

# Managing academic research

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Over the past few decades, there have been some profound changes made to the way that academic research is managed. I recall a former, rather autocratic, professor's approach to the subject; "I take the responsibility, I make the decisions." Under his directorship, his department became world renowned, demonstrating that this approach is not necessarily wrong, but it represents an extreme in the continuum from dictatorial to democratic management. The former might work if the dictator is benign, the latter can fail owing to decision paralysis. What is clear, however, is that researchers had more personal power in the past. I hypothesize that the waning of power is inversely correlated with the waxing of research management and associated activities.

Individuals involved in management—sometimes scientifically qualified, otherwise with training in accounting or management—now wield enormous power, as they have become the guardians of public funds. Academic research scientists are held tightly to account by these managers, for what they do and how they spend money. This occurs through several processes that can all be described in one word: review. The researcher's life undergoes constant review in many areas, including human resources, ethics, finance and scientific output—the latter perhaps done on behalf of the manager by a panel of external experts, appointed specifically for that task. I have seen lately an alarming trend of the review panel being asked to check whether the researcher did the research exactly as proposed in the initial application. In a worst case scenario, the researcher might receive only 80% of the grant, but must spend 100% up front. The remaining 20% must be borrowed, but might be reimbursed provided that later reviews are favourable in all areas.

In order to cope with this situation, institutions often hire internal reviewers, who turn into policemen asking questions such as: "Are you sure the order for this chemical is for

this project and not another?"; "No, you can't buy a new computer, the project has only 6 months to run and it may be queried"; "You may have an absolute need for that centrifuge, but your budget allocation for equipment is not quite adequate"; "You budgeted for Tris, not Trizma."

Soon the researcher is spending more time on project administration and justifying expenditure than on research. The managers or compliance officers quickly realize that they are in an unassailable position. They are seldom, if ever, criticized under the same or similar review conditions and their attitude is clear; they are helping you and preventing you from landing yourself in difficulties. The next goal for them is promotion. The surest way of achieving that is typically 'civil service' in nature; that is, through the appointment of an assistant, or preferably more than one. In order to justify recruiting assistants, the workload must increase. The way to do this is to request more and tighter reporting requirements of the research scientist. This 'bureaucracy of compliance' is rather like a muscle-relaxant to the researcher—he or she sees what is happening, but is essentially incapable of doing anything about it.

I do not propose that we should have no review or control, but I would suggest we might have passed the point at which the level of review is reasonable. Academic research is about uncovering new facts and this is where public funds should primarily be spent. They should not be used in excessive control or review, which occupies a significant part of the research scientist's life at the moment, and, one might argue, is reaching proportions that are unethical in terms of time and cost. There is little review of review, a fact that seems to escape the attention of most people. Reviewers feel that they are expected to constantly criticize in order to justify their appointment, as do some research managers. Is this not excessive in academic and basic research settings?

Perhaps such tight control has a place in commercial enterprises that are involved in research and development. Here, careful management is required of both the research and resources, to achieve what is usually a predetermined target—for example a saleable product. It is arguably inappropriate to control academic research in a similar fashion.

Why, for example, do researchers not have the freedom to shift between categories of funding? Surely once a grant is allocated, the applicant is judged trustworthy and adequate. If investigators make mistakes they will not produce results, which will have a negative impact on their chances for further funding. Should we not be granting our investigators space to work to the best of their ability once funding is allocated? Review should come later and determine further success or failure.

Institutional finance and legal officers ensure that there is no self-enrichment or illegal expenditure, an important caveat in this argument. However, I argue that this process has become so formalized that investigators are spending a significant part of their time on this work, rather than their research—the prime target of the funding. The review process has effectively become external micro-management.

Is it ethical to use research funds to pay for external audits? How does the cost of hiring auditors compare with the money saved in avoiding the fairly rare event of misappropriation of funds?

It is time that researchers take a firmer stand against the creeping administration and management that threaten our work like metastasizing tumours.

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