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The opinion article *The culture of scientific research* contributes to a debate focused on the tension between doing research and holding researchers and research institutions accountable. I find that the piece does not particularly surprise me, but it's contribution is nonetheless important as it offers a somewhat less anecdotal treatment of the issues, as well as offering constructive suggestions about how to move forward.

The article reports on the results of a survey done among scientists in the UK, with 970 responses, and on the results of a series of 15 "discussion events" having around 740 speakers and participants.

Both the survey and the focus groups considered the nature of scientific careers and the circumstances in which scientists currently work and related these things not only to each other but to the nature and quality of research being carried out.

It is heartening to learn that scientists report their primary motivations as being the quest for knowledge and the application of that knowledge in the service of society. We want to understand stuff. That's what we do. And counting pages published and impact factors is a distraction. But it's more than that.

Some of the results of the study reveal the belief that our current infrastructure for funding moves us away from riskier curiosity-driven projects, towards more conservative research.

The perniciousness of impact factor is seen as pressuring scientists to try for particular journals, as well as leading researchers away from reproducibility projects or the examination of negative results.

The structure of careers -- especially with strings of post-docs and temporary positions -- yields a culture of short-termism. I think this is a very serious point. If early career scientists have to apply for renewal or new positions every 2-3 years, they have to get results within the first year of a position to have something published by the time they apply for their next job. This is not good for the quest for knowledge and understanding, and I think this point is under-appreciated in the debate about the nature of an academic career.

Another important topic the the article addresses is the pressure to take ethical short cuts. This in turn is one of the core issues in the authors' suggestions for improving our system. They stress the importance of training in ethical norms and practices and advocate for explicit engagement with this aspect of researcher training and practice.

In addition to encouraging us to nurture ethical training and practice, the authors also would like to see



more training to do peer review and broader evaluation in connection with hiring, advancement and the awarding of grants.

The nature of research is being manipulated and damaged by the nature of the context in which research is carried out. This article investigates that claim more thoroughly, provides evidence, and offers constructive suggestions about what could be different.

Read this piece. And talk about it with your research communities.

I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

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