Mediated Access

Transparency Barriers for Journalists' Access to Scientists and Scientific Information at Government Agencies

Center for Science and Democracy
at the Union of Concerned Scientists

Transparency invigorates a strong democracy. It inspires trust and spurs citizens to hold their leaders accountable. As citizens, we have the right to know about the scientific information shaping the policies that affect our health, our safety, and the environment. Our government has a responsibility to share this information openly.

Journalists play a key role in communicating to the public the scientific information generated and used by the government. The work of government scientists affects the air we breathe, the water we drink, the food we eat, and the medicines that help maintain our health. Journalists need access to these experts in order to understand the context and nuances of this scientific information. They need to be able to have frank and honest conversations with the people who analyzed the data in order to communicate accurately about issues such as chemical spills in local rivers or earthquakes near unconventional oil and gas development sites.

Scientists, likewise, need to have the freedom to speak candidly with journalists—and hence the public—about their work. For example, if scientists at the U.S. Centers for Disease Control and Prevention (CDC) have apprehensions about a new strain of influenza or a tuberculosis outbreak, the public needs to have confidence that these scientists are communicating openly with the press and that the CDC's response is based on science. Only in this kind of environment can the public feel confident in the information available for citizens to make decisions concerning the health of their children, families, and communities. Further, government scientists are also citizens and should have the ability to publicly share their expertise in a private capacity.

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At the same time, federal agencies confront a variety of pressures that can affect their ability to facilitate the free flow of information. Most face budget constraints and staffing limitations in the face of larger regulatory mandates and greater demands for information. Litigation can also preclude the release of information. Additionally, increased and sometimes hostile congressional scrutiny of agencies' work has put some agencies on the defensive and may explain why, in part, they have tightened control over information. Public information staff at those agencies may argue that limits on press access to scientists are intended to protect their agencies—and agency scientists—from unjustified attacks.

Yet in this age of scrutiny, as the Union of Concerned Scientists (UCS) has argued previously (Halpern, Huertas, and O'Brien 2012), **it is especially important for scientists to be able to respond to valid critiques and questions about their work from the public and the press**. When their work is discussed by policy makers and pundits, experts should be able to correct and clarify. It is equally important for scientists and public information officers (PIOs) to distinguish between responsible inquiries and baseless criticisms aimed at unfairly undermining public confidence in the agency, the scientists' research, or public policies based on it. In all cases, we need government scientists to communicate clearly and honestly and demonstrate their reliability as purveyors of facts. Some media policies and practices aimed at defending agencies against unfounded external criticism can excessively limit journalists' access to scientists and scientific information they routinely seek, and thus compromise the news-gathering process. Journalists perceive these policies and practices as transparency barriers. Their perceptions of these barriers can

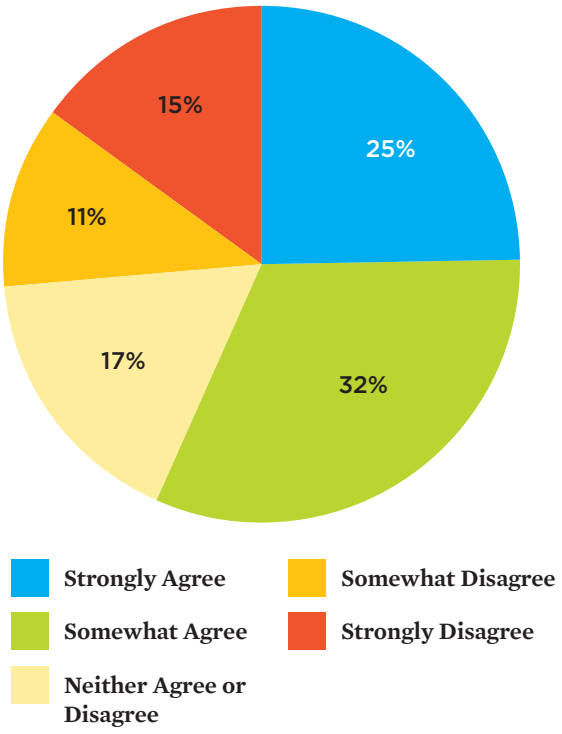
serve as a bellwether for the degree of balance that agencies are achieving between maintaining transparency and insulating the agency from efforts to undermine its work.

