

Access Mentoring Applicant Guidance Research Fellowships 2022/2023

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Rationale

The Academy's overarching goal for 2025 is to harness the power of engineering to build a sustainable society and an inclusive economy that works for everyone. As part of delivering this goal, the Academy will work to foster talent and diversity so that the UK has a world-leading and truly inclusive engineering workforce. This should be reflected in the awardees of the Academy's grant schemes.

Aim

To provide additional support to applicants from groups that are persistently underrepresented within UK engineering through the grant application process. This [positive action](#) will contribute to improving diversity in the talent pipeline and widening the diversity of applicants and awardees within the Academy's research grant schemes.

The process will be run in the May 2022 Research Fellowships (early-career post-doctoral researchers) call.

Research Fellowship summary

The Academy supports Research Fellowships (Research Fellowship and Engineering for Development Research Fellowship) each year to support

outstanding early-career researchers to become future research leaders in engineering. The scheme's objectives are to:

- support the best early-career researchers in establishing their independence and international reputation.
- provide long-term support enabling the pursuit of an ambitious programme of engineering research and impact.
- develop ambassadors for the Academy and advocates for STEM (science, technology, engineering, and mathematics) disciplines.

Applicants must have a PhD awarded in the last four years.

Research Fellowships must be held at a UK higher education institution/university or at a UK research organisation that is eligible to receive UK Research and Innovation (UKRI) funding, and which has a capacity to support research and researchers in engineering.

The award value is up to **£625,000 over five years**, at 80% of full economic costs.

The annual call takes place May to September, with awards to start August to October in the following year.

In addition to the direct financial support, the scheme benefits include:

- An opportunity to establish a research track record and in turn be in a stronger position to apply for additional funding and grow own research team.
- Mentoring support from an Academy Fellow to offer advice on research and career development.
- Reduction of teaching and administrative duties to dedicate time to research.
- Training opportunities.
- Networking opportunities with other Research Fellows and Academy Fellows.

Why Research Fellowship applications are unsuccessful

The most common reasons applications are unsuccessful are given below:

Host institution	Not explaining the choice of host institution.
Independence	Lack of independence in research.
Collaboration	Unclear on collaborators, and potential collaborator plans including industrial/ clinical collaborations.
Competitors	Not knowing and acknowledging competitors.
Vision	Vision and ambition not clearly explained. Not demonstrating potential to become future research leader.

Novelty	Proposal lacking novelty and explanation of potential impact.
Realistic	Unrealistic in terms of overstating potential impact. But also, milestones, resources, and the applicant's ability.
Support	Lacking a strong letter of support from host institution.
Communication	Poor communication skills, both written and verbal. Inconsistent/unclear information provided in the application form.

Eligibility

Applicants will need to meet the following criteria to qualify for Access Mentoring:

1. Meet the eligibility criteria for a Royal Academy of Engineering [Research Fellowship](#).
2. To be from an underrepresented group in engineering, specifically:
 - **Women**
 - **Black people including those with any mixed ethnicity with Black ethnic background(s)**
 - **Disabled people**

The Academy accepts applicants' self-declaration on the above identified underrepresented groups under the host institution's guidance.

All candidates, including those from the identified underrepresented groups, must meet the assessment criteria for the Research Fellowship scheme, detailed in the [applicant guidance notes](#).

Eligible applicants are not obligated to undertake Access Mentoring.

Mentors

Access Mentors will be Fellows of the Academy or Research Fellowship alumni.

Mentor/mentee pairing

- Mentees will be matched with a mentor at the Academy's discretion.
- Mentor and mentees will not be matched based on research discipline or any other criteria.
- Mentees will be matched with a mentor up to the capacity of the mentors.
- Mentors will be from a different institution to the applicant.
- A mentor may have multiple mentees.

Mentor role

Access Mentors will provide the applicant with advice in producing a high-quality application aligned to expectations of the scheme. The applicant is not obligated to follow the Access Mentor's advice and should use their judgement and act accordingly in their best interest and that of their proposal. The mentor is not responsible for the outcome of the application. Mentors will not review their mentees application in the scheme review period.

An Access Mentor does:

- Read the application and suggest areas of improvement
- Listen and give their time
- Support, encourage and challenge
- Provide a framework to look at options, to understand implications and to plan future action
- Share experiences where relevant
- Signpost, if asked, information and resources – including people/networks.

