

News from the National Institute of General Medical Sciences (NIGMS)

COMMUNICATING WITH THE PUBLIC—IT'S IN YOUR BEST INTEREST

After weeks (or months) of writing and rewriting, you have just had a paper accepted for publication in a major, peer-reviewed journal. Does your mind turn next to a lab celebration, or to the rising pile in your inbox? Actually, it might rather turn to your funding agency—in this case, the National Institutes of Health (NIH).

While NIH is in the business of supporting research, its mission also includes explaining to the public the results of this research. The idea is not to hype the science, but to partner with researchers to inform and educate the American public about the scientific progress their tax dollars are making possible.

"We often as scientists don't realize how wide the gap is between what we do and the understanding of the average citizen in the community," said Dr. Ronald Borchardt, Solon E. Summerfield Distinguished Professor of Pharmaceutical Chemistry at the University of Kansas. "The public is providing the resources for carrying out these studies, thus we have a responsibility to share with them what our findings are."

Surprisingly, many U.S. citizens are unaware of the role public funds play in supporting research across the nation. Many also do not understand the significance of basic, non-disease-targeted research, such as that supported by the National Institute of General Medical Sciences (NIGMS). NIH is committed to working with researchers to raise awareness in these areas through communicating about the science it supports.

What You Can Do

As an NIH grantee, you can help increase the public's appreciation of scientific research—and of the role played by their tax dollars. The best way to do this is to tell your program director (the NIH staff scientists who administers your grant) when you have had a major paper accepted for publication or are going to announce a major finding. And naturally, acknowledge NIH support as appropriate on journal articles, posters, seminar slides, and in conversations with your institution's public affairs office and with journalists.

At NIGMS, your program director will inform the institute's Office of Communications and Public Liaison (OCPL) of alerts you provide about upcoming articles or announcements. This office may write a news release about your NIGMS-supported findings. During the preparation of a release, the OCPL will work with your institution's public affairs office and will honor applicable journal embargoes. Because it can require a few weeks to prepare, clear, and distribute such a release, please contact your program director as soon as you learn that your findings are accepted for publication. NIGMS also highlights some of the research it supports in feature stories, reports to Congress, and "research briefs" on its Web site (see <http://www.nih.gov/nigms/news/releases/>).

Responding to Reporters

If NIH or your institution features your work in a news release, you may receive calls from journalists who want more

details about your work. You can receive tips or training about how to respond to such calls from your institution's public affairs office (this office may also be called the public information office, the news office, or the public relations office).

The most important lessons in dealing with the media are:

1. Talk with reporters as soon as possible. They almost always work on extremely tight deadlines.
2. Explain your work using plain language rather than scientific terms. Often a clever way to do this is to devise analogies that relate the science to everyday objects or events.
3. Practice explaining the main point of your research (what you did and why it is significant) in a simple, concise way, preferably in a sentence or two.

"Effective communication with the public is very difficult," acknowledged Dr. Gordon Amidon, who is the Charles R. Walgreen Jr. Professor of Pharmacy and Professor of Pharmaceutics at the University of Michigan. "As scientists, we're very specialized, and we speak our own specialized languages. It takes great effort to be able to present and articulate a position in language that would be generally understood." This is especially the case for fundamental research, which often does not have foreseeable clinical applications.

Remember that although some reporters have advanced training in science, many do not. Unless they are writing for a scientific publication, you can assume that their audience is intelligent, but scientifically naive. They are most interested in what's new—especially if it is surprising—why it's important, and how it may impact their lives in the future.

Some reporters, especially those doing a longer or more in-depth story, may want to talk with other scientists to gain a broader perspective. Please suggest that the journalist contact your NIH program director, who is familiar with your work and can provide scientific context. (Please alert your program director if you make such a referral, and provide him/her with a copy of the relevant journal article or preprint.)

Why Now?

Researchers recognize that efforts to explain science to the public are more important now than ever. "Twenty years ago, there wasn't as much accountability for what we did," said Dr. Borchardt. "Now there's a lot more accountability in every sphere of society. There is a need to explain why NIH . . . is expending its money in the way it is."

"I think public support is not a right. I think it is something we're given that we have to earn," said Dr. Amidon. "We must spend part of our time communicating to the public. It's an obligation for accepting public money. I think not doing it is not an option."

As science and technology steadily permeate our everyday lives, the public is more interested in what's happening behind laboratory doors. "The previous attitude of most faculty was very elitist—they thought the only people who were interested in or could understand what they were doing were their peers. I think we're now into an environment and a generation that

wants access and many people are quite capable of understanding [the science]. We have an obligation to provide this information," said Dr. Borchardt.

An increased public awareness of the rich variety of research topics may also foster enthusiasm in the next generation of scientists. "If we can communicate in lay terms what we are doing, we have a good chance of stimulating young people—middle school, high school, even college students," said Dr. Borchardt.

Exposure in the popular media may also garner the attention of other researchers. An article in *The New England Journal of Medicine** concluded that journal articles covered in the popular press receive a higher number of scientific citations. Amazingly, articles in the *NEJM* that were publicized by *The New York Times* received 72.8 percent more scientific citations in the first year after publication than did control articles, which were selected for publication in the *Times* but were never distributed to readers because of a newspaper strike.

In some cases, new scientific collaborations are born through the pages of the popular press. "I had a scientist from the U.K. come up to me at a meeting and say he read something about me in the local newspaper," recounted Dr. Amidon. "It is comforting to know that . . . the information gets out there and that people read it."

Researchers largely agree that the responsibility to explain their work to the public extends beyond being good citizens of

the community and is truly in the best interest of science. "The advantage to scientists is the increased level of support, not just financial support, but cultural support of the role of scientists in society," said Dr. Amidon.

"The bottom line is, if we can't explain what we're doing with the money, the public will not be willing to continue to support basic research," concluded Dr. Borchardt.

For more details about contacting your program director and acknowledging NIH support, please see <http://www.nih.gov/nigms/funding/attrib.html> or call the NIGMS Office of Communications and Public Liaison at (301) 496-7301.

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* D. P. Phillips, E. J. Kanter, B. Bednarczyk, P. L. Tastad. Importance of the lay press in the transmission of medical knowledge to the scientific community. *New Engl. J. Med.* **16**:1180–1183 (1991).

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