Hilary Hearnshaw uses some fictional scenarios to highlight the very real and complex problems involved in getting funding for academic research

Research funding dilemmas

The lecturer's tale

I AM A MICROBIOLOGY LECTURER in a university department. So far, I have gained one research grant for a project that I lead. Academic colleagues in my department are co-researchers on this project. I have a full time research

associate working with me on the project, whose contract has just nine months to run. Unless I can get another research grant to fund her, she must soon start looking for another job. I see a call for proposals for research that would fit well with the work we are doing now. We want to do that, and we can do that. So we generate a design for a research project and submit it as a proposal. The proposal would fund me for a proportion of my academic time for two years and my research associate full time for two years.

Writing this proposal takes six working days of my time, six days of the research associate's time, three days of secretarial time, and half a day of university finance office time to check and approve the figures. The deadline for proposals is tight because that is the way the funding bodies work. The total cost of preparing the proposal is about £3000, which mostly comes from our current research project funds, paying the research associate's salary now and contributing to the finance office through overheads taken from our grant.

Our proposal has failed, but we do not know why. The funding organisation gave us no feedback on why our application was turned down, so we don't know how to improve. How can we avoid repeating all this?

We never see any of the successful proposals, so we can't even learn from other people's successes (Bandura, 1977). It all feels a bit of a lottery, although I do not want to believe this.

I'm not sure we can afford to prepare another proposal, but nor can we afford not to. We need to raise money for my researcher to keep her job. She can see no security in a career in research, and she is right. I cannot guarantee her anything.

Like most academics, I have had no formal training in research project management. It feels as though I spend about 40% of my research time writing proposals saying what we are going to do, 40% of my time writing papers saying what we have done, and only 20% of my time thinking and doing the research. That seems out of balance.

The research associate's tale

I HAVE WORKED FULL TIME on this two-year project for 15 months, and there are just nine months left on my contract. After that, nothing is guaranteed. I was encouraged by a new EU directive, which promised to ensure that fixed term employees are treated as fairly as permanent employees (Solesbury, 2001). Unfortunately, that does not mean very much since there are few permanent employees in my department below the grade of professor.

Everyone is on fixed term research funding. Universities claim that they must use fixed term contracts for research staff because their income is uncertain. However, this is difficult to justify, since most of our economy works on uncertain income. Why should universities, whose core business includes research, an activity based on uncertainty, be a special case? I was optimistic about the latest proposal we submitted. Another two years of funding would have meant that I could have been a little more secure in my future and maybe looked to buying a house. Obviously my optimism was unfounded.

The awards coordinator's tale

I AM THE AWARDS COORDINATOR in an organisation that supports research in medicine and health care. The exact topics we support are decided each year by our board of experts. We advertise the awards widely twice a year and get many applications each time.

I recruit expert reviewers to advise the research committee on which applications to fund. It costs thousands of pounds to administer and manage this. We keep to tight deadlines because that is what researchers like. I don't have enough resources to do all that I would like to do, and one thing I regret is that we cannot give any feedback to the unsuccessful applicants.

We are fairly sure that our peer review process is not biased (Wessely, 1998) but some reviewers do not provide very kind reviews on some applications and the board fears that providing feedback to researchers may lead to appeals. It is difficult to be sure about the quality of my reviewers and how to interpret what they say, but I soon get to know about their reliability and ability to meet deadlines. We try to get a range of reviewers to present differing viewpoints, but that often just increases the difficulty in reaching consensus on the decisions.

We probably do not owe the unsuccessful applicants anything many of them have wasted our time. We were offering them a favour. We do not promise feedback. We must focus our resources on supporting the projects we decide to fund so that we get answers to our research questions (Pencheon, 1999). Perhaps we can learn from other research funding organisations on how best to meet the needs of the NHS and provide research governance (Department of Health, 2000). The review of research councils (OST, 2001) should bring us some useful information on researchers' views of the process.

