Pre-Doctoral Trainees: Getting that Training Fellowship. Top tips

John-Paul Taylor

Overview

- Disclaimer
- Application planning
- Application writing
- Review process
- Interview

Application planning

Get the right lab and right potential supervisor

- Find the right group and the right supervisor for you!
- Find an idea!
- Helps if you research plans align with clinical background
- ACF posts provide excellent opportunity for research time to develop skills, ideas, get preliminary data, polish CV and ultimately apply for CTFs

Application planning

Know thy funder

- What is it they fund?
- What is their driving ethos?
- Who have they mainly funded?
- Be nosey – find people on the internet or locally who have been successful
  - Do you measure up to them? If not, how could you?
  - See if you can drop them a line or speak to them to get advice.

Some example funders

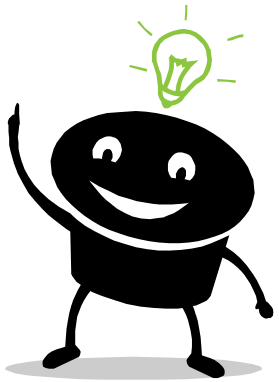
Alzheimer's Research UK

Alzheimer's Society

Medical Research Council

Wellcome Trust

Be aware of the timelines (which vary)



Good idea!

Application

Expert peer-review

Rebuttal

Funding Committee

Short-listing for interviews

Interview Committee

Decision

9-12 months

Writing the Application

Writing an application

- Hypothesis-driven
  - ensure that the work you propose addresses a hypothesis and is not simply a technique or process refinement exercise
- Realistic Time-frame
  - the proposed programme of research must realistically fit into 3 years

Writing an application

SEEK ADVICE……

- Ask for as many independent views and or comments on the fellowship proposal as possible
- If you can get someone who has sat on a clinical training fellowship panel/done shortlisting that can be very helpful
- Get statistics advice if needed – be aware though that you need to be asking them the right questions
- Seek opinions from colleagues outside your field as to readability, focus etc

Writing an application

- Do not underestimate the importance of providing reasonable and realistic justifications for staff and resources (do not leave it until the last moment!)

- Animals need to be accurately accounted for and justified

What makes a successful CTF application

Newcastle University

PERSON – PROJECT – PLACE

What makes a successful CTF application

PERSON – MAKING A BET ON YOU

- Look for evidence of commitment to clinical academic career from undergraduate through to postgraduate
- Presentations, Posters and Papers (case reports, commentaries, reviews and beyond)
- People come from range of backgrounds and experiences. Previous “heavy” research experience whilst helpful in some cases is not always needed. Panels will look beyond to the potential of the individual
- Funders are looking to invest in people who look like they are committed to a long-term academic career and clinical research leaders of tomorrow

What makes a successful CTF application

PROJECT

- **Clarity:**
  - Clear hypotheses / research questions
  - Clear research plan/easy to understand (e.g. by non-specialist)
  - Clear context/background. However key that this is not too long – **save room for what you are going to do!**

- **Not over- or under- ambitious**
  - Succinct and not too many aims
  - But still ambitious that the future outputs won't just be low level IF journal papers

- **Clear ownership** - not part of someone else's work and not repeating other work

What makes a successful CTF application

PROJECT

- **Scientific rigour**
  - Proposed research needs to be sufficiently described (less space on background)
  - Ensure that the work you propose addresses the hypothesis
  - **Novelty** - PhD shouldn't simply be a technique or process refinement exercise. Can be blue sky but science needs to be solid
  - Make sure methods chosen are appropriate to the scientific question and can be held up to scrutiny (and that you can defend / mitigate any shortcomings)
  - What are the confounders/biases in design?
  - **Contingencies** - possible plan Bs if initial plans don't come off

What makes a successful CTF application

PROJECT

- **Feasibility**
  - Is the sample size appropriate for the science – power calculations virtually always necessary
  - Is the work deliverable within the timeframes specified

- **Preliminary data –** but not as essential at this stage. More if using a relatively “untested”/ novel technique in lab of supervisor

- **Justify clearly** all costs, equipment & animals

What makes a successful CTF application

PLACE

- **Scientific capability**
  - Available cohorts
  - Available research infrastructures
  - Technical support where appropriate

- **Supervisor(s)**
  - Expertise in the area that student will be working in
  - Able to provide regular supervision
  - Track record in supporting trainees with strong outputs
  - Other supervisors to cover/support key areas in project

- **Avoid being a "pair of hands"**
  - Large research groups and centres of excellence count. However, be aware that this might also work against candidates – esp. if felt that proposal is actually just part of a larger programme of work and will not be driven by applicant.

