Royal Academy
of Engineering

Frontiers Champions

Application Guidance Notes

Deadline:
16 November 2023
2pm (UK time)

All questions to be sent to
frontiers@raeng.org.uk

Contents

Introduction to Frontiers programme and Royal Academy of Engineering

The Royal Academy of Engineering is driving sustainable solutions and an inclusive economy. Collaborating with Fellows and partners, we cultivate talent, foster diversity, and influence policy to address global challenges.

Frontiers empowers researchers, innovators, and practitioners worldwide to collaboratively solve complex global challenges. Through interdisciplinary thinking, we catalyse creative solutions, fostering a lasting global community for a sustainable and inclusive society.

Frontiers Symposia: These highly interactive and curated symposia convene early-mid career academics, industry professionals, NGOs, and policymakers around a topic related to the Sustainable Development Goals (SDG). Events foster diverse, collaborative and impactful partnerships to tackle local and global challenges.

Frontiers seed funding: Grants of up to £20,000 are awarded to support successful collaboration bids following the symposia.

Frontiers follow-on funding: scale seed-funded projects with funding of up to £300,000 over three years.

Frontiers Champions: Former participants can apply for up to £10,000 over one to build networks around challenges that benefit specific communities.

Frontiers Champions Overview

Frontiers Champions will:

Bring together global and regional networks of researchers, practitioners, and innovators

Convene a community of peers who are tackling global challenges

Become leaders of their community and inspire engagement in international development challenges

These grants support former participants to build on the networks they formed at a Frontiers symposium. Champions will convene peers via regional or thematic events, fostering an international community of researchers, innovators, and practitioners. Networks are vital for addressing complex global challenges: while the Frontiers Symposia initiate connections, the Champions advance them by taking agency and ownership of their success.

Frontiers Champions undertake community building activities such as networking events, webinars, meet-ups, and workshops. This benefits the communities and is an excellent opportunity for professional development. For example, it may be used as evidence for professional accreditation systems.

Each Champion arranges at least one event, employs innovative methods for inclusive, impactful gatherings, and engages in quarterly calls with Academy staff and their peers to share lessons learned from their project. The Academy supports Champion events with promotion, peer-to-peer learning opportunities, and provision of Fellowship members and staff participation, when appropriate.
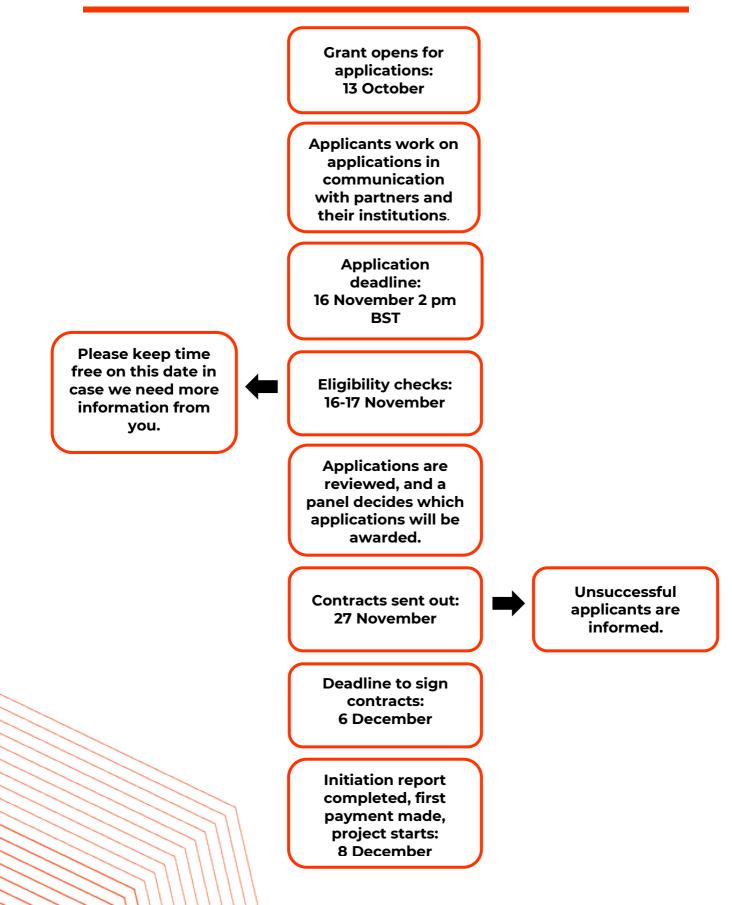
Award value: Up to £10,000

