Every scientist has to adhere to the publish-or-perish maxim to some extent - the pressure to write papers is huge, and growing. Can automated writing really help prepare manuscripts?

Scientist's work is continuously being evaluated by how many articles you publish and where. Today, science is very competitive. There has never been so much pressure on a scientist to publish as there is today. At the same time, publishers are demanding more rigorous documentation to diminish the percentage of potential retractions and increase the reproducibility of published research.

An alarming study<sup>1</sup> showed that out of 238 published scientific articles, barely 46% could be reproduced. Many of us are even more familiar with the recent news<sup>2</sup> about the replication efforts which were successful for just two of five cancer papers. There is always the question of integrity, time and money.

Can we manage our time efficiently in today's fast-paced reality – when we realise that we're actually spending more than 40% of time on administrative tasks?

To fully understand the implications of automating paper writing, we need to take a step back and understand that in order for a software to generate a draft of a manuscript based on our own research data, it needs our data to be systematically organised and traceable.

**Start with the data** The subject of automating paper writing is just the tip of the iceberg. The whole story starts with the way we do research.

Working habits differ greatly in laboratories and there is still no standardised approach to how we organise and manage research data. For example, when I was doing my PhD, my work was part of a project involving five different institutes in two different countries. I joined the project in about half way through and was also handed a lab notebook from a colleague whose work I was supposed to continue.

It turned out my coworker had the worst hand-writing and I had to chase him down a few times to get some explanations. He also used completely different logic for organising the files, so I first had to make sense of that and modify everything to fit the way I needed it.



There is barely time to think, let alone to make sure that every note, comment, document, printout or idea is neatly and systematically organised.

On the other hand, for example, I'd write changes or deviations related to my research data in