

Don't be misled by citation figures! (15)

Tainted Trust

Nieminen was an extremely conscientious man, strongly believing that in science true virtues still count. He belonged to that special class of researchers, who stand for a particular ethos in science, whose only and ultimate goal is the selfless quest for knowledge and truth. Of course, Nieminen had noticed to his disappointment that, in recent times, this attitude had increasingly become regarded as somewhat stuffy and old-fashioned. However, he didn't let this affect him.

Nieminen published nothing if the data wasn't absolutely watertight. Controls were almost sacred to him; he didn't start writing a manuscript until the last independent control experiment was complete. And for a long time, he got along well with this approach, which certainly distinguished him from those "high-throughput writers" who publish according to the "salami tactics" of the smallest publishing units. Nieminen's publications, however, were always based on solid foundations and could be absolutely trusted. And it was exactly this quality that his colleagues appreciated and respected.

However, this no longer went without saying. In this era of "publish or perish" you could no longer expect everything to be published without reservation. A development sometimes regarded by Nieminen with a tinge of sadness – until one dark day, he too was caught short...



The research business had become ever more complex. In order to achieve a comprehensive project result, you were increasingly forced to collaborate with groups that were able to do a variety of things your lab couldn't. Finally, Nieminen also reluctantly went down this path, despite feeling uncomfortable that he was no longer able to understand every detail in the resulting cooperative papers bearing his name. "Not to worry", he reassured himself, "at the end of the day, they are all scientists – just like me," silently hoping they all upheld ideals and moral concepts, similar to his own.

Four years ago, Olli, a clinician from the Department of Internal Medicine approached Nieminen, wondering whether he could help him with his broad cell biological expertise in pursuing a "fantastic idea" for tumour therapy. Olli explained the project and Nieminen agreed.

Over the next few weeks, Nieminen and his team produced the cell constructs, which Olli's assistant, Rantanen, subsequently administered to selected cancer patients. And every time Nieminen met with Olli, he was enthusiastically reassured about how "sensational" everything was progressing.

Three months later, the manuscript draft was on Nieminen's desk. As far as he could judge, everything looked very good. Another two months later, the article appeared. It came as a real bombshell!

Only half a year later, however, the bomb exploded for a second time. Doubts had arisen over the integrity of the study and, after a short review, it was revealed that Rantanen had invented most of the patient data; some of the patients had never even existed! Nothing of any significance remained of the study.

Nieminen, as the penultimate author, was entirely innocent; this was clear to everybody. Personally, however, the scientific world he thought he once knew had fallen apart, overnight. How could he, *he* of all people, appear as co-author on a fake publication – Nieminen became a tragic figure.

But the whole story was to reveal even further ugly aspects of the modern scientific establishment: to date, the paper has still not been retracted, although Nieminen had immediately called the Chief Editor of the journal. Worse still, the paper continues to be briskly cited. Apparently, there are some who actually believe they can support their own data with a flawed paper...

Thus, the paper has accumulated more than 450 citations to-date. And, of course, the databases also add this figure to Nieminen's citation account. Nieminen, however, utterly demoralised, wants nothing more to do with it, his only goal now is retirement...

RALF NEUMANN