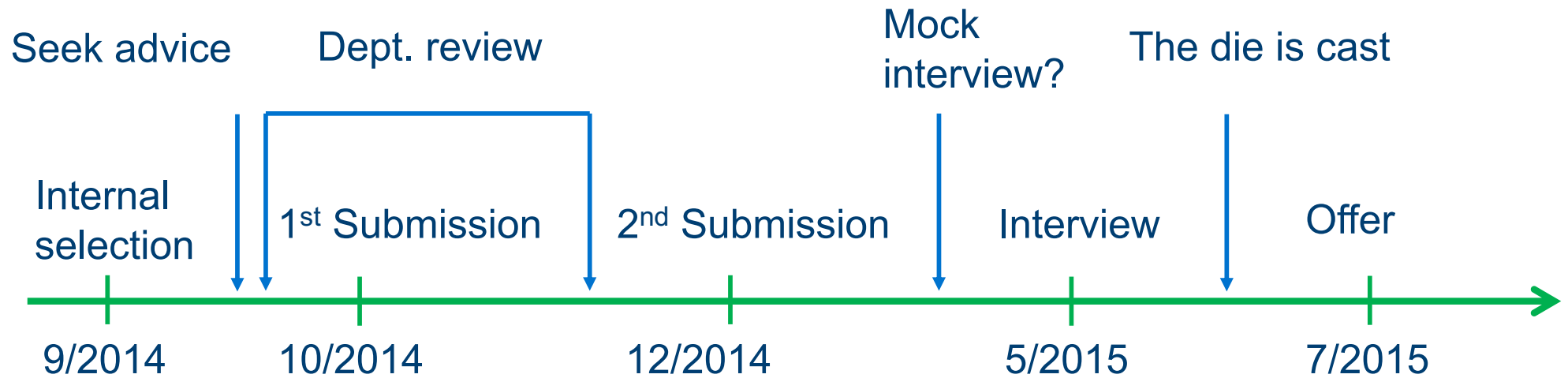# Part of my experience with the Royal Academy of Engineering (RAEng) research fellowship application

Luca Magri

# Summary of my RAEng research fellowship application

Open to all UK universities. Max
3 candidates per university.

Some basic requirements

- You must not have a permanent position

- PhD students may apply. Award needed before starting RAEng fellowship

- PhD award no more than four years prior to submission

- Check https://www.raeng.org.uk/grants-and-prizes/support-for-research/raeng-research-fellowship for more details

Writing the proposal takes months
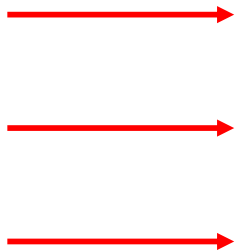
Number	Page	Est. time to complete	Status	Required documents	
1	Applicant and institution details	5 mins	Complete		View
2	Beneficiary/recipient details	1.5 hours	Complete	1 / 1	View
3	Project details	1 hour	Complete		View
4	Case for support - part one	3 hours	Complete		View
5	Case for support - part two	2 hours	Complete	1 / 1	View
6	Collaborations	1 hour	Complete		View
7	Resources Requested	1 Hour	Complete		View
8	Statements of support and declaration	1 hour	Complete	2 / 2	View

2nd stage

Case for support

1st Stage

- Goals and objectives

- Methodology

- Reference list

- Risks

- Timeliness and novelty

- Beneficiaries and impact

- Exploitation

2nd Stage

- Choice of host institution

- Mentor

- Dissemination and public engagement

- Gantt chart

- Project management

- Ambitions and future plans

Example of collaboration letter

Re: Letter of Collaboration

Dear Royal Academy of Engineering committee,

This is a letter of collaboration in support of ⎯⎯⎯⎯⎯ application to the Royal Academy of Engineering Research Fellowship.

