Home <u>About P.I. Association</u> <u>Our Mission</u> <u>Key Staff</u> <u>Contact Us</u> <u>PI eAlert</u> <u>Sign Up for PI eAlert</u> <u>Back Issues</u> <u>Submit a Reader</u> Home

Question Lab Animal eAlert Lab Animal eAlert Back Issues Submit a Reader Question Clinical Trials eAlert

Clinical Trials eAlert Back Issues Submit a Reader Question Membership

Member Benefits Join the P.I. Assn.

P.I. Advisor

Subscribe Today! About the Newsletter Editorial Advisory Board Sample Issue \$1 Bulk Subscription Guarantee Certificate Education & Service Audio Conferences EAQ National Conference Books Store

Sign up for our weekly e-Alert

Submit >>

T-Shirts

PRINCIPAL INVESTIGATOR ADVISOR

Does Your Location Influence Your Grant's Funding Chances?

In a perfect world, science, whether in the form of a grant or a paper, would be judged purely on the strengths of its ideas, the quality of the data presented, and on the originality and novelty of its hypotheses. Taken to its logical extreme, the review process would be truly double-blinded, neither reviewers nor authors being aware of each other's identities.

But this is an imperfect world — one in which the judgment of editors and reviewers undoubtedly is colored by the names and reputations of the submitters, and perhaps even by the identities of their home institutions. To hope otherwise is to be, at the very least, naïve.

At the lunch table in my institution, we have a shorthand expression that rationalizes (and makes bearable) the heartbreak of the sub-24-hour rejection by a prestigious journal. Colloquially, it's called "the ZIP code effect (ZCE)," for the widely held conviction that, absent a return address from Cambridge (Mass.), San Francisco, or Baltimore, your paper will be returned swiftly — even before being sent out for review.



A legendary historical example of the ZCE is provided by the experience of Dr. Hans Krebs1. While a lecturer at the University of Sheffield (England) in 1937, Krebs submitted the key manuscript describing the discovery of the cycle bearing his name (aka, the citric acid cycle) to *Nature*. The editor at that time, clearly unaware that he had received one of the most important papers in biochemistry in the 20th century, begged off consideration of the manuscript with the filmsy excuse that he already had a backlog of letters and would be unable to consider the paper for months.

Krebs eventually published his masterwork in the Dutch journal *Enzymologia*, which eventually folded in 1972. One wonders whether *Nature* would have been more receptive to Dr. Krebs' manuscript had it been submitted later in his career, after he had been appointed to a named professorship at Oxford, received a Nobel prize, been knighted, and received countless other accolades.

Another example where the ZCE might have been lurking behind the scenes is detailed in the autobiography of Craig Venter (*A Life Decoded: My Genome*), known for his high-risk but ultimately successful effort to produce the first complete human genome sequence. In Venter's account, he describes how multiple grant proposals submitted to sequence the first bacterial genomes (by what are now routine high-throughput rapid-sequencing technologies) were systematically rejected by NIH Study Sections during the critical lead-in period to his ascent of the human-genome Everest

While we should be careful not to cast aspersions on the motives of individual reviewers in the absence of details about the grants and reviews, I think we can unequivocally agree that this was not peer review's finest hour. Think what would have happened had this first wave of the sequencing revolution lapped at the doors of NIH through the efforts of a big-name PI from a highly prestigious institution, rather than a mere journeyman scientist not long out of the NIH intramural program.

If there is a lesson to be learned from these grand scientific oversights, it's that, for better or worse, your scientific "brand" counts for a lot — particularly where peer review is concerned.

In science, the concept of celebrity is not well defined, but people do build reputations, the height of which clearly has an impact on the perceptions of editors and reviewers.

A not insignificant measure of that perceived reputation flows from the institution to which the PI's name is attached. How much? Based on my experience on review panels, it varies according to the individual reviewer and the application. I've never seen the identity of a PI's home institution pull a highly flawed application out of the triage pile, but I can't say that it hasn't moved the needle a few points for a grant that sat "in the critical range." On the flip side, grant applications from a number of Noble Prize winners have been considered by some of the panels I've served on, but even that luminous distinction does not ensure automatic funding.

SUBSCRIBE TODAY

Knowing that the identity of your home institution can impact your score and that you can't readily change that (unless you move to a more prestigious institution), what should one do to mitigate the (potential) disadvantage associated with a less-than-prestigious institution?

The first and most important step is not to lose sight of what reviewers are thinking about when they try to assign scores to the review parameters in which we are most interested here, namely "investigator" and "environment."

The scores you receive on these criteria reflect the specific judgment of the reviewers about whether, given a significant problem and a doable research plan, you can carry out successfully the research plan you've proposed.

To assess that likelihood, they probably will weigh a number of important factors, including (a) your past productivity, (b) your experience and familiarity with the approaches, (c) the availability of necessary equipment and collaborators, and (d) your appreciation of potential problems and the availability of scientific work-arounds in case the primary strategy fails.

Your own background likely will provide clues about (a), (b), and (d), and your "environment" will provide metrics for (c). Among criteria that will not be taken into account are the size of your institution's endowment and the average earnings of your graduates after 10 years in the marketplace.

It is a misconception that NIH chooses only reviewers from what are considered "distinguished" institutions. On an average Study Section, you are much more likely than not to meet a geographically and scientific diverse panel. Many reviewers either will work at, or certainly appreciate the constraints of, working at institutions lacking unlimited resources.

