered, but should help in the forming of an answer.

If you are still unsure, please contact your in-country organisation team.

Q –Challenge Areas

Which sustainable challenge does your project help address? More information and guidance on each challenge can be found at the end of this document. You may select all the challenges that are relevant for your innovation:

- secure and resilient food systems supported by sustainable marine resources and agriculture
- sustainable health and well being
- inclusive and equitable quality education
- clean air, water and sanitation
- affordable, reliable, sustainable energy

- sustainable livelihoods supported by strong foundations for inclusive economic growth and innovation
- resilience and action on short-term environmental shocks and long-term environmental change
- sustainable cities and communities
- sustainable production and consumption of materials and other resources
- understand and respond effectively to forced displacement and multiple refugee crises
- reduce conflict and promote peace, justice and humanitarian action
- reduce poverty and inequality, including gender inequalities.

Q – Developmental Benefits of your innovation (150words maximum)

One of the broader aims of the Newton Fund is to promote economic and social welfare development in developing countries. Please outline the potential benefits of your innovation in terms of promoting economic growth and/or improving health and social wellbeing.

Q-What is your stage of technology development?

Please tick the most applicable box

Q-What is your IP Status?

Please tick the most applicable box

Q-What are the next steps you are working on for your innovation?

Please let us know what you plan to be your next actions you are working on for your innovation.

Q-What is the biggest challenge you are facing at the moment?

Please let us know your greatest challenge you are encountering at the moment with your innovation.

Q-Are there any lessons that you learned from your innovation that you would like to share with your peers?

Please share with us any lessons you have learned so far in your innovation journey that may benefit your fellow LIF peers. This can be any learnings from personal successes or failures.

3. Your business plan

Q - One line pitch (50 words)

Please provide a one-line pitch for your business. We will use this one line to showcase your innovation in networking events etc.

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For example, you could use 15 words to describe your innovation, consider:

- what it is
- who is it for
- how it will change the world.

Q - Business Summary (150 words)

Please provide a short description of your business idea/plan.

Q-Source of Funding

Please select the option that indicates the source of funding you are next seeking for your business/project

Q-Have you ever raised commercial investment capital before?

Please tick the most applicable box

Q- Do you intend to raise commercial capital in the near term?

Please tick the most applicable box

Q. Business Profile

Please fill out the table with relevant or available details, for the categories:

Number of Researchers/Employees: (how many people involved or employed)

Current or Potential Investors:

Partners: (are you being supported by a partner?)

Capital raised:

Capital pursued:

Grants/Awards received:

Q-Next Steps

Please select the option which best describes what you are looking for next.

Q-Sales Strategy

Please select the option which best describes the sales strategy of your business.

Q - Customers and their perceived needs (150 words)

Please give an outline of who you think will be the customer for your new product, technology or service, and their perceived needs. What evidence is there that customers will pay for this product or service at commercially profitable levels?

Q - Major risks (70 words)

Please identify what you think will be the major risks and challenges that you will have to overcome in taking the business plan forward (e.g. lack of funding or securing intellectual property).

4. Declaration

In this section, you will also be asked to declare that:

- The information you have provided is accurate.
- You understand that if you participate in the programme, it is entirely at your own risk. It is the responsibility of all participants and/or their employers to arrange suitable travel insurance *before* participants travel to the UK for the residential programme.
- You understand that it is your responsibility to obtain the necessary visa to travel to the UK.
- That you will allow the Royal Academy of Engineering to share this material with its Fellows, Funder and subcontractors for the purposes of preparing the training for the Leaders in Innovation Programme and reporting.
- Confirm that you have permission from all relevant employers to attend the Fellowship, if selected to participate.
- I confirm that I have the permission of any person or persons I have included contact details for, to share their details with the Royal Academy of Engineering for the purposes of administering this application.

All participants in the programme will join a global network of innovators and technology entrepreneurs, centred around the Royal Academy of Engineering's Enterprise Hub. As part of this network, we will endeavour to maintain contact with all participants in the programme, and may periodically offer further opportunities for international networking and mentoring. We may also contact you for further updates about the progress of your business.

