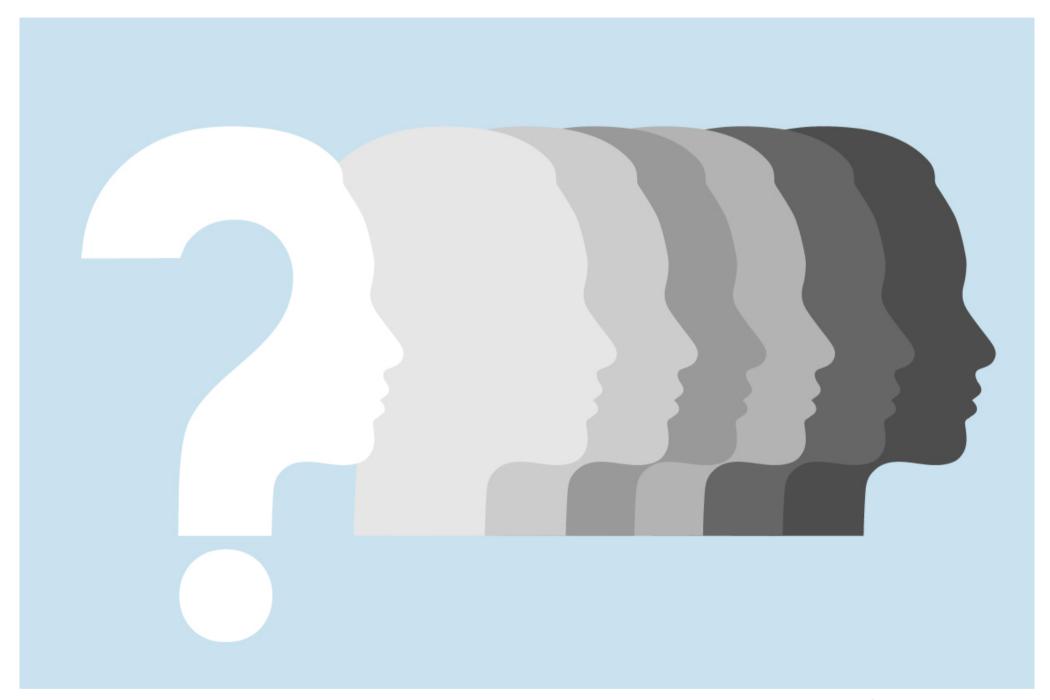
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'Honorary authors' of scientific papers abound—but they probably shouldn't

Up to one-third of authors don't meet criteria for adding their name to a paper, study finds

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An unusual study examined contributions to papers by more than 600,000 scientists and whether they met publishing industry standards for authorship. ELENA SOLOVEVA/ISTOCKPHOTO, ADAPTED BY M. ATAROD/SCIENCE















It's a practice that makes some scientists cringe: The lead author of a paper pays homage to a department chair, or a colleague who helped secure a grant, by listing them among the manuscript's authors—even though the person made no intellectual contribution to the paper. Such "honorary authorship" is discouraged by many journals, publishing industry groups, and universities, who say it undermines the integrity of scientific literature.

Despite such disapproval, however, honorary authors appear to be common, a new study concludes. Up to one-third of more than 600,000 authors examined by the study appear to have been granted authorship even though they didn't meet some commonly used criteria.

The unusually large study is "novel and adds to what we know" about the long-standing but controversial practice, says Annette Flanagin, executive managing editor of *JAMA* and the JAMA Network, who was not involved in the work. And the finding comes as authorship practices have come under scrutiny over concerns that senior researchers often horn in on credit for work done by junior colleagues.

Previous studies of honorary authorship have estimated its frequency by surveying scientists directly. But such self-reported data can be unreliable. To get a firmer grip, a team led by veterinary researcher Nicola Di Girolamo of Cornell University examined what it believes to be a more reliable measure: statements, typically written by a paper's lead author, that describe each author's contribution to the work. Specifically, the team examined statements that accompanied some 82,000 papers—with 629,000 authors—that were published in seven open-access journals from 2017 to 2021. All the journals are published by the Public Library of Science.

The researchers used a computer program to comb through the statements—which are assembled using a standard approach called <u>Contributor Roles Taxonomy</u>, <u>or CRediT</u>—and see whether each author satisfied two commonly referenced sets of authorship standards. These guidelines don't allow honorary authorship and also lay out the kinds of contributions that should entitle researchers to be named as authors. One set of standards was developed by the <u>International Committee of Medical Journal Editors</u> (ICMJE). The other, based on recommendations by the editors of several leading science journals, was published in 2018 in the <u>Proceedings of the National Academy of Sciences</u> (PNAS).

Overall, some 35% of the authors failed to meet the ICMJE criteria, and 4% didn't meet the *PNAS* standards, the team reported this month at the International Congress on Peer Review and Scientific Publishing in Chicago. In addition, they concluded that some 1% of the authors appeared to have been listed solely because they secured funding or provided materials or other resources for the project, practices that don't meet either standard.

The team might have found an even higher prevalence of honorary authorship, Di Girolamo notes, if the CRediT statements had allowed it to evaluate two other criteria required by standards: that all co-authors approve the draft submitted for publication and accept responsibility for the integrity of the work. But the CRediT statements don't address those issues.

The results partly reflect differences in the ICMJE and *PNAS* standards, Di Girolamo notes. ICMJE, for example, says an author must have participated in drafting the work or substantially revising it. In contrast, the *PNAS* guidelines count drafting and revising as sufficient but not necessary for authorship. Both standards allow other project roles—such as conceptualizing the research design, curating data, or writing software—to count. And both recommend that researchers recognize project participants who didn't meet the criteria for authorship by acknowledging them elsewhere in the manuscript.

The idea that honorary authorship is widespread is concerning, Flanagin and other researchers say. For example, it can mean honorary authors "are misrepresenting their contributions in the scientific literature," possibly to inflate their volume of publications for tenure and promotion, Flanagin and colleagues wrote in a 2011 study of the practice. But they note that being an honorary author can also carry risk: If a paper bearing their name triggers allegations of research misconduct, for example, every author's reputation can be damaged, regardless of their role in the work.

Di Girolamo says personal experience played a role in motivating him to conduct the study. In one of his first research projects, a collaborating institution asked him to add its scientists as authors of the resulting manuscript, even if they hadn't substantively contributed. "Being a young researcher at the time, I was helpless in that situation," says Di Gerolamo, who notes that honorary authorship can be "a form of scientific misconduct that is often the consequence of power dynamics. ... For a co-author, it's hard to tell a senior author, 'You shouldn't be an author of this manuscript, you haven't done enough.'" When the paper was published, fewer than half of the dozen listed authors met the ICMJE guidelines for authorship.

Curtailing the practice will likely require educating authors and editors about best practices in publishing, Di Girolamo says. Universities and journal editors could do more to stop honorary authorships, he adds, but other ICMJE policies discourage such policing. They state, for example, that it is not up to journal editors to determine who qualifies for authorship or to arbitrate authorship conflicts. "There won't be a single way to fix this problem," Di Girolamo says.