This report synthesizes survey data from science journalists gathered in January and February 2015 and released in April. To supplement this information, we spoke with a subset of journalists who have regular contact with government agencies (for methodology, see Box 1, p 5).

Overall, journalists say that they are not getting the information they need to fully and accurately inform the public. The majority of survey respondents (56.8 percent) reported that they believe the public is not getting all of the information it needs because of barriers that agencies are imposing on journalists' reporting practices (see Figure 1).

Our research points to four barriers—directly linked to agencies' policies and practices—experienced by reporters in their efforts to speak with government scientists:

FIGURE 1. According to Science Writers, the Public Is Not Getting All of the Information It Needs Because of Agency Barriers



Journalists are always seeking information to write their stories—and there are always more questions to be asked. Although more than a quarter disagreed with the statement "the public is not getting all the information it needs because of barriers agencies are imposing on journalists' reporting practices," more than half agreed and 25 percent strongly agreed.

1. Preapproval for interviews is required
2. Interviews are closely monitored
3. Interviews are denied
4. Tough questions are avoided

In the following pages, we provide context for the current situation in which science writers report that they struggle to get information from government sources. We identify the specific obstacles they face and illustrate how these hinder science reporting. We also consider the special case of information access in crisis situations. Finally, we provide recommendations for improving open communication between journalists and government scientists.

The Obama Administration

From his first day in office, President Obama stated that transparency within the federal government would be a top priority, and he acknowledged that public access to federal scientific information related to the environment and public health needed improvement (Brainard 2011). Promising in his first inaugural address to "restore science to its rightful place," the president also pledged that his administration was "committed to creating an unprecedented level of openness in government" (White House 2009b, White House 2009c). He directed agencies to "take specific actions to implement the principles of transparency, participation, and collaboration" (White House 2009a).

SCIENTIFIC INTEGRITY POLICIES

The president's statements and early policy actions on transparency and science inspired optimism. The Open Government Directive (White House 2009a) set ambitious goals for government transparency, and many agencies began making data sets more available. Notably, however, the focus was more on access to data than access to the people who can interpret and provide context for these data.

President Obama also committed to scientific integrity reform and, in March 2009, asked the Office of Science and Technology Policy to come up with a plan to create strong scientific integrity standards within government. In 2010, White House Science Advisor Dr. John P. Holdren issued a memorandum instructing federal agencies to develop scientific integrity policies (Holdren 2010). Twenty-three federal agencies and departments subsequently developed policies that included provisions such as dispute resolution processes and the right to review scientific publications for accuracy prior to release. Some of these also included guidance on public communications; however, the degree of openness in these policies varies considerably.

In addition, the scientific integrity memorandum and many of the subsequent policies failed to affirm that federal scientists

could speak to the media and the public about their work and within their areas of expertise without obtaining preapproval. As we recommended in our model media policy (UCS 2007), scientists should notify PIOs when speaking in an official capacity and take advantage of them as a resource. However, requiring preapproval opens the door to political influence and slows down or reduces public access to information.

Dialogue between the press and agency scientists comes with different rights and responsibilities. Scientists have the responsibility to distinguish among data reporting, expert interpretation of those data, and personal opinions on particular policies. Agencies and departments should make clear—and make sure their scientists understand—what kinds of communication are appropriate in what context. Scientists should have the right to express their personal views—even on matters of policy—as long as they make it clear they are speaking in their private capacity as citizens and not on behalf of an agency. Further, agencies need to have robust protections for whistleblowers. When agency employees expose fraud, waste, abuse, or political interference to journalists, it would obviously not make sense for them to be required or even encouraged to notify other employees about it, especially if they fear retaliation.

