

Article of Interest

Research Grants: Conform and Be Funded by Joshua M. Nicholson and John P. A. Ioannidis. *Nature*, 492, 2012, 34–36.

The article's subtitle tells it all: "Too many US authors of the most innovative and influential papers in the life sciences do not receive NIH funding . . ."

This fits in a little-remarked genre: evidence that contemporary science is very different from the popular view of it as behaving objectively by virtue of the scientific method and peer review. Even as many such articles document flaws in clinical trials, statistical incompetence in much of the medical literature, and failures of peer review (for example, Altman 1994, 2002, Bauer 2013, Ioannidis 2005, Ioannidis & Panagiotou 2011), there are no effective followup ventures to improve matters.

In this instance, Nicholson and Ioannidis document with compelling data what actually is known to everyone trying to do research in biology or medicine: What matters is whom you know, not what you know or what you have discovered. The National Institutes of Health (NIH) has not been consistently supporting the best investigators, those whose work has had the greatest impact. One reason, with which again all insiders are familiar, is that the NIH study sections that make recommendations on grants are populated by people who themselves are very likely to have funding through NIH, albeit their work has had comparatively little impact. To exaggerate only slightly, grant proposals from geniuses are adjudicated by mediocrities.

Nicholson and Ioannidis suggest that one partial remedy would be for NIH to direct funds primarily to people of proven accomplishment instead of by the project-grant system that prevails in almost all funding of scientific research. The absurdity of that almost universal system is, again, widely recognized: Proposals for funding are expected to explain what the work will accomplish and what its impact will be, which cannot possibly be done if the work is to be truly creative and exploratory. So what gets funded are routine banalities. Richard Muller (1980) long ago noted what one has to do: Present a banal proposal and then bootleg as much as possible of the grant for really worthwhile work.

While this article's analysis adds to documentation of the problem, the suggested amelioration is not likely to be feasible under present circumstances, because the judgments as to who the most accomplished

people are would again by made by the study sections whose record is the funding of banalities (Bauer 2012).

The broadest context for the present dysfunction in science lies in societal drives for “equity” and against “elitism.” Because in the past all sorts of judgments led to discrimination against females and members of various minorities, institutions have increasingly sought to make judgments objective, and this is too often interpreted as quantitative; or, judgments are left to committees whose composition is supposed to ensure equity by including representatives of historically deprived groups. But as is well-known, committees asked to design horses are prone to come up with camels; only individuals can judge *quality*; and there are no quantitative measures of quality. Consequently, in much of society and much of science and much of medicine, judgments are being rendered that do not reflect quality.

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