Contact

If you have any technical queries about the form, please contact Mahmoda.ali@raeng.org.uk.

Is it ODA?

The following guidance has been developed to provide general guidance on ODA compliance for the Academy's Newton Fund activities.

How the Newton Fund relates to the UK's Official Development Assistance

The Newton Fund forms part of the UK's Official Development Assistance (ODA) commitment which is monitored by the Organisation for Economic Cooperation and Development (OECD).

ODA funded activities focuses on outcomes that promote the long-term sustainable growth of countries on the OECD Development Assistance Committee (DAC) list and is administered with the promotion of the economic development and welfare of developing countries as its main objective. Newton Fund Partner Countries represent a sub-set of this list.

All applications under Leaders in Innovation Programme must be compliant with the ODA guidelines.

What activities can be funded under the Newton Fund?

Within the paper ['Is it ODA?'](#), the OECD defines ODA compliant research activities as follows:

"Research includes financing by the official sector, whether in the donor country or elsewhere, of research into the problems of developing countries. This may be either (i) undertaken by an agency or institution whose main purpose is to promote the economic growth or welfare of developing countries, or (ii) commissioned or approved, and financed or part-financed, by an official body from a general purpose institution with the specific aim of promoting the economic growth or welfare of developing countries. Research undertaken as part of the formulation of aid programmes in central or local government departments or aid agencies is considered as an administrative cost."

Some other categories of activity similar to potential Newton Fund activities are also counted as ODA [by OECD](#):

"Development-oriented social and cultural programmes provide basic facilities or training to enhance the social and cultural development of nationals of developing countries... As well as educational services, they will typically...include finance for the provision of books, periodicals, the creation or operation of libraries, provision of prizes, and the running of seminars, philosophy and humanistic studies, the consolidation of a recipient country's cultural heritage (including archaeological projects)..."

Any Newton Fund project therefore must make it clear that its primary purpose is to promote the economic development and welfare of developing countries. They should also consider how strengths of UK will be used to address the issue identified.

Challenge Area and Sustainable Development (Adapted from the GCRF UK Strategy)

This guidance and information relates to question 6 in Your innovation section (section 2) of the application form.

The UK already carries out world class research and is a world leader in international development. The three areas below provide an overarching framework for these two spheres to come together in a new way by increasing the scope and depth of research activities. They are a vision for change and not intended to constrain innovative approaches in other areas that also address these aims. The main areas are broadly consistent with the accepted notions of sustainability and are core to the SDGs.

Equitable access to sustainable development

Our vision is to create new knowledge and drive innovation that helps to ensure that everyone across the globe has access to:

- secure and resilient food systems supported by sustainable marine resources and agriculture
- sustainable health and well being
- inclusive and equitable quality education
- clean air, water and sanitation
- affordable, reliable, sustainable energy

Sustainable economies and societies

The pace, nature and patterns of economic growth are threatening the future of its climate and eco-systems and are placing a major burden on the Earth's resources. At the same time populations are increasingly shifting from rural to urban areas. Each of the five challenge areas listed above must be placed in the context of the need to create prosperous economies and societies. There is also a need to understand and address the local and global challenges of population growth and pressure on the environment and climate, as well as new socio-economic models based on enabling technologies such as digital technologies. Research and innovation is encouraged that in the longer-term, builds:

- sustainable livelihoods supported by strong foundations for inclusive economic growth and innovation
- resilience and action on short-term environmental shocks and long-term environmental change
- sustainable cities and communities
- sustainable production and consumption of materials and other resources

Human rights, good governance and social justice

It is increasingly recognised that development, human rights, good governance and social justice are indivisible. Developing an understanding of the institutions that embed and promote human rights, good governance and social justice - and the means to

strengthen these - is paramount. Progress against the pursuit of the SDGs has been particularly challenging in fragile and conflict-affected states, while multiple refugee crises are applying mounting pressure in countries of origin, transit and destination. Research and innovation is supported that enables us to:

- understand and respond effectively to forced displacement and multiple refugee crises
- reduce conflict and promote peace, justice and humanitarian action
- reduce poverty and inequality, including gender inequalities.