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MEDIA POLICIES

Some agencies went beyond Dr. Holdren's instructions on developing scientific integrity policies and made significant improvements toward advancing a culture of openness within the agency, which included improvements in media policies that covered communications with the press. For example, the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), and the National Oceanic and Atmospheric Administration (NOAA) updated their media policies to include, among other things, a personal views disclaimer. This provision affirms the right of their scientists to speak as private citizens—that is, to express their own personal views on an issue, as long as they make it clear they are not representing the views of the agency.

However, other newly developed media policies continue to allow agencies to exercise excessive control over scientists' communication with the press. In *Grading Government Transparency: Scientists' Freedom to Speak and Tweet at Federal Agencies*, UCS scored 17 federal agencies' public communication policies on their effectiveness at protecting scientists' freedom to speak with the public and utilize social media (Goldman et al. 2015). This analysis found that while many agencies have developed or updated policies to include language promoting openness, many still compel scientists to get permission from supervisors or PIOs to speak with reporters, instruct PIOs to sit in on and monitor interviews without specifying appropriate parameters for this participation, and exclude or discourage the use of personal views disclaimers (Goldman et al. 2015).

Furthermore, there is evidence that official policies, even if supportive of transparency, are not always indicative of agency practices (Simon 2015). A 2011 survey of senior science, health, and environment reporters conducted by the *Columbia Journalism Review* and ProPublica found that 30 percent rated the Obama administration "poor" or "very poor" on overall transparency and access to information, and 42 percent rated it only "fair" (Brainard 2011). While these numbers represent a modest improvement over previous administrations (44 percent rated the George W. Bush administration as "poor" or "very poor"), they indicate that journalists still report significant barriers to speaking with agency scientists—and hence the continued restrictions on public access to government scientific information. Surveys of reporters conducted by the Society of Professional Journalists in 2012 and 2014 also indicate that transparency remains a challenge (Carlson and Roy 2014; Carlson and Roy 2013; Fahri 2015; SPJ 2012). In July 2014, 38 journalism and good government organizations wrote an open letter to President Obama detailing concerns about access to experts, giving examples where access was denied, and urging the administration to "seek an end to this restraint on communication in federal agencies" (SPJ 2014).

In some cases, agencies with excellent written policies appear repeatedly in journalists' anecdotes of difficulties they encountered trying to obtain information from or interviews with agency scientists. The prevalence of these anecdotes among journalists suggests that the implementation of written policies is far from complete. Better policies must be accompanied by better practices if government scientists are to have adequate freedom to provide information and share their work with the press and the public.

BOX 1.

How We Assessed Access

In order to gain more insight into discrepancies between agencies' policies and practices, we surveyed and interviewed journalists to assess their ability to obtain information from government scientists. We were interested in both direct access to agency scientists and access to information through PIOs. We used a survey of science writers, which included open-ended questions, and a supplemental questionnaire that a small subset of journalists responded to via email and phone interviews. To understand how agencies viewed their interactions with the press, we spoke with PIOs at several agencies regularly contacted by science journalists.

SURVEY OF SCIENCE WRITERS

UCS and the Society of Professional Journalists conducted a randomized, anonymized survey of science writers about their experiences obtaining information from scientists at government agencies and their interactions with agency PIOs. We invited a sample of 1,667 journalists who self-identified as science, health, or environment reporters to take the survey and received 254 responses, a 15 percent response rate. The survey was completed online between January 20, 2015, and February 14, 2015.

To view the survey instrument and raw data, see Appendices A and B. To view a detailed analysis of the data that supports the findings synthesized here, see Appendix C. The detailed data analysis was initially released in April 2015 and is also available on the Society of Professional Journalists' website (Carlson 2015).

SUPPLEMENTAL STORIES

Following the completion of the survey, we reached out to individual journalists for more in-depth insights on some of the issues raised in survey responses. We contacted 15 senior journalists who cover science, environmental, and energy issues at the local, state, and regional levels and routinely interact with agencies as part of their reporting. We also emailed members of the Society of Environmental Journalists, inviting them to send us their thoughts on the ease or difficulty of getting in touch with agency experts, their access to experts during crisis situations, their working relationships with PIOs or scientists, whether conditions had improved or worsened over the past several years, and any other issues they thought we should know about based on their interactions with agency PIOs and scientists.

