

# HOW TO... ...APPLY FOR RESEARCH FUNDING

The Biomedical Science Programme Lead at the University of Salford, **Dr Lucy Smyth**, discusses the challenges that students and academics face when applying for research funds.



**W**hatever your motive for seeking research funds, competition is high and unless you are skilled at persuading others to part with their money, success rates are low. Whether you are an undergraduate or a pioneering professor, a successful researcher must be prepared to be a) passionate about their work; b) tenacious enough to keep going through tough funding droughts; c) have a developed art of persuasion.

## Examples of types of funding

**NHS apprenticeships:** This is the new real-world experiential way of learning. **Action:** Young (18+) applicants can look out for opportunities to work in the NHS while gaining a formal biomedical science academic qualification (level 2, level 4 and, later on, level 6).

**Undergraduates:** To make your CV stand out for jobseeking – maximise

opportunities to skill-up and show employers you have what they need. Vacation scholarships from councils and charities can provide excellent entry routes into a research lab. Funds provide up to £2k for two months for expenses.

**Action:** Access the online funding body application information, approach a tutor who is active in research at your university, then lead the application submission process in an agreed area of research with your tutor. On completion of the work, you would be expected to present your data in a summary report to show the impact of your work to the funding body so giving you chance to deploy your writing skills too.

**Postgraduates:** Lucky enough to be in a funded PhD post?

**Action:** Aim to go to at least one national and one international conference to disseminate the impact of your findings. Join the appropriate learned societies – student rates are often a fraction of normal fees. Do this early in your first

year to make you eligible for conference travel fund applications later on. This is an early chance to commence a track record in gaining research funds.

**Post-doctoral researchers:** You are a highly skilled professional with glittering career prospects, unfortunately, among many others.

**Action:** Funded post-doctoral positions are located in jobs sections of: science journals, jobs.ac.uk, clinical trials, and company and university websites. Positions are fixed term, usually about three years, requiring commitment and flexibility. With experience, you can seek fellowship funds to form your own research area. Successful fellowship bids are often done with the support of your current research leader.

**Lecturers and beyond:** You've gained tenure and the academic freedom to lead a research team based on your ideas.

**Action:** Seek initial sources of funding, for example seed/early researcher careers

funds. These are generally smaller sums to help generate pilot data for subsequent larger bids. Ensure you seek department/internal funds (including any match fund schemes) in addition to relevant external councils and charities, industry partners and Knowledge Transfer Partnerships. Bids can include funds for PhD students, technical support staff, Postdocs, equipment, consumables and whole programmes (for PIs that have an outstanding research track record).

## Lessons learned from bids

• Know your relevant sponsors; be sure of your eligibility and suitability for their calls. Successful bids are strongly aligned

## 10 STEPS FOR SUCCESSFUL GRANT WRITING

Are there really 10 golden rules for guaranteeing a successful grant application? Certainly not, but here's some that may help. Good luck!

- ✓ Start writing early
- ✓ Do your homework on your potential sponsor and target your bid carefully
- ✓ Never work alone – ploughing your own furrow is long and unrewarding
- ✓ Identify your external collaborative partners, they are your best allies
- ✓ Plan, monitor and keep planning
- ✓ Have clear and specific objectives
- ✓ Justify your methods – based on your/ collaborators track record(s)
- ✓ Identify the impact of your research – who will benefit? Why should anyone care?
- ✓ Include pilot data – it demonstrates your proven skills
- ✓ Have your proposal reviewed internally before sending.

to the discipline and the underpinning values of their sponsors.

• Know your sponsor call timelines, so you can be organised and ready to strike. Many an unsuccessful bid is scurried together in response to a “surprise opportunity”.

• Craft your rationale carefully; for example, the timing of a larger bid is better after you have a track record of smaller bids, good pilot data and once your collaborative networks are established. This all serves to give a better picture of your personal impact and why sponsors should invest in you.

• Successful bids have clear objectives; a central “hook” to secure reader interest then a logical storyline built around that. You need to get across why your topic is important and why the funding is timely and needed now.

• Successful bids often have a mixture of “risk strategies”. Your research needs to be cutting edge, often using new technologies, so may be perceived as somewhat high risk. So you also need to assure the sponsor your research will work – what are your contingency plans? What infrastructure is there to support you? Is investing in you an opportunistic bargain given all the resources, teams, networks around you?

• Map out a clear timeline – reasonably short intervals on your Gantt chart indicate careful planning, which needs to include lab work themes, data analysis and writing.

• Budget for your proposal – this needs “full economic costing” and knowledge of if your sponsor will cover this.


Also, state how you intend to acknowledge your funding source, and how the impact of your work will be communicated to the wider public in addition to scientific audiences.

• Consider your language – a lay summary needs to be very different from your scientific one.

*Identify the impact of your research – who will benefit? Why should anyone care?*

• In biomedical science, translational work supported by NHS partners, clinical sample availability with pre-established ethical working protocols (usually the NHS LREC and research institute approvals are needed) make for good impact bids, particularly when approaching sponsors supporting the 3Rs principles.

• A “scattergun” bid approach is time consuming, has a lower success rate, but is more likely to gain a “hit” in a shorter time. A targeted approach should have a higher success rate, but fewer applications are made per unit of time; meaning fewer “hits”. In either case, plan a series of applications which helps get over the inevitable post-application blues.

• Go to sponsors and university/institute training days to get the best insight into what they're looking for. Performing grant reviews or participating in funding panels provides a fantastic insight into sponsors' decision-making processes... seize any opportunities. 

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