

A personal view on Research Fellowships

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Goals of this talk

- What is a fellowship proposal?
- What is the funding process?
- Dos and Don'ts personal tips in:
 - Grant writing
 - Responding to reviews
 - Panel presentation
- Planning for success next steps Keeping focus



To get started, you must have a destination.





1997-2001 – MPhys - Astrophysics

- 2001-2005 PhD satellite remote sensing, Leicester
- 2005-2008 PDRA, Thunderstorm dynamics, Manchester
- 2008-2011 PDRA, Geoengineering, Manchester
- 2011-2014 NERC Fellow, Lecturer
- 2014 Senior Research Fellow



"It's all about the confidence"



- Your first Fellowship app can (and will) be daunting.
 - Why?
 - The process is new
 - Your idea is new (or it should be!)
 - A lot of personal and career capital may be hanging on its success
- But don't be scared!
 - Accept that it will be outside your comfort zone
 - If you are confident in your ability and your idea, it will shine through.
 - Convince yourself and the panel will follow...



What is a Fellowship?

• It is a prestigious (often strategic) investment in <u>YOU</u> (and your science)

- Success requires:
 - An ambitious but achievable project
 - A new, topical and clear scientific deliverable
 - Impact and relevance
 - A track record that demonstrates your potential
 - A clear pathway to follow-on projects



An investment in YOU

- The idea and project must be sound but this is secondary to showing your POTENTIAL
- A great Fellowship project will not get funded if the panel can't see that you are an emerging research leader
- Track record is important.
- Passion, commitment and forward-look
 - Think beyond the project
 - Partnerships and knowledge exchange



Different funding agents have different approaches.

Most simple: Marie Curie -proposal scored only by referees Most complex (e.g. NERC / ERC): Sift, review, panel





The funding process

A proposal is the easy part...

Your status, fit to agency remit etc

There are good and bad reviewers in this world....the panel know this too.

Almost there! Down to you now...

The University of Manchester A Fellowship applications contains:

- A case for support (typically ~8 pages)
- Your CV
- Justification of Resources
- Pathways to Impact
- Letters of Support
- Various summary boxes on the Je-S/ERC portal:
 P2I, JoR, Academic Beneficiaries, Lay summary
- NERC: Score for scientific excellence (0-10) is added to P2I (0-6) but excellence is weighted more highly when compiling the rank order



Pointers for structuring a written proposal

- Keep it simple, logical and concise increase the complexity further into the text
- Try to 'funnel' your reader from general towards technical.

Abstract

Work plan





- Phrase constructively: a "problem" is, in fact, a "challenge"
- Use present perfect: "although much work has been done..."
- Take your reader by the hand:
 - tell your reader where you're headed; imagine reading 40 proposals
 - Have an intro, middle and summary for each section.
 - Repetition of key points throughout
 - Abstract/Exec Summary → Introduction/motivation → project details → work plan/deliverables
- Make it look good: use figures!
- Keep in mind: A proposal is NOT a research paper



What sort of proposal would you enjoy reading if you were on the committee?

Try to empathize.....

- They do not have patience for waffle
- Be technical enough to give detail for specialist readers
- Be general enough for non-specialist scientists
- Balance and flow narrative and focus



Budgeting

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Document Menu <u>(Hide)</u>	Home: Documents: Document	<u>t List</u> : With Council (read-only))		
Instructions	Document Actions Prev	Next			
Project Details		E-Hausehin			
Fellow Details	Scheme: Postdoctoral	Fellowship			
Fellow	Project Title: Novel High-re	esolution Trace Gas Retrievals	from Aircraft in Support of	Regional Air Quality	Modelling
Objectives	Organisation: The Universit	ty of Manchester Depa	rtment: Earth Atmosph	neric and Env Science	es
Summary					
Academic Beneficiaries					
Technology	Summary fund heading	Fund heading	Full economic cost	RC contribution	% RC contribution
Partnership Details	Directly Incurred	Staff	141,430,00	113,144.00	80
Related Proposal		Travel & Subsistence	25,600,00	20,552,00	20
Impact Summary		Travel & Subsistence	25,690.00	20,552.00	80
Resource Summary		Other Costs	24,600.00	19,680.00	80
Other Support		Sub-total	191,720.00	153,376.00	
Resources	2				
Travel and Subsistence	Directly Allegated	Estatos Costa	25 727 00	20 501 60	90
Animal Costs	Directly Allocated	Estates Costs	35,727.00	20,501.00	00
Other Directly Incurred	2	Other Directly Allocated	4,062.00	3,249.60	80
Costs		Sub-total	39,789.00	31,831.20	
Other Directly Allocated Costs	9				
Research Facilities/Existing Equipment	Indirect Costs	Indirect Costs	117,246.00	93,796.80	80
Research Council Facilities		Tabal	040 755 60	270.004.00	
Estates and Indirect Costs		Iotal	348,755.00	279,004.00	