The goal of these interviews and email exchanges was not to gain information that could be quantified, standardized, employed as a representative sample, or otherwise used to generalize about either journalists' experiences or across-the-board practices at agencies. Rather, we sought to use this small set of journalists' anecdotes to expand on the transparency barriers identified by the survey and illustrate them in concrete, relevant ways. We spoke by phone with four of the 15 senior journalists we contacted for 30 to 60 minutes each and received written email responses, which included some follow-up exchanges, from six members of the Society of Environmental Journalists. Interviewees included Steve Everly, formerly of the *Kansas City Star*, and Ken Ward of the *Charleston Gazette*, both of whom agreed to be named and quoted, as well as two other journalists—a freelancer and a Washington, DC–based environmental reporter—who agreed to be quoted but wanted to remain anonymous in order to speak candidly without negatively affecting their working relationships with agency employees. The six journalists who responded by email also agreed to be quoted but requested anonymity for the same reason.

We also contacted the public information offices of the federal agencies named in survey responses and interviews. Jeff Ventura, acting deputy director of strategy in the Office of Media Affairs at the U.S. Food and Drug Administration (FDA) provided a written response, and four PIOs agreed to be interviewed: John Burklow, associate director for communications and public liaison at the National Institutes of Health (NIH); Bob Jacobs, deputy associate administrator for communications at the National Aeronautics and Space Administration (NASA); Tom Reynolds, associate administrator for public affairs at the EPA; and Gavin Shire, chief of public affairs at the FWS. To view the questions we asked journalists and PIOs, see Appendix D.

Four Barriers to Open Communication

Notwithstanding the challenges and negative experiences journalists described that are discussed in the sections below, it is essential to underscore upfront that a majority of survey respondents (63.8 percent) said they do have positive working relationships with at least some PIOs who help them get in touch with the scientists with whom they need to speak. A majority (70.6 percent) also said they have positive working relationships with at least some agency subject-matter experts that help them get the information they need at agencies. All of the PIOs with whom we spoke said that they saw themselves as facilitators between agency scientists and the public via journalists.

In considering the barriers that journalists perceived, it is important to keep context and implementation methods in

REPORT CARD	Media Policy Grade	Social Media Policy Grade
Bureau of Land Management	B	B+
Census Bureau	B+	B
Centers for Disease Control and Prevention	A	C
Consumer Product Safety Commission	C	B+
Department of Energy	Inc	C
Environmental Protection Agency	A-	B
Fish and Wildlife Service	B+	A
Food and Drug Administration	C	Inc
National Aeronautics and Space Administration	B	B+
National Institute of Standards and Technology	B+	B
National Institutes of Health	C	A
National Oceanic and Atmospheric Administration	A	B
National Science Foundation	A	B+
Nuclear Regulatory Commission	B+	B
Occupational Safety and Health Administration	D	D
U.S. Department of Agriculture	C-	D
U.S. Geological Survey	B+	A+

In March 2015, UCS released Grading Government Transparency, *an updated analysis of media and social media polices at federal agencies. Our survey and supplemental interviews of journalists indicate that several agencies that received good grades for their written policies may not be measuring up in practice.*

mind. A fine line that is not always easy to define can separate policies and practices intended to protect scientists from external harassment, or simply being misquoted from those policies and practices that inhibit transparent responses to legitimate inquiries. For example, journalists did not describe the problem with interview monitoring as the presence of PIOs per se. Rather, the problem lay in what the journalists saw as uncooperative actions sometimes taken by PIOs before, during, or after some interviews to tightly manage interactions between the journalists and scientists, curtail scientists' freedom to speak, and even control what reporters published. Whereas journalists acknowledged that PIOs could play a helpful role during interviews, including by noting resources the agency needed to send to the journalist, they expressed concern about activities that they perceived to disrupt the news-gathering process.