**Deadline for submissions:
16 November 2023, 2.00pm (UK time)**

Projects must begin on or before 8 December 2023

**Projects must be up to 12 months and finish on/before 8 December 2024.
Final reports will be due in January 2025.**

Application and award process

Grant opens for applications:
13 October

Applicants work on applications in communication with partners and their institutions.

Application deadline:
16 November 2 pm BST

Please keep time free on this date in case we need more information from you. ← Eligibility checks: 16-17 November

Applications are reviewed, and a panel decides which applications will be awarded.

Contracts sent out: 27 November → Unsuccessful applicants are informed.

Deadline to sign contracts:
6 December

Initiation report completed, first payment made, project starts:
8 December

Expectations of Frontiers Champions

Frontiers Champions will commit to:

- Arrange at least one event, online or in person.
- Participate in quarterly calls with the Academy to update on project progress and connect with your fellow Champions.
- Stay in regular contract with the Academy, strive to be a role model to others, and engage with peers around the world.
- Complete all required reporting and contracted activities on time – stay in touch with the Academy if things change.

The Academy will provide support to the Frontiers Champions, including:

- Help to build your profile, including development of a Frontiers Champions profile and promotion via social media. We will actively put you forward for other opportunities offered by the Academy and our partners.
- You will have the opportunity to input into the Frontiers newsletters to promote your activities, ask for input, and access the 1200+ strong Frontiers' network of innovators, researchers, and practitioners in more than 60 countries around the world.
- In addition to joining the Academy's Awardee Excellence Community, we will connect you directly with specific members of the Frontiers community, wider Academy international networks and Academy Fellowship, on request.
- When you have exciting news to share, related to your community building activities, we can share it via our social media channels, helping to build your profile.
- We hope that being a Frontiers Champion will be seen as prestigious and an indicator of excellence. If there are other ways we can support our network of Champions, we will remain open to suggestions!

Eligibility Criteria

1. The Frontiers Champion must have attended a Royal Academy of Engineering Frontiers Symposium (including Frontiers of Engineering for Development and Frontiers of Development events) since November 2016.
2. In this round, the benefits of the projects will accrue in one or more of the following countries:
   - **Africa**: Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania and Zambia, Kenya, South Africa.
   - **Asia**: Afghanistan, Bangladesh, Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, Timor-Leste and Yemen, India, Indonesia, Malaysia, Philippines, Thailand, Vietnam.
   - **Caribbean and Latin America**: Haiti, Brazil.
   - **Pacific**: Kiribati, Solomon Islands and Tuvalu.
   - **Middle East**: Turkey, Egypt, Jordan.
3. The lead applicant must be affiliated with an organisation, institution or University that can help administer the funding (this funding will not usually be paid to an individual). Please note that, on award offer, applicants may be required to undergo due diligence checks before the award is confirmed.
4. The proposed activities must be designed to convene a community of researchers, innovators and practitioners who are working to tackle one or more Sustainable Development Goal (SDG), and aligned with ODA requirements. Events should be interdisciplinary and inclusive in nature.
5. Events **must not** be closed and exclusive to a specific, invite-only group – they should be open to as many previous Frontiers event participants as possible, appropriate, or practical.
6. Individuals are limited to **one application**.
7. There is no requirement for applications to focus on engineering, or for the Frontiers Champions to be engineers. However, applicants should consider how they will innovatively use technology to engage people in their activities.
8. Efforts towards gender equity and equal representation will be looked upon favourably. Projects must not harm gender equality, and where possible must promote it (even when impacting gender equality is not the primary research or innovation objective). This will be considered in the application review.
9. The eligible costs are detailed on page 18 of this document.

