Key words

scientists, career, committee, fraudulent

uncountables: evidence, fraud, funding, information, misconduct, proof, research, science, work

Type of document/ point of view: all from 2023

1. article published in scientific journal 2. Opinion piece by founders of a whistleblower website 3. graphs using data from document 2 4. article published by The Sydney Morning Herald: Australian point of view.

The rise of scientific fraud

In 2023, the president of Stanford had to resign because of the poor quality of/ his research. What does the increase in scientific fraud and misconduct reveal about the current state of science? This corpus/ tackles various aspects of this issue and is made up of four documents from 2023: document 1 is an article/ by Martin Enserink from Science dealing with a publisher's refusal to retract an article; document 2 is an opinion piece / by Ivan Oransky and Adam Marcus — founders of the website Retraction Watch —from The Guardian. Document 3 — two graphs published/ by The Economist — uses data from the Retraction Watch website while document 4 — an article from The Sydney Morning Herald/ — deals with scientific fraud in Australia and refers to a similar website: Retractions Australia.

First and foremost, the rise of/ scientific misconduct shows that the scientific world is in crisis. Using information from Retraction Watch, the first graph from document /3 shows a huge surge in retracted biomedical science papers from 1996 to 2023, from almost none to around 17,000/. Furthermore, document 2 reports that this increase actually underestimates how serious the problem is: not only is it worse than/ is shown, but also, few scientists, publishers and institutions are willing to react.

Why is this? Scientific misconduct happens for/ many reasons: scientists themselves refuse to accept allegations of fraud, threatening whistleblowers with legal action for example; journals and publishers/ often refuse to withdraw work that has been shown to be problematic. One such example can be found in document/ 1. Even after a university investigation found proof of fraud in a paper about fish behaviour, The Proceedings of the /Royal Society B would not retract the work and justified its continued publication. Document 4 adds that scientists feel obliged/ to publish in order to further their careers and even pay for their names to be listed on a paper. /

Despite this alarming context, some positive steps are being taken. The role of whistleblowers — often volunteer scientists — is key. They/ analyse research findings, instigate investigations (document 1 and 4), and provide information about the type and the scale of the /problem, as we can see in both document 2 and 3. The other major reason for hope is in the/ reaction of universities and major publishers. In document 1, for example, we see that the University of Delaware followed up/ on whistleblowers' alerts and set up an investigation into the fish behaviour paper.

In conclusion, while there is some reaction/ to scientific fraud, more needs to be done. (428 words)