

## Are You Ready to Publish? Factors to Help You Decide

When it comes to publishing, *when* is not nearly as important as *why*. It's always important to publish promptly, of course, and there may be rare extenuating circumstances when it's necessary to publish before you feel you're fully ready. But experts generally agree that the decision on when to get your results into print should be driven by the science — not simply your desire to see your name in the high-end journals as often as possible.

The National Institutes of Health's (NIH) Office of Extramural Research tells *Principal Investigator Advisor*: “The NIH wants investigators to publish their work as a means of building the scientific knowledge base for biomedical research. However, the timing and frequency is really the decision of the investigative team.”

“The NIH will want you to wait until the circle has been closed via the final report,” says **Martha S. Mihalý**, PhD, an independent consultant in Washington, D.C. “When you apply for your next grant, you can always cite your previous research as ‘in review,’ if you've submitted it for publication. The NIH will understand.”

“I have an NSF grant and served on the review panel for three years for social psychology. Both quantity and quality count,” adds **Linda M. Isbell**, PhD, an associate professor of psychology and graduate program director at the University of Massachusetts. “A high quantity of high-quality papers is best, of course, but if there has to be some sacrifice — and there usually is! — I still favor quality over quantity as a grant reviewer.”

Your judgment as a scientist thus comes into play. “In my department, it's entirely up to the principal investigator,” notes Isbell. “Of course, more high-quality publications are rewarded, so there is some pressure to get work published. But the decision on how exactly to do that is up to the PI.”

Of course, things are rarely as black and white as you'd like them to be. Stories abound about PIs feeling under pressure to publish before they're ready — because they want to be ahead of results of similar work from a competing lab, thereby establishing some ownership around the findings.

Conversely, there may be times when the private company sponsoring your research has legal paperwork work yet to be completed before you can go public with details on a product that has to be patented.

### Factors influencing your decision

But for the most part, the “when to publish” call is yours — and it requires striking a balance among a number of factors.

“First, a PI should have reasonable confidence in the findings,” Isbell stresses. “If you doubt whether they’ll replicate, it’s better to conduct the replication first. If the work is published and then not replicated by others later, that could negatively impact your career.”

Of course, it’s always good to get your name on papers as soon as you can to increase the speed with which you get established in your field. But if you have great data, yet need some additional time to publish in a top-tier journal, “it’s usually better to wait rather than to publish in a lower-level journal more quickly without the extra data,” Isbell adds. “Publications in higher-level journals will have more impact on your field — and more impact on your career, such as an increase in funding opportunities.”

Adds Mihaly: “It’s more important to establish yourself as an ethical researcher than as a groundbreaking one. Very little research is truly groundbreaking, but an unethical or nonprofessional incident can haunt you throughout your career.”

**Gregory Lanza**, MD, PhD, a professor of medicine at Washington University Medical School in St. Louis, says he never publishes until he’s repeated an experiment two or three times. “That said, once you have a good result, you do want to publish ASAP (as soon as possible) for the recognition and for the potential impact for other people to move the results down the line,” he says. “Don’t sit on data until you prove them to the 9th degree. Ideally, you want a balance between the two.”

Her work’s fate before peer reviewers is a big consideration for **Elisabet Nalvarte**, PhD, in deciding when to publish. “You definitely want to publish when the research is ready,” the research associate professor at the University of Missouri says. “If I publish something when my gut feeling is ‘I’m ready,’ then getting published is practically a done deal. “But if I have the feeling that I’m not there and I push the paper on a ‘maybe,’ publishing takes a longer time and more effort.”

Reviewers can be tough on “not-ready-for-prime-time” research, too, Nalvarte adds. “The way we used to publish five to 10 years ago is no longer the case,” she says. “The standards have been raised because of the increasing complexity of knowledge.”

Nalvarte also notes that you may not get to make the when decision all by yourself, because PIs increasingly work as members of teams. “You need the blessing of the all others to publish,” she points out. “The manuscript goes through all of them to get their seal of approval. Hopefully, you won’t have one person saying, ‘I don’t want to publish yet’ when all the others do. Fortunately, that doesn’t happen very often.”

This article reprinted by permission by Principal Investigators Association. Article cited at: <http://www.principalinvestigators.org/pia-are-you-ready-to-publish-factors-to-help-you-decide/>