



UNIVERSITY OF  
**LEICESTER**

# Advice on What Funders Look for in a Grant Application

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# Declarations

- **Awards Panels**

- CIHR
- MRC
- NIH
- NIHR PGfAR
- NIHR RfPB
- Stroke Association

- **Advice**

- BHF, Jeremy Pearson
- NIHR (RfPB), Heather Fortnum
- NIHR (RDS), Martin Williams
- TSA, Kate Holmes
- TSA, Dale Webb

# Ask Yourself the Following Questions:

- What is your research question?
- What about your application?
  - What type of grant best suits your needs ?
    - Personal award, project grant, programme grant ?
  - Which funding body is most appropriate ?
    - Research Councils, NIHR, Charities, Industry ?
  - Is the institution the best place to do the work ?
  - Have you got the right mentors, co-applicants and collaborators ?
  - Does the project play to your strengths ?

# The Research Question

“There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns -- the ones we don't know we don't know.”

# Is it a good research question?

- **Answerable** – it must be possible to answer the question through research methods
- **Realistic** – the research needed to answer the question must be deliverable within time and budget constraints
- **Specific** – there should be clear boundaries, delineating what is included in and excluded from the study
- **Important** – the question(s) must be important to others, not least funders and expected users of the findings

# Important research question to who?

Therefore, ask yourself:

- To you and your collaborators?
- To patients, clinicians and other 'end-users'?
  - Does your research address a major problem?
  - Will it generate something that people need?
  - Will it clearly benefit the public or patients and/or influence policy or practice?
  - Will the study resolve major controversies or fill gaps in current theories or models?
- To funders?
  - Most research costs £££!

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- too descriptive
  - What forms of exercise do British South Asians commonly participate in?
- too vague
  - How does the obesity crisis affect teenagers?

# The Application: Before You Start!

- Read the rules and follow the guidelines
- Do NOT leave things out
- Do NOT submit overlength applications
- Do NOT use miniature fonts to pack more in
- Do be concise and clear. Do NOT repeat stuff just to fill the word limit. The panel have to read a lot of applications so make it easy for them.

# Before You Start!

- *Otherwise you run the severe risk of having the application returned un-reviewed, or putting the reviewers (who are not paid to do their job) in a bad mood before they consider the scientific merits of the project !*



# The Application

- Lay summary and scientific abstract
- Background and Aims
- Experimental Plan
- Justification for resources requested
- Dissemination
- Appendices including curricula vitae

# Lay Summary and Scientific Abstract

- These are not the same!
- Lay Summary
  - Try to make the lay summary clear and simple
  - Are technical terms and jargon avoided
  - Are the relevant sections clear and concise
  - Evidence of PCPIE
    - Throughout the research process
    - Identifying the question
    - Designing the study
    - Deciding the outcomes
    - Managing the study
    - Disseminating the findings
    - Properly resourced
    - It is vital – TAKE TIME!



# Scientific Abstract and Lay Summary

- Scientific Abstract
  - The proposal should be clear to non-specialists.
  - Panels often comprise a number of different specialities and expertise; there may be no-one in their field so the rest of us have to be able to understand it.
  - Summarise the research proposal, including
    - issue being addressed
    - scientific background
    - questions/aims
    - research design
    - study population
    - sampling methods
    - outcome measures
    - data analysis methods



# Background and Aims

- Must succinctly provide the scientific foundation for your project, citing the appropriate papers, systematic reviews, guidelines
  - State where you have looked
  - Including search for current studies/ trials
- Refer to recent data
  - Size and cost of the problem
  - NHS/ patient relevance
  - Highlighted by funders/ patient groups/ etc
- Must show why your project is important, novel and worth doing, and why you have the right credentials to be doing it
- Aims must be clear, and must explain exactly what is novel
- Hypotheses must be clear and testable, not vague and aspirational

“The project does not appear to be hypothesis-driven and is largely descriptive. How will it shed light on the mechanisms involved ?”

“Neither the rationale for the study nor the specific hypothesis was clearly laid out, and some of the key approaches rely on techniques not yet established by the applicant.”