Diversity and inclusion policy and monitoring

The Royal Academy of Engineering encourages applications from all underrepresented groups. No applicant will be disadvantaged or receive less favourable treatment because of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender, or sexual orientation.

Before completing the application form, applicants are asked to complete a Diversity Monitoring Form to help the Academy monitor and assess its diversity and inclusion policy. The information will be treated as strictly confidential, nonattributable and only reported when collated. It is gathered, stored and used in compliance with the Academy's Policy Notice in line with the General Data Protection Regulations 2018. The information will only be used for statistical purposes with access restricted to staff involved in processing and monitoring the data. It will not be seen by anyone involved in any selection processes. No information will be published or used in any way that identifies individuals. The Academy will retain personal information as per our Data Retention Policy.

In addition, in this round we ask all applicants to consider and describe the impact of their proposed activities on people of different genders. This could include any measures you will put in place to ensure equal opportunities, any expected impacts on different groups, or any outcomes or outputs that you will measure disaggregated by gender. You should consider this all the way through your project planning, especially in the scoping stages, so that it is embedded from the beginning.

How To Apply

The application form has **six main sections** and should take around one hour to complete, assuming you have written your answers to the questions offline and merely need to enter the information, rather than compose it.

All applications must be submitted via the Academy's online application system at **https://grants.raeng.org.uk**

The applicant must first register with the system and provide some basic log-in details to create a profile.

After logging in to the online system and selecting 'Frontiers - Champions' you should be presented with the 'Instructions' screen. You will see some general instructions on how to use the system as well as the following list of the five sections of the application form as listed below.

The applicant will need to provide a letter from the appropriate Research Grants Office (or equivalent) confirming the application is approved. Details of this can be found on page 20

Applicant and institution details

Project details

Challenge details

Goals, objectives and outcomes

Budget

Support and declaration

At any stage in the application process, you can save your progress and return to the application later. You can answer the questions in any order you like so it is possible to skip some sections and return later.

Things To Consider

Equitable Partnerships

The Academy is committed to support the embedding of practices which ensure equity in the design, delivery, and dissemination of research. Not all Champions' projects will require collaboration agreements, but where they do we recommend you consider:

- Transparency in the partnership agreement - the grant contract requires that this must be in place within the first three months of your project.
- Consider the time it takes to build an international partnership, especially remotely, and build a timeline for this into the design of the project.
- Think about whether your project includes a diverse set of perspectives.
- Think about how to embed equality into the division of labour in the project.

For further resources on equitable partnerships please visit the UKCDR Equitable partnership resource hub and refer to the Global Code of Conduct for Research in Resource Poor Settings and familiarise yourself with the Adaptation Research for Impact Principles.

Interdisciplinarity

Interdisciplinary research is defined as "a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice."[1]Alternatively, speak to one of the Frontiers team for support.

Other Resources

The Frontiers programme has some other resources that may be useful for your projects as they progress. Visit the resources section of the website for information.

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[1] Committee on Facilitating Interdisciplinary Research, Committee on Science, Engineering, and Public Policy (2004). *Facilitating interdisciplinary research*. National Academies. Washington: National Academy Press, p. 2

Artificial Intelligence (AI) Guidelines

The following guidance must be followed by any applicant considering the use of generative AI to develop their application:

1. You are responsible for all of the content in your grant application. The grant process does not penalise the use of generative AI tools, but you must make sure that the application represents your own voice and ideas.

2. Be rigorous in your approach to check any content generated by AI, and make sure you avoid any 'hallucinated' references or factual errors. These will be perceived as a lack of rigor by reviewers, which will negatively impact the assessment of the application.

3. Do not solely rely on generative AI tools to write the grant application! While these tools may assist you, the application must primarily represent your own original work.

4. Plagiarism is never acceptable: some AI tools use ideas from other human authors without proper referencing. To make sure you avoid this pitfall, check that all sources are appropriately attributed.