Of positive relationships with both scientists and PIOs, Ken Ward affirmed, "You can't replace having good sources within an agency. You can't replace knowing inspectors and policy makers.... That is vitally important." Ward valued relationships with knowledgeable PIOs: "You hear a lot of people in journalism complain about PR [public relations] people. But please give me a good PIO person who understands the subject area and thinks their job is to help me find information."

One survey respondent discussed how cultivating relationships with scientists can bear fruit over time: "Sources I've interviewed many times tend to be comfortable enough with me that they don't feel the need to involve their press office, especially if I'm calling with a quick question or just checking in on the status of a particular project or topic."

When PIOs, scientists, and journalists work together, everyone benefits. Journalists have their questions answered; write accurate, fact-based stories; and meet their deadlines. Scientists get to share their knowledge with the public. Agencies and policy makers gain credibility and trust. And the public obtains information about issues that affect their lives and communities. Journalists, scientists, agencies, policy makers, and the public all have a stake in overcoming the following four barriers to open communication.

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1. PREAPPROVAL FOR INTERVIEWS IS REQUIRED

An important component of the public's ability to obtain a clearer view of the scientific evidence behind government decisions and policies is agencies' allowing scientists to speak freely with the press without requiring either scientists to get preapproval to speak with reporters or reporters to have their questions preapproved. In the UCS report, *Grading Government Transparency*, released earlier this year, only eight out of the 17 agency policies we graded received full credit for "no required preapproval for media contacts" (Goldman et al. 2015). Correspondingly, almost three-quarters of survey respondents (74.2 percent) said they dealt with preapproval requirements at least some of the time. Nearly one-third said that preapproval of some kind was always required (see Figure 2, p. 8).

When scientists voluntarily notify PIOs and supervisors about their media contacts, they help to facilitate internal agency coordination and communication and limit public confusion. For instance, the EPA has several offices that could conceivably answer general or even specific questions about chemical toxicity, and it is to the agency's benefit to both ensure that the most knowledgeable expert speaks to a reporter and to avoid duplication in future interviews. Similarly, agencies' **requesting** that journalists allow interviewees to preview their questions can help scientists better prepare for interviews. However, when PIOs **require** scientists to get preapproval to talk to reporters or require reporters' questions to

BOX 2.

Why Journalists Oppose Interview Preapproval and Monitoring

Unlike denying interviews and avoiding tough questions—two of the four transparency barriers described by journalists surveyed and interviewed for this report—interview preapproval and interview monitoring are explicitly written into policies at many agencies. Whereas PIOs may see themselves as facilitating communication and protecting their colleagues from being misquoted, many journalists see agencies slowing or interfering with the news gathering process. Further, journalists rightfully worry that agencies can misuse monitoring and preapproval requirements or suggestions to chill speech, spin the science, and hide wrongdoing.

FORMS OF CENSORSHIP

Journalists reported being asked to submit questions in advance and to conduct interviews on the condition that PIOs be present, in some cases even when the interviewee did not want them to be there. When PIOs utilize preapproval and monitoring to curtail what journalists can ask and how interviewees can answer, they exert a form of control over how reporters understand an issue and what they write—and hence the information the public receives. Therefore, journalists generally balk at any requirements for preapproval or having PIOs sit in on interviews.

In two earlier surveys (Carlson and Roy 2014; Carlson and Roy 2013), political and general assignment reporters and education reporters also discussed their experiences with monitoring and preapproval at government agencies as forms of information obstruction and message control. One respondent said PIOs used interview monitoring "to intimidate the employee into saying the 'right' thing" (Carlson and Roy 2013). Another said, "I think sometimes PIOs are so afraid of any bad news getting out that they make it difficult to get any stories good or bad" (Carlson and Roy 2013). Another questioned the purpose of interviewing an expert when the PIO oversaw what was said: "I'm not big on chaperoned interviews and try not to do them. You may as well just have the PIO provide you the information you need" (Carlson and Roy 2014). Yet another questioned the trustworthiness of information that did not come from an original source: "I am still concerned about the entire system, where information is filtered through the PIO, and where the best stories about government have to be sourced with anonymous sources" (Carlson and Roy 2014).