I agree to provide him with tangible contributions to his research, in particular

Interview

The interview will begin with your being introduced to the Interview Panel by an Academy staff member. You will then be asked to begin your 6 minute presentation. Your first slide will be displayed on screen when you enter the room and will serve as a background. Please note that this is a strict 6 minute limit and you will be held to this time. The presentation will be followed by a 24 minute question and answer session. For your presentation you are asked to prepare 4 PowerPoint slides addressing the following:

1. Introduction slide (containing only your name, Host University, project title – this slide will be showing on the projector when you enter the interview room)
2. Major aims and objectives of the research
3. Impact that the research will have on the economy and society
4. Your future career plans

Do not use any animations, transitions, hyperlinks or videos in your presentation – this is not a test of your ability to use PowerPoint creatively. Please ensure the presentation is not copy protected, and is saved in the '.pptx' format. For your reference, we use PowerPoint 2010 at the Academy, so please make sure your presentation is compatible with this version.

My four slides

- **Title slide** with my name and host institution.

- **Aims and objectives.**

- **Research impact.** Who cares, who can benefit, how it contributes to the betterment of society. Why you, why this, why now (see Mark Ainslie's presentation).

- **Career plans.**

- Keep it simple but not trivial. It is a lot about balance.

- Stick to the time you are given.

My experience with the application process

- **Proposal**. The ideas should be clear and well defined.

- **Proposal**. Some boldness is necessary (the dept. review helps make the proposal punchier) but avoid over-statements.

- **Mock interview.** I heard it is extremely useful.

- **Preparation**. Be prepared but do not over-prepare. Seeking advice is good, but too much advice may not be beneficial.

- Balance.

What possibly made my application go through

Honestly, I don't know the exact reasons, but here's my two cents:

- **Non-confidential letter of support from the HoD.** (No confidential reference letters for the application are required.)

- **Track record.**

- **The proposal.** Thought-through. Balance between broad picture/impact and details. Ambitious but realistic. Inspired by my PhD but not incremental.

- **The budget.** Motivated and justified.

- **Collaboration letters.**

- **The interview.** Addressed all the questions straight to the point.

- **Passion.**

Managing my project

- A few projects in parallel.

- Flexible fellowship

  o Some research questions have been addressed more quickly than anticipated

  o New research questions in the same field have arisen

  o Freedom.

- **Collaboration-based** networking.

From the RAEng website

ROYAL ACADEMY OF ENGINEERING

Common mistakes

The most common reasons applications fail are given below:

- Incremental research, lacks novelty.
- Lack of independence, e.g. from PhD supervisor or group.
- Poor communication skills, both written and verbal.
- Unrealistic, e.g. overstating the potential for impact of the research and the applicant's reputation.
- Lack of ambition – we're looking for future research leaders.
- Weak letter of support from the Head of Department.
- No industrial/clinical collaborations planned.

The most common administrative mistakes are given below:

- Poor spelling and grammar. Please get your application proof-read by someone outside of your field of expertise.
- The CV is too long. There is a three-page limit, if you submit a CV longer than three pages it will either be returned to you for quick amendment or rejected outright.
- The start and end dates do not match, e.g. if your start date is 1 January then your end date will be five years later, so 31 December, and not 1 January which would make your award longer than the maximum five years.
- Inappropriately high salary levels. These Fellowships are aimed at future leaders, but as they are early career Fellowships and we expect the salary to be in accordance with early career researchers, not Senior Lecturers.

From the RAEng website

ROYAL ACADEMY OF ENGINEERING

Interview

The interviews will be 30 minutes long, which includes a five-minute presentation from the candidate. It will be conducted by a generalist panel consisting of four Fellows of the Academy. Panellists will provide comments against each of the following assessment criteria:

1. Candidate and their career development
- quality and potential of the applicant to become a research leader in their chosen field
- potential to act as an ambassador and advocate for engineering research.

2. Research quality and vision
- quality of the applicant's research vision and their potential to establish an independent research career in their chosen field of engineering
- quality of the proposed research programme including: timeliness, novelty, vision and ambition.

3. Research environment
- quality and level of support and commitment to their career development by the host university
- quality and level of support and commitment from collaborators.

4. Beneficiaries and impact:
- Extent to which beneficiaries will benefit from the proposed research and the potential to translate research outcomes into societal and economic impact.

The ranking of candidates during the preceding Sift Panels will have no bearing at interview, with all interview candidates considered to have equal standing. Following the interviews the panel will rank the applications and select the top ranked candidates for awards.