5. If you do use generative AI tools to help write your application, you must acknowledge the name of the tool you used, and tell us how you used it. For example:

   - "I acknowledge the use of [insert AI system, version number and link] to generate materials for background research / styling / proofreading."
   - "I acknowledge the use of [insert AI system(s), version number and link] to generate materials that were included within [insert section titles] in modified form."

Application Questions

1. Applicant and Institution Details

Question	Information
1. **Applicant details**	This should be the contact information of the lead applicant, who is the prospective Frontiers Champion.
2. **Institution or Organisation details**	This should be information related to the organisation that will administer the grant on your behalf – for example, if you are a UK-based academic this will usually be your university.
3. **Institution/organisation website**	Input a link to the website of the institution or organisation that will administer the grant on your behalf.
4. **Please submit your CV**	Your CV must be no longer than three pages. You do not need to include your contact details.
5. **Have you received any other grant funding from the Academy?**	Provide a list of any other grant funding that you are a named lead applicant or collaborator on, given by the Royal Academy of Engineering. If none, please leave this blank. You may also include any funding from the other UK National Academies (The Royal Society, The British Academy, or the Academy of Medical Sciences).
6. **Which Frontiers Symposium did you attend?**	Select which Frontiers event you attended, from the list. You may select more than one.
7. **Why do you want to be a Frontiers Champion?**	Tell us why you are the right person for the role. Outline the aspects of your expertise that will make you a good Frontiers Champion and tell us what you believe you will get out of the programme. (maximum 300 words)

2. Project Details

Question	Information
1. **Project Title**	The essence of the project should be captured in the title and should be as informative as possible. Ensure that it is understandable to a non-specialist reader. (maximum 10 words)
2. **Abstract**	The project summary should provide an overview of the project, a brief overview of your aims, activities, and the benefits of the project. Ensure that it is understandable to a non-specialist reader. (maximum 300 words)
3. **Total grant sought from the Academy**	The value requested should be up to £10,000.
4. **Project start date**	Projects must start on, or before, 15 December 2023
5. **Project end date**	Projects can be up to 12 months long and must finish on, or before, 13 December 2024

3. Challenge details

Question	Information
1. Please select the primary Sustainable Development Goal **that your project will address from the list below.**	You must select one SDG – this should be the SDG that your project will primarily address. There is also an option to select up to two additional SDGs that your project will impact.
2. Indicate the country or region that your project will primarily focus on	You should write only **one** country or region, that your project will primarily focus on. Some projects may be truly global – if you believe that this is the case, you may write "global" here. There is an option to list any other countries or regions that your project will directly impact – this should take the form of a list, not an explanation. Remember, being specific will count in your favour. Make sure the benefits of the projects accrue in one or more of the following: **Africa**: Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania and Zambia, Kenya, South Africa **Asia**: Afghanistan, Bangladesh, Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, Timor-Leste and Yemen, India, Indonesia, Malaysia, Philippines, Thailand, Vietnam **Caribbean and Latin America**: Haiti, Brazil **Pacific**: Kiribati, Solomon Islands and Tuvalu **Middle East**: Turkey, Egypt, Jordan (maximum 15 words).

3. How will your project address this SDG(s)?	Explain how your project will address the Sustainable Development Goal(s) that you have selected, and why it is needed to address this goal(s), in the country, countries, or region(s) indicated above. (maximum 400 words)
4. How have you considered gender equality in the project or activity design?	In line with the UK Government's Gender Equality in Research and Innovation Policy, all successful applications to this scheme must demonstrate consideration of the activities on gender. All funded activities will, and at a minimum, ensure that no harm is done to gender equity. To this end, please outline any specific gender considerations and implications for your proposed project. This could include any measures you have put in place to ensure equal opportunities, any expected impacts on people of different genders, or any outcomes or outputs that you will measure disaggregated by gender. (maximum 400 words)

4. Goals, Activities, Outputs, Outcomes, and Impact

This section outlines the logic of planned activities and their impacts. The application form will include a table with headings matching the below, including space for short explanations. A clear framework helps reviewers assess the proposal. For more information, please refer to this resource.