- Get help from the faculty finance team and a mentor
- DO NOT under-resource your project. Use exactly what resources you need to achieve your aims and nothing less. Allow contingency
- Proposals do not fail if the bottom line is high they fail if the bottom line is not justified



Pathways to impact

- Relevance of results to contribute to solving economic, societal, cultural..... challenges
- "Pathway" refers to realising impact what are the mehanisms/communication channels etc through which your research will turn into real benefit.
- Scores are 0-6;
- 6 is defined: "is linked directly with specific relevant identified beneificiaries of research who are explicitly engaged and supportive of the project. Details achievable mehanisms and performance indicators by which research will enable or realise significant impact"
 - E.g. "The NHS will use this research to improve treatments for patients (see letter of support) following the conclusions of a successful collaborative study in month 35 of the project after project meeting #5."



Review Rebuttal

<u>Do:</u>

- Stay positive and constructive. Assume that the referee is bona fide
- Address each point of the referee's comments completely, but briefly; use the interview to go into detail if necessary
- Where possible, use positive comments from one referee to refute criticism from another.
- If you deem it necessary to criticize your reviewers, do so diplomatically
- Stick to the point the rebuttal is not a chance to introduce something new.



Review Rebuttal

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Don't:

Your rebuttal should be longer than the comments (remember the pile of paper!). Usually 1 A4 page per review.

As a general rule, avoid criticizing the referees (there are exceptions....).

Avoid defensive phrasing. Phrase proactively. Argue with fact and truth



Who decides?

A committee

 Is composed of people who are exceptionally busy and are not getting paid for their work



• Has to read ~40 proposals, mostly from areas of research that they know nothing or little about

•Grab their attention early in the proposal or they will switch off! Same goes for reviewers generally.



The Panel



- Committee of 6+
 - A Chair (procedural/timekeeper, not decision maker)
 - admin from the funding agency (ensures correct procedure is followed, no role in decision-making)
 - A "first introducer" Specialist in your field that summarises the project score (and its reviews) to the panel
 - A "second introducer" May or may not be a specialist in your field.
 - Several non-experts who may comment/question more generally
- All take part in the scoring process



The Panel Interview



• Before you are invited in:

- The Chair will ask the introducers to report on the project and reviews and scores (and rebuttal, where provided). They are not your advocate but there to summarise and lead discussion.
- If the 1st and 2nd introducers disagree, the Chair will initiate a discussion and a consensus must be reached.

The University of Manchester The Panel Interview

would rather have questions that can't be answered than answers that cant be questioned

• After you are invited in:

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- ~10 minute summary of your project
- This is your chance to shine (and deflect bad reviews which may form the basis of questions). Engage the panel (usual comms skills)
- 10 minute Q&A
- Specialist and non-specialist questions
- Be prepared for "why do you want this Fellowship?" and next steps
- Be honest and don't try to answer anything you can't



Design of your presentation

Rule of thumb: 1 sheet/minute Max. 1 message/sheet

- <u>title</u> Biological membranes are the boundaries of cells
- <u>intro/context</u> We know much of structure, but little of membrane dynamics
- <u>motivation</u> Dynamics are important; structure alone is insufficient
- <u>aim and challenge</u> Aim: to see membrane dynamics in real-time
- solution/approach For that, we need new complex laser techniques
- why me, now, here I know how to, and I will tackle this important problem
- summary
 - in the first place it's about *science*. Budgets, planning etc. are secondary. Do not show these in your main presentation



After the Panel

- Committee will re-evaluate and decide a final score (often 0-10).
- If the proposal is scored 7 or higher (e.g. NERC), it is deemed fundable in principle and moved to the "funding frame".
- All proposals 7+ are placed in a new rank order by the panel
- A line is drawn where the agency-allocated money runs out – above you win, below you lose.

PRIORITY LIST				
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General Do's



- Be CONFIDENT in yourself and your ideas
- Be ambitious, passionate, clear and concise
- Be honest, organised and pay attention to detail
 - follow the format guide
- develop existing and new networks, e.g. visits to other institutes
 - Panel like active KE across the global community (£20k+ T&S not unusual)
- Get letters of support
- Show a clear view for the future
- Use your CV and CfS to highlight your track record



General Don'ts

- <u>No typos!</u>
- Don't use negative language
- Don't be overly technical
- Don't under-resource your project (big pitfall)
- Don't treat a Fellowship as an extension of your PDRA/PhD
- Don't write a proposal like a paper
- Don't be afraid to get help!



Summary

• Get advice

- internal peer review, other Fellows, me.

• Practise makes perfect

– Presentation (alone, to a friend, to a peer audience)

Don't be scared to explore your ideas
This is the biggest obstacle in my experience