JOURNALISTS AS WATCHDOGS

Journalists say they need agency experts to be able to speak candidly, especially when the data or experts' interpretation of the data differ from official reports. Such discrepancies can signal inappropriate political or corporate influence or interference and indicate the need for further inquiry. Journalists strongly support whistleblower protections as a vital mechanism for shielding agency experts from retribution when they publicly expose wrongdoing (SPJ 2008). However, they worry that agency employees may only be willing to risk alienating their employers by taking advantage of whistleblower provisions under the most egregious circumstances, as the act of whistleblowing can significantly damage or end a career. Therefore, the degree of control PIOs can exercise over journalists' interactions with agency employees through preapproval and monitoring—even when that control is exercised responsibly—is a cause of concern within the journalism community.

The Society for Professional Journalists, for instance, as well as other journalism groups, strictly opposes monitoring and preapproval at agencies.

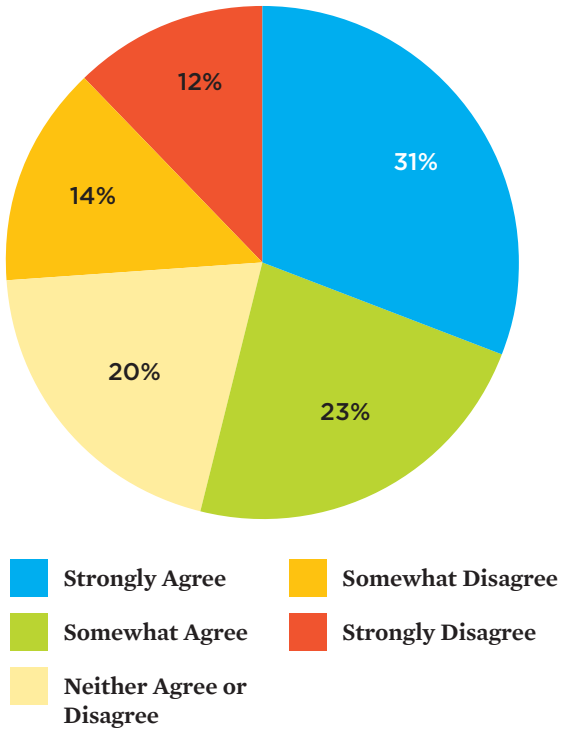
be preapproved, they can stifle the free flow of information rather than facilitate openness between interviewers and interviewees. One survey respondent described how the process could feel like a mechanism of censorship: "Usually I'm required to submit questions first and then the interviewee is given the answers and not allowed to deviate. If I ask a different question, the person says he [or] she has to get permission to answer the question or send me the info I've requested."

Even reporters who have cultivated long-standing relationships with agency scientists have been prevented from having conversations with those individuals if they wanted the conversations to be on the record. One freelance journalist explained the awkwardness of this hurdle: "At NIEHS [the National Institute of Environmental Health Sciences], the researchers are really helpful, but I am often told, if I email someone directly, that I have to go through the press office or they can't talk to me.

During Deepwater, there was someone I knew. We would talk offline sometimes, and he would say how ridiculous it was that it had to be cleared all the way up if he wanted to talk to me." A Washington, DC–based energy and environment reporter commented on how required preapproval discourages interviews altogether: "They just want us to go away."

Preapproval can reasonably be viewed by agencies not only as a useful means of maintaining internal coordination but also a way to help scientists prepare to talk to nonscientific audiences; for this reason, a New England–based environmental journalist, while cautioning against the use of preapproval as an overly restrictive form of gatekeeping, expressed some sympathy for the PIO position: "I can see the circumstance where this is just meant to help everyone. A source needs to prepare herself or himself differently to talk with a shock jock [deliberately provocative talk show host] than to a scientific journal. But the source should be allowed to make a decision on what media to talk to, without having to be a media expert.... There is the feeling of having to pass muster, which is chilling."

