From the Editor

Retraction Expansion?

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Every month we publish a list of the top 10 news articles from BioTechniques.com. For those who pay attention to this list on a regular basis, the following should come as no surprise: retraction and scientific fraud stories are well-read. In fact, they tend to be the top news stories. This realization led me to think about two questions: Why are these stories so popular and why are there so many cases of fraud and retraction occurring now?

The popularity of these stories probably derives from our very nature; we like to read about other researchers and their triumphs and tribulations. Retraction stories get right to that core interest — the triumph of publishing a paper and the tumultuous fall when something is wrong with the work. In some cases it can be an isolated event, an error in the data analysis or collection that undermines the conclusions. But more often these days it is not an isolated event, with a seemingly greater number of cases of researchers fabricating data in multiple articles coming to light. The recent case of Duke cancer researcher Anil Potti is just one example of a string of researchers accused of falsifying data that has led to a number of retracted articles. The damage from these cases can be widespread: unaware co-authors, members of the lab, funding agencies, and the journals where the articles appeared all have questions to answer following such revelations.

But the fundamental question that has to be examined is the reason for all these retraction stories appearing now. Could it be that the expanded cataloging of retractions on social media sites such as Twitter along with a growing number of websites and media outlets reporting on retractions are finally bringing these cases to light? For example, Retraction Watch, started by Adam Marcus and Ivan Oransky, is a blog-style site that specializes in reporting on scientific fraud and retractions. Posts describe the nature of the retraction and provide background material

for readers. These efforts could be shining a light on a problem that has been around for a long time. If this is the case, an organic effort to stem this problem is already under way.

However, a more chilling possibility is that data fabrication and sloppiness is a sign of our times. In an era of science where funding is limited, competition for faculty positions intense, and no sign of relief is in sight, are young researchers cutting corners in an effort to publish faster to secure funding and positions? Yet another possibility to consider is that this could be a horrible outgrowth from the explosion in the number of scientific journals that has taken place in recent years — taxing the peer review system and allowing suspect articles to pass through unnoticed and be published.

Answers to these important questions might only come with time. But time is something that is in short supply. Retraction stories represent a double edged sword: exposing fraud is essential, but the more retraction stories that are published, the more the pillars of science are weakened, both within the scientific community and in the eyes of the public. Science is based on truth, and the search for the truth. The integrity of our profession is at stake; bringing these infractions to light is only the first step — now we must understand how and why data fabrication happens, and hopefully put other stories at the top of our monthly list in the future. Please share your thoughts with us by posting at our Molecular Biology Forums under “To the Editor” (<http://molecularbiology.forums.biotechniques.com>) or sending an email directly to the editors (bioeditor@biotechniques.com).

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