1. **Complete the table in the application form. It is expected that you will have at least three clear objectives, as follows:**

Objective	Activities	Outputs	Outcome	Impact

Question	Information
2. Timeline of activities	Please indicate when each activity will be taking place. (maximum 800 words)
3. Pictures and diagrams (optional)	Upload any pictures and/or diagrams related to your project. These should be formatted as a single document where possible.
4. Expected impact of the network	Use this section to explain the expected impact or your networking activities more broadly, including who will benefit from the project. (maximum 300 words)
5. How will the project achieve an interdisciplinary approach?	Detail how you will focus on and achieve interdisciplinarity throughout the project. Successful interdisciplinary networks comprise of two or more disciplines or bodies of specialised knowledge to advance fundamental understanding of to solve problems whose solutions are beyond the scope of a single area of research practice. Please show how your project will include perspectives and use methods from other disciplines. (maximum 200 words)

6. **How will you ensure that your activities are inclusive and embody best practise for equitable partnerships?**	More information on best practice for equitable partnerships can be found [here.](#) (maximum: 300 words)
7. **Measuring success**	Describe how you will monitor the project and measure success (Guide: 300 words)
8. **Risks and mitigation**	Outline any significant risks that the project may face and how you will take action to mitigate them. Please note that this will be an important consideration for reviewers, especially if you plan any in-person activities, so ensure you pay it particular attention. (maximum: 350 words)

5. Funding Requested

Question	Information
1. Cost breakdown	Please provide a breakdown of the funding requested using the table in the application form. Allowable costs and funding guidelines are listed below.
2. Other funding or in-kind contributions	Optional: if you have other funding, an offer of funding, or any in-kind contributions that will supplement the funding from this grant and contribute to the success of the project, please detail them here.
3. Justification of costs	Give a narrative description of what resources are requested and why.

Costs and Funding Guidelines

- Please note that the funding provided by this scheme is ***not*** calculated on the basis of full economic costs.
- There is no set limit on how much you can claim between the directly incurred cost headings.
- The totals may come to more than the maximum funding you can request under this scheme. Additional costs must be met from elsewhere. If this is the case, please outline any contributions and identify where they will come from.
- The host institution(s) can include up to 10% of the grant as a contribution to project management, administrative and other running costs.

Travel costs
- This should include local or international travel costs for the project lead, and any attendees, speakers or event staff.
- This line can include accomodation, subsistence and visas.
- Subsistence costs should reflect the normal rates applied at the host institution/s. All costs should be based on the best value option available.

Event costs
- This should include venue hire and catering, and should reflect normal rates applied by the host organisation or institution. All costs should be based on value for money.
- This budget line can include staff costs directly related to event logistics or translation services.
- Small stipends, typically not exceeding 5% of the total grant, can cover expenses enabling local community groups, indigenous people, women, young people, or students to participate in the project.

Marketing costs
- This cost line should include any cost related to social media, marketing or advertising. This can include consultancy (based on best value for money options).

Website and design costs
- This includes webinar and website hosting, including membership to online services and costs for hosting an online event.
- This line can also include design costs related to your project.

Other Costs
- This may include costs realted to printing, distribution, or disemination of project outputs.
- Competition prizes.
- This line can also include a range of other relevant costs – details should be given in the "justification of costs section."
- If your proposed costs deviate from these parameters, please contact the Academy for a case-by-case discussion of potential eligibility.
- Other necessary service provisions directly related to the project, such as translation or IT services, are eligible up to 5% of the grant

The following costs are NOT eligible:
- Indirect costs, including overheads.
- Where staff costs are claimed, only the direct staff costs are allowed.
- Purchasing of equipment or research costs.

At the end of the project, any unspent funding awarded will be repayable to the Academy.

6. Support and Declarations

Organisation/Institution/university declaration
The purpose of the declaration is to confirm that the application is acceptable in principle to the organisation, institution, or University, and that it has received all necessary internal authorisations.