FIGURE 2. More Than Half of Journalists Reported Encountering Preapproval Requirements at Least Some of the Time



Fifty-four percent of survey respondents agreed with the statement "I am required to obtain approval from the public information office before interviewing employees."

Journalists with more experience were especially critical of preapproval requirements because they say they remember an environment in which scientists themselves could decide whether or not they wanted to talk to a reporter—and what they wanted to talk about. Veteran reporter Steve Everly explained how things have changed: "Going back 20 or 25 years," he said, "it's night and day. You could really get inside these agencies. You could call around. You could walk into some of the offices. You'd meet somebody at a conference and they'd freely talk to you." By contrast, a survey respondent described frustration in trying to get past PIOs to speak with scientists more recently: "There's a lot of push and pull, and many times we have little or no leverage." Another reflected that PIOs "often insist on written questions in advance. It never used to be this way."

2. INTERVIEWS ARE CLOSELY MONITORED

More than half of survey respondents (57.8 percent) said PIOs are a third party to interviews at least some of the time—either monitoring in person or listening in on a telephone call. The UCS report *Grading Government Transparency* corroborates what journalists reported encountering. Eight out of the 17 agencies we scored lost points for requiring PIOs to be present during interviews (Goldman et al. 2015).

Having a PIO sit in or listen in on interviews is not unique to government agencies. Universities, nonprofit organizations, and corporations also engage in this practice, and it has a utilitarian purpose. Indeed, journalists commented that PIOs sometimes took note of studies and other sources interviewees had mentioned, tracked them down, and provided them to the journalist after the interview. Doing so saved scientists time and contributed to journalists' understanding of the issues. A survey respondent stated that "it's often helpful, because [PIOs] can then send appropriate follow-up information." Ken Ward explained PIOs' roles as mediators and translators: "They can help getting things clarified.... They can help to make sure journalists and scientists do not misunderstand each other." A survey respondent also found that PIOs sometimes listen in when they want to educate themselves about agency issues: "NIH, my main beat, usually lets me talk to scientists unmonitored, and when they do sit in, they say it's because they want to get up to speed with what the researcher is doing for planning their own coverage, which I think is usually legitimate."

Agency PIOs we interviewed believed that their presence added value to the process as both support and protection for the scientists being interviewed. Two of them said that they like to be present because they learn from the interviews,

which then helps them when they speak publicly about agency research. All acknowledged having had colleagues misquoted or whose quotes were taken out of context. One said he felt that it was his responsibility to back up his colleagues being interviewed—to ensure the integrity of the interview. NASA's head PIO explained that monitoring is not required, but "it's rare that someone doesn't want a comms person" in the room, especially for major interviews.

PIO involvement in interviews for these reasons serves a pragmatic function, but reporters believed that PIOs also slow down—or otherwise obstruct—the news-gathering process when they try to exercise control over what journalists get to ask and how scientists get to respond. In open-ended survey responses, journalists pointed out different ways they felt PIOs sometimes inhibited conversations. "They routinely monitor reporter questions," said one respondent, "and often times shut down all information and access, other than a short statement."

Scientists do not, of course, have to answer reporters' questions, and PIOs sitting in on interviews can ensure that scientists speaking in their official capacity are able to maintain boundaries—sticking to questions involving their expertise—when confronted by an aggressive reporter. However, one survey respondent described situations in which interviewees seemed to want to answer questions, but the PIO present during the interviews prevented them from doing so. The respondent asserted that PIOs at some agencies "can be ridiculous, cutting researchers off mid-sentence if they're saying something they shouldn't." A Washington, DC–based energy and environment reporter likened her encounters with PIOs at one agency to previous experiences as a foreign correspondent in an authoritarian country. She said, "I'd be on the phone with a scientist ... and the [PIO] person would be on too. And I'd ask why they were there, and they'd say just to make sure everything goes smoothly. And I'd say, 'You do realize I just came from [a country] where message control is really important?' I'd go along with it because I needed the story." Ken Ward considered these scenarios "not acceptable.... The energy ought to be between me and the person I'm interviewing, and the minder [the PIO] shouldn't try to be the person that decides what gets asked and how it gets answered."