The reviewer's tale

AS A REVIEWER for the research funding organisation, I am asked to give my opinion on research grant applications. Twice a year I am sent 12 applications, and I have three weeks in which to review them. The deadline for reviews is tight because that is what funding bodies and researchers like. I read the applications carefully because I know from my own experience how much effort goes into preparing a proposal. I want to do the task justice. It takes me about two hours to read and report on each proposal. I receive no financial reward.

My report is read by members of the research committee and used to inform their decisions. At least, I assume that is so, but I am not told how the decisions are made nor what the results are. I do know that the administrative resources are low. They cannot even afford to send my comments to the applicants. Nor do I get any feedback on my review. So, no one will use my opinion again once the decision has been made, which seems a waste.

Reviewing can also be very boring. There are some awful proposals submitted. Doesn't anyone teach people how to write a good proposal? They certainly have not taught me how to do reviews. Sadly, no reviewer is perfect, but we can all improve. I have no idea whether I am wasting my time. I don't even get any thanks.

The university research finance officer's tale

I AM ASKED TO CHECK the figures of research grant proposals to ensure that the university can support what is proposed. Normally, academics come to me at least 24 hours before the deadline for submission, so we have plenty of time (they tell me) to make corrections and get all the required signatures. Of course, it would be much easier for everyone if I was asked at the start of the process of preparing a proposal, so that errors could be prevented and we could work at sensible speed. Researchers seem surprised that people in the research office, who must sign proposals committing the university to large amounts of money, often want to read what they are signing.

Our academics are confident that preparing their proposal has been a good use of time and that, ultimately, we shall all benefit. It seems to me a poor use of everybody's time to produce detailed budgeting at the first submission of a proposal. Surely a proposal could first be assessed for its research quality, with only an outline funding budget in an initial submission. If the research is good enough then we could work on the details of finance. I suppose that might put me out of a job, though...

Commentary

SADLY, THESE FICTIONAL CHARACTERS are based on realities. Is this really the way to get the best research projects? Is this really the way to develop a high quality research culture? Can we improve things? Of course we can, and some funding bodies are improving. A good start would be to use a transparent process for awarding research grants which would be both evaluative and educational. With this, the funding body would still get the best projects. Unsuccessful applicants would get at least some reward by way of information and feedback for their efforts. Their next proposal could then be better, and the quality of research overall would improve. Reviewers would be nurtured and valued and be able to contribute positively to the culture of research. We all, as taxpayers and charity supporters, would get better value for money from research.

Are research funding bodies looking seriously at the cost effectiveness of their processes? The current review of the research councils will provide some answers for those councils, but there are many other funding bodies. Which funding body has the most cost effective process? There are many different processes in use, so some must be better than others. Do research funding bodies want to know this? Would a proposal to

study their cost effectiveness be funded by anyone? The irony of the lack of controlled trials of factors in the funding decision making has been pointed out (Wesseley, 1998) but not yet acted upon. Would a proposal to do this research get through any of the funding bodies' processes?

Hilary Hearnshaw
Senior lecturer, Centre for Primary Health Care Studies, University of Warwick, Coventry CV4 7AL, UK
Hilary.Hearnshaw@Warwick.ac.uk

Based upon and reproduced with kind permission from an article originally published in *The British Medical Journal* 2001; 323: S2-7324

Please email the editor **(a.c.hilton@aston.ac.uk)** if you want to continue this discussion

References:

- Bandura, A (1977) *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Solesbury, W (2001) Fixed term contracts and other worrying symptoms. *Research Fortnight* April 25:17.
- Wessely, S (1998) Review of grant applications: what do we know? *Lancet;* 352: 301-305
- Pencheon, D (1999) Doing research [career focus]. *BMJ;* 318: 2-3.
- Department of Health (2000) *Research governance framework for health and social care.* London: DoH.
- Office of Science and Technology (2001) OST business: *Quinquennial review of the grant awarding research councils.* www.dti.gov.uk/ost/ostbusiness/ (accessed 29th Jun 2001).