An Access Mentor does not:

- Collaborate on research
- Apply jointly for grant funding
- Get involved in matters relating to status, promotion, or payments
- Directly act on behalf of a mentee
- Judge the actions the mentee takes.

Format

Applicants will meet with their allocated mentor for a 1-2-1, one-hour meeting (approximately) at their mutual convenience. Mentors will receive a draft copy of the application in advance of the meeting. The Research Fellowships scheme deadline is 20 September 2022. The mentor meeting will take place no later than 13 September 2022 (one week before the scheme deadline).

Meetings will be held virtually. If both the mentor and mentee agree, meetings may be held physically if safe to do so under the UK government's COVID-19 guidance at the time of the meeting. Any subsequent meetings are at the discretion of mentor and the mentee.

Once the application has been submitted the Access Mentoring relationship officially ends. Once the application has been submitted the mentor will not provide any further advice or support on the application.

The Academy and mentor are not liable for the information that is disclosed by the mentee.

Application limit

For Research Fellowships the standard application limit for each host institution is two applications, but the host institution can submit up to four applications (either Research Fellowships or Engineering for Development Research Fellowships) as part of our positive action initiative with the following conditions:

- If the submission is four applications, at least two of the four applications must be submitted by candidates from the identified underrepresented groups
- If the submission is three applications, at least one of the three applications must be submitted by a candidate from the identified underrepresented groups
- If the submission is one or two applications, the application or applications do not need to be submitted by candidates from the identified underrepresented groups. However, the expectations of host institutions above still apply.

Therefore, up to a **maximum of four** candidates per institution can apply for access mentoring providing they meet eligibility criteria and submit a full application to the Research Fellowship grant scheme.

PLEASE NOTE: Access Mentoring is a resource limited opportunity. Applicants do not need to wait until the deadline to submit their application and can be matched with a mentor as soon as the application is approved. Early submission is encouraged.

PARTICIPATION IN ACCESS MENTORING DOES NOT GUARANTEE THE APPLICATION WILL BE SUCCESSFUL.

ACCESS MENTORING IS CONFIDENTIAL. ALL CANDIDATES ARE TREATED EQUALLY. CANDIDATES WHO RECEIVE ACCESS MENTORING ARE NOT DISCLOSED TO THE REVIEW PANEL.

Application form

Access Mentoring applications are to be submitted via the Academy's [grant management system](#). The Access Mentoring application process is separate to that of the Research Fellowship. Applicants should ensure they adhere to the Research Fellowship application guidance.

Access Mentoring application **deadline is 4pm Tuesday 16 August 2022**. This is subject to capacity of mentors being reached and may close sooner.

1. Applicant details

Q. Applicant name and contact details

Please provide your name and preferred contact details. You should also provide the details of the host institution where the Research Fellowship will be held and confirm that this is the 'host organisation'.

Q. Research Fellowship eligibility

Applicants will need to meet the eligibility criteria for a Royal Academy of Engineering Research Fellowship. Please confirm that you have understood and met the Research Fellowship eligibility criteria by stating your Research Fellowship application reference.

Q. Access mentoring eligibility

To qualify for access mentoring applicants will need to be from an underrepresented group in engineering, specifically:

- **Women**
- **Black people, including those with any mixed ethnicity with Black ethnic background(s)**
- **Disabled people**

Please select from the drop-down list what Access Mentoring eligibility criteria you meet. Please select the options that are applicable to you.

Q. Mentoring

What are the key attributes you would look for in a mentor and how do you think they would be able to help you? What specific areas would you like advice on? 100 words maximum.

2. Project details

Q. Project title

The essence of the research should be captured in the title and should be as informative as possible. Please ensure that it is understandable to a non-specialist reader. 10 words maximum.

Q. Project summary

Describe the research in terms that can be understood by a non-specialist reader. 100 words maximum.

Q. Subject category

Select one single broad engineering category that best describes your research proposal. If your research proposal fits into several categories, please pick the category that is most applicable to your proposal. See Annex 1 for subject category descriptions.

Q. Please provide keywords relating to the project

You may wish to include relevant words from the subject categories provided. 10 words maximum.

3. Declarations

Q. University declaration

The declaration from the applicant's host institution/university should be completed by an appropriate officer/position from the central research grants office or equivalent. The letter should be on headed paper and should carry the signatory's name and position and the institution/university's official stamp (if applicable).

