Engineering Department Postdoc Committee

"Winning a Research Fellowship"

Dr Mark Ainslie, EPSRC Early Career Fellow

My Background

- **2009 – 2012 PhD (Engineering), Department of Engineering, Cambridge**

- **2012 – 2017 Royal Academy of Engineering Research Fellowship**

  Engineering interactions of magnetic and superconducting materials for electrical applications (£584k)

- **2017 –   EPSRC Early Career Fellowship**

  - *Portable, high magnetic field charging of bulk superconductors for practical engineering applications* (£902k)

EPSRC Fellowships

- Three types:

  - Postdoctoral, Early Career, Established Career

    https://www.epsrc.ac.uk/skills/fellows/

- Three step guide:

  - Competency profile

  - Fellowship priority areas

  - Application documents/process

Competency Profile

No eligibility rules based on years of postdoc experience

ATTRIBUTE	POST-DOCTORAL	EARLY CAREER
Research Excellence	Delivery of outstanding research and an indication of where the research contributes to delivering impact. Awareness of the international context of the research.	Has a track record of outstanding research and in delivering impact. Shows a strong awareness of the international context of the research and starting to show evidence of recognition in the community on an international scale.
Setting the research agenda	Has a clear vision of the contribution the applicant can make to their research area. Evidence of independence of (research) ideas.	Evidence of showing leadership within the research community and evidence of pushing the boundaries of the research area.
Strategic Vision	Shows an awareness of different research in other fields or across technology readiness levels, an aspiration to work across boundaries and/or to conduct high risk research and finding a network of independent contacts so that the applicant is getting positioned to do this.	Has some experience in identifying, exploring and developing research opportunities more broadly and across different interfaces. An awareness of how to position themselves to take up these opportunities and an ability to make decisions to deliver this vision.

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Competency Profile

No eligibility rules based on years of postdoc experience

ATTRIBUTE	POST-DOCTORAL	EARLY CAREER
Profile and Influence	Not strongly applicable at this career stage.	Shows potential and aptitude to act as an ambassador and advocate for a research field/theme and for research in general. Advising and influencing into policy making.
Inspirational Team leader	Can provide evidence of an aptitude to lead and inspire for example, through mentoring or self organisation of peers.	Has ability to lead and inspire their own research team. Ability to identify and maximise potential in others (or get the best out of people).
Communication and engagement skills	Demonstrates excellent communications and interpersonal skills and aspires to develop these across a broad audience.	Demonstrates excellent communications and interpersonal skills and aspires to develop these further across a broad audience.

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Fellowship Areas

Engineering 🔗	Postdoc	Early Career	Established Career
	Robotics and Autonomous Systems (with ICT)

The following priority areas will be closing on 10 April 2018:

Synthetic biology

Engineering for Sustainability and Resilience

Microsystems

Control Engineering | Water Engineering

Complex Fluids and Rheology

Software development for novel Engineering research

Assistive technology, rehabilitation and musculoskeletal biomechanics (to close on 10 April 2018)

Particle Technology

Synthetic biology

Engineering for Sustainability and Resilience

Microsystems

Advanced Materials Engineering

Robotics and Autonomous Systems (with ICT)

Control Engineering | Water Engineering

Complex Fluids and Rheology

Assistive Technology, Rehabilitation and Musculoskeletal Biomechanics (to close on 10 April 2018)

Particle Technology

Synthetic biology

Engineering for Sustainability and Resilience

Microsystems

Advanced Materials Engineering

Robotics and Autonomous Systems (with ICT)
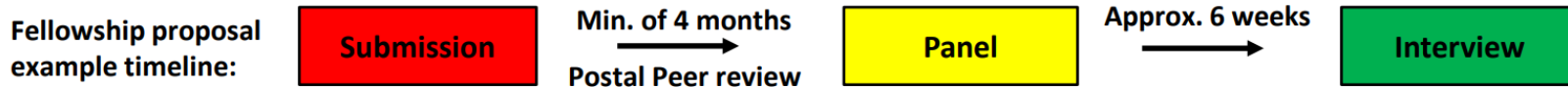
Control Engineering |

Plus specific calls: https://www.epsrc.ac.uk/funding/calls/

What Do You Get?

Resource Package	Postdoctoral	Early career	Established career
Duration	Up to 3 years	Up to 5 years	Up to 5 years
Salary	Up to 100%	Up to 100%	Up to 100%
Travel & Subsistence	Yes	Yes	Yes
Staff	No	Yes	Yes
Visiting Researchers	Yes	Yes	Yes
Equipment	Items costing less than £10,000 (incl. VAT)*	Yes – in line with current EPSRC equipment guidelines**	Yes – in line with current EPSRC equipment guidelines**
Consumables	Yes	Yes	Yes
Access to facilities	Yes	Yes	Yes
Public Communication Training	Yes	Yes	Yes

When To Apply & Timeline
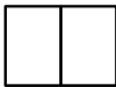
Allow 12 months: starting proposal → result

Fellowship proposal example timeline:

| Submission | Min. of 4 months → Postal Peer review | Panel | Approx. 6 weeks → | Interview |

Capability themes: *Proposals are processed on a rolling basis*

	Jan	Feb	March	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Engineering		4• / 6		5◊ / 1		6◊ / 2		1* / 3		2* / 4		3• / 5
Physical Sc.		2		3	1				1 / 2			3
Math. Sc.		1				1	2				2	
ICT	2	1					1		2			

Legend:
- 🟥 Advised submission date
- 🟨 Prioritisation Panel meeting
- ⬜⬜ Weeks 1-2 and 3-4 of a month respectively

1 Matched advised submission date with first upcoming panel
Example: if you submit for ICT before the end of February, we aim to get your proposal to the ICT July panel

(Matching symbols (*, • and ◊) will go to the same fellowship interview panel)

What To Prepare

- Cover letter (2 pages)

- Case for Support (9 pages)

  - *Track record of applicant (2 pages)*

  - *Proposed research & context (address assessment criteria)*

  - *National importance*

  - *Academic impact*

  - *Fit with EPSRC strategic priorities*

- Pathways to Impact (2 pages)

  - *Kinds of impact, project management, collaboration, exploitation, resources required, public engagement*

- Justification of Resources (2 pages)

- CV & publications

- Host organisation statement / letter of support; letters of support (industry, collaborators) with <u>well-defined financial contributions</u>

My Advice

- Your proposal should **present an outstanding & unique case** for:

  WHY THIS   Important / valuable / interesting / topical research

  WHY NOW   Timeliness, why hasn't it been achieved already, what developments have created this unique opportunity?

  WHY YOU   What makes your unique skill set / experience useful to accelerate this area? How will you lead the field?

- **Read the information carefully**, e.g., specific call, person specification

  - Evidence should be provided for each specification (and assessed using these!)

- **Funding is flexible, but should be reasonable**

  - Too little or too much will be flagged

  - Should include personal development / training

My Advice

- **There is a lot more to do than just a good idea**

    - Research environment, costing, national importance, fit to EPSRC, pathways to impact, outreach, personal development, etc.

    - Why you is as important as the project itself (leadership potential, ambassadorial skills, etc.)

- **Quantitative impact is always useful**: reduce costs by X%, improve efficiency by Y%, potential market sizes, etc.

- **Notify the Research Office of your plans & seek help from others**

    - Run your proposal past your PI, colleagues, Philip, friends/partner

    - Ask previous awardees for advice!

- **Be willing to take on board criticism** – highly competitive & panel won't hold back

    - Many iterations required on proposal documents (allow several months)

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