“The applicants have done a good job of marshalling evidence in favour of their hypothesis. However, they have ignored data that do not support their point of view.”

“The strength of this application is that it is in a relatively under-researched field. However, the lack of focus makes me question what we will know that is novel at the end of this work.”



# Experimental Plan

- Experimental plans must be focussed, detailed and test the hypotheses put forward
- In clinical studies you must show that recruitment is feasible, have reasonable criteria for inclusion and exclusion, and have sound outcome measures
- Must justify study size (e.g. power calculations for clinical studies), but a number is meaningless unless you state how achieved - feasibility, likely population, realistic consent rate, drop-outs, etc
- Must convince the reviewer that you have chosen the best methods to do the work and know how to use them
  - Why other researcher designs have failed
  - Your feasibility data
- Should be at least predominantly achievable by the end of the award

“This is a disappointing application: there are serious issues regarding technical feasibility, the underlying science is rather pedestrian, and the pilot data are of rather low quality and unconvincing.”

“This is a thought provoking application, but the study patient groups are poorly defined, and the design of the study will not allow the stated primary outcomes to be assessed.”

“The applicants wish to reveal important basic protein structural information, but it is not clear that this will be relevant to understanding and treating cardiovascular disease. The grant is better suited to the BBSRC.”

“The project is interesting and will provide new data, but the applicants provide no information on how the data will be analysed.”



# Justification for Resources

- Reviewers and funders are concerned about value for money, so justify carefully the level of any staff requested and the need for new equipment
- However, make sure you claim for allowable expenses
  - e.g. Laboratory assessments will need technicians!
- In clinical studies make it clear why costs of the study charged to the grant body cannot be absorbed elsewhere (e.g. by the NHS, NIHR)
- Has the application been properly costed, with involvement of relevant research offices, networks, CTUs?
- Does the project appear to deliver good value for money?

# Dissemination

- Are dissemination plans likely to lead to uptake by NHS services, clinicians or patients or be of direct value to the wider research community?
- Does the research have potential benefits for NHS services and users?
- Are plans for publication sufficient?
- Is there more that could reasonably be done to improve dissemination or use of study findings?

