

Wikipedians reach out to academics

London conference discusses efforts by the online encyclopaedia to enlist the help of scientists.

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07 September 2015



Chris Batson / Alamy

The fact that anyone can edit Wikipedia anonymously has long made the website suspect in the eyes of many scientists — but its advocates say that academic experts can be part of the solution.

Wikipedia is among the most frequently visited websites in the world, and one of the most popular places to tap into the world's scientific and medical information. But scientists themselves are generally wary of it, because it can be edited by anyone, regardless of their level of expertise. At a meeting in London last week, the non-profit website's volunteer editors reached out to scientists to enlist their help and to bridge the gap between the online encyclopaedia and the research community.

"A lot of academics have the impression that because anyone can edit, that means it's a Wild West," says Martin Poulter at the University of Oxford's Bodleian Libraries, UK, and an organizer of the meeting. "But Wikipedia is a community of ultra-pedants who care about facts being right."

And it is that community of ultra-pedants, replete with laptops bearing the garish stickers of previous campaigns, that Poulter mobilized for last week's summit. He brought them together with scientists, academics and publishers who had never attempted a Wikipedia edit for the first ever [Wikipedia Science Conference](#) in London on 2–3 September.

Cultural barrier

Poulter says that in many cases, Wikipedia content already is of [high quality](#), although some [dispute](#) that. Because scientists are experts in their respective fields, their involvement could help to improve it.

But by and large, scientists are not getting involved. The number of people editing Wikipedia is, in fact, falling, says Alex Bateman, a computational biologist at the European Bioinformatics Institute (EBI) in Hinxton, UK. He hopes to make more scientists comfortable with the idea of editing Wikipedia pages in their field of expertise. "Most articles grow really organically, sentence by sentence", which is a very different experience from writing a scholarly paper, he says.

"There is a cultural barrier," Poulter says, adding that academics often feel too busy to get into some of the admittedly "petty discussions" that sometimes take place around Wikipedia edits. "There have to be changes from both sides. That's what we're

discussing.”

“There are lots of disparate efforts going on around the world”, to reach out to scientists, says Bateman, “but essentially, this community hasn’t got together before.”

Error fixing

In one such effort to reassure scientists about the quality of the website’s articles, Wikipedia is trying to improve its biographies of living scientists. The first to benefit have been fellows of the Royal Society, Britain’s pre-eminent scientific institution. Duncan Hull, a computer scientist at the University of Manchester, UK, persuaded the society to take on a ‘Wikipedian in residence’, a part-time editor to lead [edit-a-thons at the society](#) to fix errors of omission about the fellows. Of fellows accepted in the past 20 years — around 1,000 of them in all — 30% do not have a Wikipedia page, and the biographies that do exist are often of poor quality, Hull told the conference.

“It’s a small step,” says Hull, “[but] having that information in Wikipedia might change the scientists’ attitude to Wikipedia. If they find out they’ve got an accurate biography of them and their work, that might change their view about Wikipedia as a way of communicating information to the wider public.”

Harnessing expertise

[Two projects, called Pfam and Rfam](#) — databases of protein and RNA families, respectively, which are hosted by the EBI but open to editing by anyone through Wikipedia — have shown that when scientists get involved, Wikipedia’s science content benefits, according to Bateman. The databases’ entries for a protein or RNA family reflect the content of that family’s Wikipedia page, and changes made on Wikipedia are automatically drawn into the main database.

“There have been 90,000 edits to these articles,” says Bateman, who co-founded the databases while at the Wellcome Trust Sanger Institute in Hinxton, UK, in the 2000s. From articles of just a few sentences at best, some entries have grown to be truly encyclopaedic. “We never would have gone to the trouble of writing such detailed articles,” Bateman admits. “There are so many experts around the world, if you can just harness them somehow.”

Although Wikipedia’s science content would benefit from getting more expert contributors — the site maintains a [list of specific articles requiring expert attention](#) — Poulter also thinks that academia can benefit from buying into Wikipedia. “Wikipedia is an opportunity to recapture some of the academic ethos that has been weakened by the commercial sector,” he says, pointing to the transparent process by which Wikipedia articles are created and edited.

“If you’re working in the open, you release all your data, your drafts and everything, and you invite comments from the start, rather than only after a process which is hidden away from the public,” he says.”

Nature | doi:10.1038/nature.2015.18313