- **Training**
  - What is the quality of the training that is offered? Will you learn more than one skill (transferable)?

What makes a successful CTF application

PLACE

Collaborators and co-supervisors

- Enlist the assistance of collaborators for the project if necessary
- A good application can often be strengthened with the involvement of experts or co-supervisors - they may expedite results and improve the technical quality
- obtaining signed consent of collaborators clearly demonstrates their willingness to participate in the project, and reassures the reviewers that the work can be performed

Peer Review Assessment

Typically several reviewers

Candidate
"Very suitable and excellent clinical record. This could help Dr Brilliant launch an independent research career....."

THINK- SELL YOURSELF ACADEMICALLY AND CLINICALLY

Research environment
"Prof Big Cheese is an internationally recognized researcher in the field of neurodegenerative disease and imaging and she has over 180 articles in well-respected, peer-reviewed journals....."

THINK – IMPORTANCE OF SUPERVISOR

Peer Review Assessment

Research question

"....by seeking the basis for the variability of attention, Dr. Clever may be able to help us to understand how to improve this terrible symptom and this may have tremendous impact on the quality of life for many individuals suffering with the second most common cause of neurodegenerative dementia....."

THINK – IS YOUR QUESTION IMPORTANT? ALWAYS ASK THE "SO WHAT?"

Peer Review Assessment

Research feasibility

Strengths:
“.....fluctuating cognition is a distinctive and very interesting feature of Lewy body diseases and the project proposes an innovative set of approaches to investigate this.....

Weaknesses:
“....the diffusion tensor imaging DTI section of the proposal is not covered in sufficient detail. In principle, the addition of DTI studies to the very small literature in this area is of value.

THINK – WEAKNESSES- THESE WILL BE USED AS BASIS FOR QUESTIONS IN INTERVIEW

"...it involves techniques with which the applicant appears to have no prior experience and for which no preliminary data are proposed."

"...the work described in this application is over-ambitious, it could not be achieved in the life-time of the investigator."

"Despite the interesting and important topic the poor writing, referencing and proof reading of this application significantly detract from its overall quality."

"I had only one problem with this application, I had no idea what they were trying to do..."

Peer Review Assessment

The rebuttal

• Very important to do well. Will shape what the panel think about you and what questions you might get in interview

• Some reviewers will carefully read the application and may make many comments. Other reviewers may produce 2 lines!

• Often “scores” bear no relation to the comments

• Panels will typically take note of the more in-depth reviewer comments (both positive and negative)

• Remember that panels will sometimes ignore very good reviews or negative reviews on the basis of the gestalt and the expertise of the panel

The selection process

The “Interview”

- Intimidating experience but shorter than you think (20-30 minutes!)
- Opening question “Tell me a bit about yourself....” “Summarise your proposal.....” to ease you in. **Know this well. Often expected to have a short (3 min) presentation**
- Know thy “subject” i.e. your proposal inside out
- Know thy “enemy” – check who is on the panel if you can.
    - Specialist vs. generalist
- Remember 3 P’s – person, project and place

The “Interview”

- What is novel about the project?
- How does it fit into the broader research endeavour?
- Be ready to address reviewer comments
- What are your plan Bs?
- Be passionate
  - About the project
  - About the clinical need
  - About your future
- Taker advice from the panel if offer it (try not to argue but be confident)

The “Interview”

- Does the candidate “own” their project?
- Does the candidate understand the project?
- Don’t worry if can’t answer all questions – sometimes applicants may be “pushed”
- Avoid bullsh*tting if you don’t know. It is obvious
- Don’t waffle or move off topic – short clear answers preferred
- Not trying to catch people out and allowances made for anxiety
- We want you to get the fellowship

The “Interview”

Newcastle University

- Practise, practise and practise

- Mock interview invaluable – I would do at least 3....
  - Choose generalists and specialists
  - Get them to be as mean and aggressive as possible

What are my chances?

- 100% if good project and good interview!
- Reality – approximately 1 in 6 from application
- However varies considerably each year
- Luck is always an element so hedge your bets – have plan B,C,D

Thank you!

John-Paul Taylor

john-paul.taylor@ncl.ac.uk