The declaration must confirm the application has been approved by the institution/university and **must contain the exact wording** given in the box below, as well as any further remarks the university wishes to make. Applicants and Institutions are encouraged to be mindful of their internal selection

processes and plan accordingly. **The submission deadline will not be extended due to an individual's unavailability.**

On behalf of the institution/university I can confirm that I have read and accept the application guidance and other information regarding this scheme, which is provided on the website of the Royal Academy of Engineering. I also confirm that:

- The applicant meets the eligibility criteria for Academy's Access Mentoring scheme.
- The applicant meets the eligibility criteria for Academy's Research Fellowship scheme.
- Access Mentoring will not be used to influence the institution's internal selection or shortlisting processes.
- The applicant will submit a full application to the Academy's Research Fellowship scheme.
- I am authorised to approve the submission of applications for funding and this application has successfully met all our internal approval procedures.

Q. Applicant declaration

Please complete the application with your full name and position once you have read and understand the declaration written in the application form. Once the entire application form is completed, a grey 'submit application' button will become available to the top right of the screen.

Q. Marketing: where did you hear about access mentoring?

This question is optional but helps the Academy to understand which marketing materials are most successful at reaching the academic community to improve future communications work.

Please note that once submitted the application cannot be edited, but you may view it from your GMS account.

Timeline

Milestone	Date
Access Mentoring opens for applicants	24 May 2022
Research Fellowship call opens	24 May 2022
Access Mentoring application deadline. This is subject to capacity of mentors being reached and may close sooner	4pm, 16 August 2022
Mentor-mentee pairing	August 2022
1-2-1 meetings	August 2022
Research Fellowships call deadline	20 September 2022

Feedback

On completion of the Access Mentoring process, applicants will be asked for feedback via a survey on the Access Mentoring process so it can continue to be refined and tailored to be of most value.

For all queries, please contact the Keir Bonnar (Programme Manager, Research) at keir.bonnar@raeng.org.uk.

Annex 1 – Subject categories

1) Civil, construction and environmental

Including aspects of civil and structural engineering; construction materials; earthquakes; wind and fire engineering; building engineering physics; construction management; numerical modelling; environmental engineering; water resources and flooding; offshore and coastal engineering; hydraulics; climate change and sustainability; waste management; geotechnical engineering; geomatics/surveying.

2) Materials and mining

Including metallurgy; metal forming; corrosion; failure analysis; structural integrity; non-destructive testing; inspection technologies; failure prevention; fabrication and repair technologies; welding and joining technologies; discovery and development of mineral resources; extraction and processing of minerals; mining engineering; materials performance; materials research; plastics and composites; structural materials (excluding materials specifically covered elsewhere).

3) Chemical and process

Including all aspects of chemical and process engineering; aspects of fuel technology; oil; coal and gas technologies; carbon; carbon sequestration; clean technology; combustion; catalysis; particulates; food processing; fermentation processes; pharmaceutical engineering; biotechnological processes.

4) Aerospace

Including all aspects of aeronautical engineering and aerospace manufacturing; turbomachinery and aerothermal engineering; avionics; radar systems; antennae; satellite systems; autonomous systems; aspects of systems engineering; airlines; materials for aerospace.

5) Transport and mechanical

Including all aspects of mechanical engineering; automotive; rail and marine engineering; transportation infrastructure; engines; turbomachinery; mechatronics; acoustics and vibrations; ultra-sonics; heat and thermodynamics; fluid dynamics.

6) Manufacturing and design

Including manufacturing management and manufacturing process innovation; manufacturing business improvement and re-engineering; CAD/CAM; robotics for manufacturing; engineering design.

7) Electrical and electronic

Including electrical, electronic and control engineering; design for electronics; aspects of nanotechnology and semiconductor engineering; lasers; optoelectronics; photonics; microwave engineering; instrumentation; display technology; solid state electronics.

8) Energy and power

Including energy technologies; electric power and energy systems engineering; nuclear and renewable energy generation; energy infrastructure; management of energy and energy resources for generation, storage, and transmission; distribution and conversion of electric energy and power; electricity supply and energy conservation; hydrogen power; fuel cells.

9) Medical and bioengineering

Including all aspects of medical and biomedical engineering; orthotics; prosthetics; ultrasound for medicine; medical scanning and imaging; drug delivery; biomedical materials; tissue engineering; medical devices; medical robotics and computer assisted surgery.

10) Computing and communications

Including computational and software engineering; informatics; web and data science; telecommunications; mobile telephony; broadband; wireless spectrum; signal processing; television, film, and broadcasting; computer and video games; special effects.