# Appendices and CV

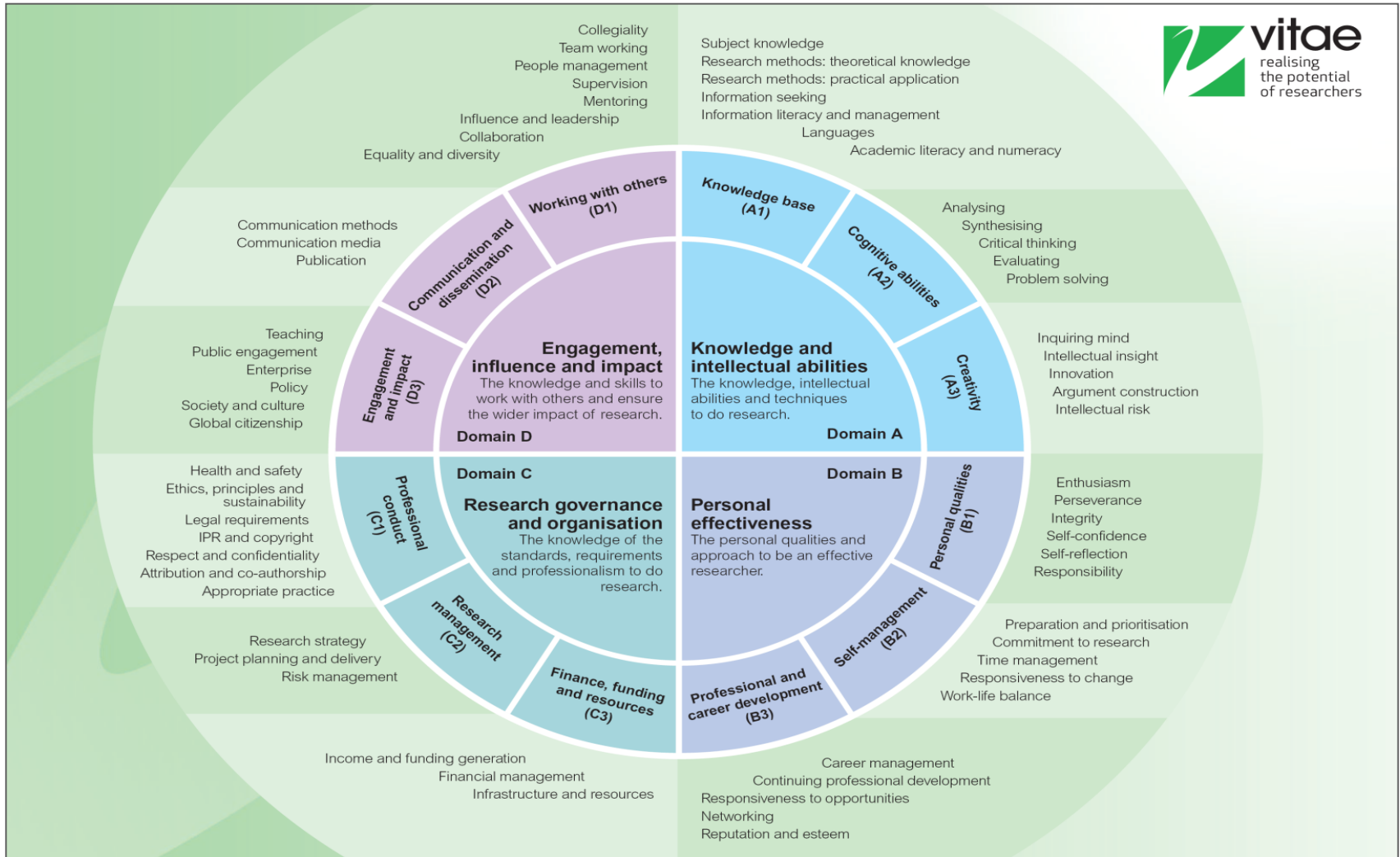
- Do NOT add unnecessary (or unasked for) appendices: occasionally a separate page or two with pilot data may be helpful, rarely a copy of a paper in press