The declaration terms must be on headed paper and be signed by an appropriate officer from the Research Grants Office or equivalent (for example, the person or people that will administer the grant funding) of the applicant's institution, university, or organisation. Digital signatures are allowed. A scanned copy or PDF of the letter should be uploaded onto the online form. The terms that the declaration must contain are as follows – it is important that the **exact phrasing is used. Please copy this table directly into the declaration**:

The applicant will be employed by the organisation/research institution/university for the duration of the award. **OR** The organisation/research institution/university commits to maintaining a relationship with the awardee such that the organisation/research institution/university will administer the grant funds on their behalf.	
The applicant will be given full access to the facilities, equipment, personnel, and funding as required by the application.	
The costs submitted in the application are correct and sufficient to complete the award as envisaged. Any shortfall in funding will be met by the institution/university/organisation.	

Applicant declaration

The applicant is required to make the following declaration:

I confirm here and by submitting this application that:
- all information is accurate at the time of submission.
- the ideas presented are my own and not plagiarised or containing IP that is not owned by myself.
- all contributions have been appropriately referenced or credited including the use of any online tools such as AI generative tools used in developing my application.
- I understand that failure to cite and declare references or sources will result in my application being removed from the process.
- I understand that my application and any content including IP shared within will be shared with reviewers as part of our application process.
- I have the express permission of any individuals whose contact details I have shared as part of this application process, to share these details with the Royal Academy of Engineering.

Acknowledgement in using AI tools

If you do use generative AI tools to help write your application, you must acknowledge the name of the tool you used, and tell us how you used it. For example:
- "I acknowledge the use of [insert AI system, version number and link] to generate materials for background research / styling / proofreading."
- "I acknowledge the use of [insert AI system(s), version number and link] to generate materials that were included within [insert section titles] in modified form."

Assessment of applications

Applicants will be evaluated by a panel including Academy fellows and experts from relevant disciplines. Each application will be assessed by a minimum of two panel members, one of whom will have technical expertise in the application, and the other will be a general reviewer. Reviews are followed by a Sift Panel, where the final decision will be made and communicated to applicants by 1 December.

All applications will be assessed against the following criteria:

The impact on gender:
The impact on gender will be assessed in eligibility checks and marked against the following criteria:
- Fail – Insufficient gender considerations, potentially negative implications that are not addressed.
- Pass – Comprehensive gender considerations, no obvious negative impacts OR, a clear pathway to a positive impact on gender equity.

*Note: Applications assessed as failing will have the opportunity to amend their response. A "fail" score after the chance to revise will result in the application being rejected.

Progress towards one or more of the SDGs:
- The aim to make progress towards one or more of the SDGs.
- The challenge is well defined, and the project well designed to address a specific regional or thematic challenge.

The quality of the project
- The proposed project including the objectives, interdisciplinary approach, pathway to impact, and dissemination.
- The potential of the proposed project to build relevant and inclusive networks.
- The ability of the proposed project to ensure equitable partnerships, and to achieve the project objectives.

The outcome and impact
- Potential benefits and impact of the project.
- Potential impact on an identified sustainable development challenge.

Suitable and realistic budget
- A suitable and realistic budget has been included, including a breakdown of the costs involved in the project.

Monitoring

Awardees will submit reports as outlined below. All reports will be submitted via the Academy's Grant Management System. You will receive more information regarding the reports in your funding pack should your application be successful.

Initiation report – by 8 December 2023

Mid-term report – 14 June 2024*

Final report – 14 February 2025

Follow-up report – 14 February 2026

*The Mid-term report will demonstrate that:
Significant activity has been undertaken in the first three months of your project. This can include kick-off meetings, more detailed project scoping and planning, achieving further sign-off from collaborators (if needed), etc. It does not need to be data collection or significant steps towards the project objectives but should demonstrate that you have laid the groundwork for the rest of the project.

Please note that non-UK organisations, and UK organisations except UK Universities, Government, and most UK research institutes will be required to complete due diligence checks before we disperse any funding.

Any changes to the timeline of the project will need to be submitted before May 2024.

FAQs and further questions

If you have questions about the application or assessment process, please email Frontiers@raeng.org.uk.

Visit our FAQs page to check answers for the frequently asked questions on Frontiers Champions.