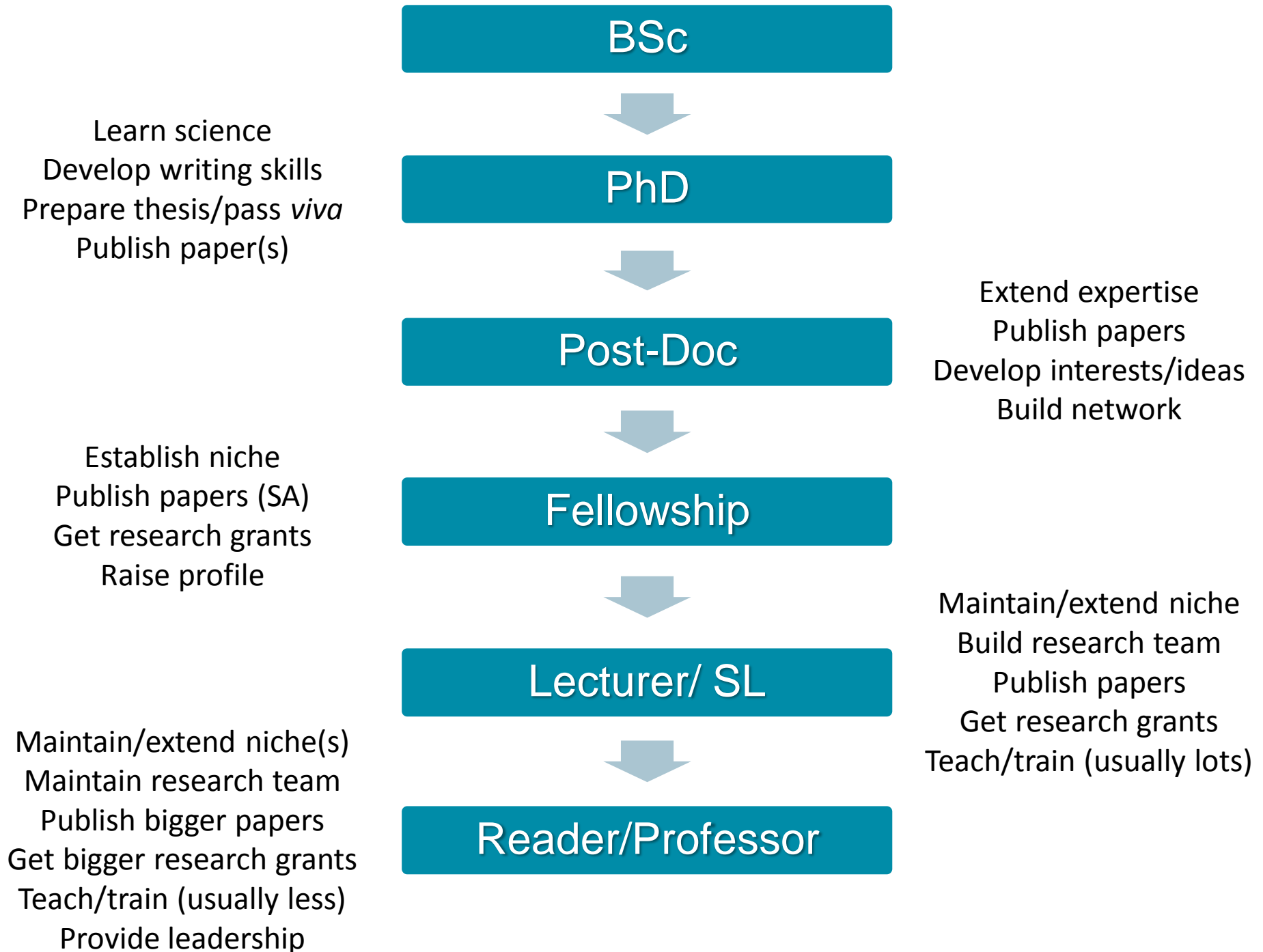
- Study flowchart/ Gantt chart may help (and may be requested)



# CV and the Individual







# CV and Team

- Pay attention to the accuracy and clarity of curricula vitae
  - Reviewers often read these first to assess the track record and potential of the applicants
  - If previous/ current grants and publications are limited, then make sure that those chosen are relevant and impactful!

**Table A2: Outputs sub-profile: Criteria and definitions of starred levels**

The criteria for assessing the quality of outputs are 'originality, significance and rigour'.

Four star	Quality that is world-leading in terms of originality, significance and rigour.
Three star	Quality that is internationally excellent in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
Two star	Quality that is recognised internationally in terms of originality, significance and rigour.
One star	Quality that is recognised nationally in terms of originality, significance and rigour.
Unclassified	Quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment.

- An application with a lack of the right expertise is less likely to be funded, no matter how much the clinicians claim they can do statistics, health economics, qualitative analysis, etc
  - But be clear on everyone's role
  - Avoid being tokenistic

# But Remember....

- Institutional peer review
- Remember the 'little bits' will take longer than you expect, and that you know the deadlines
- Letters of collaboration
- Animal licences and/or ethical approval
  - Have all ethical issues been addressed, such as safety, rights to information, confidentiality and privacy, consent, issues concerning racial and cultural diversity?
  - Will the study overburden participants in any way?
- Local finance office checks
- Senior administration signatures



# The Rebuttal

- Answer the comment!
- Clarity of response
  - Why
  - Why not
- Do NOT be defensive
- The funder wants to see changes!



# SUCCESSFUL

**S**cience must be novel and important

**U**nderpinned with pilot data

**C**redentials of the team must be relevant

**C**lear focussed aims and testable hypotheses

**E**xperimental plan must be detailed

**S**tudy must be powered sufficiently

**S**tudy must be good value for money

**F**easibility must be evident

**U**se the best models and techniques

**L**ay out application correctly !