As facilitators, PIOs can help to ensure that scientists and the reporters interviewing them understand each other. They can protect their colleagues from bad coverage and, as validators for what was said during the interview, from later being misquoted. However, a survey respondent described how PIOs have gone too far in this regard, exerting control over information even after the interview, noting, "An interesting expression I've heard lately [is] 'quote check.' They want you to run by them in advance any statements you decide to use." Another said that PIOs "want to monitor and also demand quote approval. I have declined interviews because of these conditions."

In standard journalistic practice, it is considered acceptable for a reporter to circle back with an interviewee, not a PIO, after an off-the-record interview to see whether the interviewee would agree to be quoted on selected statements that he or she made (Myers 2012). However, journalists frown upon quote-checking for on-the-record interviews because the journalists risk becoming "complicit in their [sources'] spin" (Jarvis 2012; Myers 2012). Mainstream news outlets, including *The New York Times*, discourage or prevent their reporters from doing on-the-record interviews contingent upon mandatory quote checking (Sullivan 2012), as it can lead to changing, backtracking on, or otherwise manipulating what an interviewee said on the record.

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>
> - Ken Ward, reporter for *Charleston Gazette*

When PIOs do not make clear their specific reasons for being present during interviews or appear to reporters to excessively curtail scientists' responses, reporters are left wondering about the accuracy of the information they are receiving from scientists. A survey respondent characterized the effects of PIOs' presence at interviews in terms of uncertainty: "[I]t has always kind of bothered me. I don't think my sources have answered differently because of it, but I'll never really know." In situations where commenting in an unofficial capacity is warranted, scientists at agencies that have personal views disclaimers in their media policies should be able to invoke the disclaimer during the interview and speak in their personal capacity as citizens. However, the Washington, DC–based energy and environment reporter hinted at the

discrepancy between policy and practice, stating, of the use of personal views disclaimers, "I've never been in a situation where someone has done that."

Reporters' negative experiences with PIOs monitoring interviews highlight discrepancies between some agencies' public communication policies and how these policies are implemented—something UCS noted as a problem in *Grading Government Transparency* (Goldman et al. 2015). Table 1 shows discrepancies between policy and practice at several agencies. Paradoxically, in some cases, agencies with policies that appeared not to protect scientists' freedom to speak with the press were found to be quite open in practice, while other agencies with stronger policies were less open.

> ***Veteran journalists recall an environment in which scientists alone could decide if they wanted to talk to a reporter.***

3. INTERVIEWS ARE DENIED

Sometimes, PIOs simply deny journalists' requests for interviews with scientists. Almost half of survey respondents (46.1 percent) said they were blocked from interviewing subject-matter experts at least some of the time. Thirty percent of survey respondents said they were told that the person they wanted to interview was not available in the time frame required, while others said that they were told the person they wanted to interview either was not allowed, did not want, or was too busy to talk to them (see Table 2, p. 14). "Our 'employee' typically [is] someone who has written a report [but] is not allowed to do interviews," said one survey respondent.

Scientists, of course, have no obligation to grant interviews they do not want to give, and understaffed agencies understandably cannot grant every interview request, but journalists reported that their requests for interviews with scientists were denied by PIOs often, sometimes without a reason. One survey respondent explained, "Much of the time it's difficult or impossible to talk to the persons most knowledgeable in federal agencies, and if you call directly, they will simply refer you to public affairs. Even if you start with public affairs, you will often be told that comments should come from them only.... If [an] interview is granted with a knowledgeable staff member, there might be a long wait or an effort to vet your questions in advance."

PIOs we spoke with noted that sometimes their work requires them to take potential political reactions to both agency work and press coverage, particularly from members of Congress, into account. PIOs indicated that when journalists, including those who work for ideologically driven media outlets, attempt to cover an agency in ways they perceive as overly critical to the point of inaccuracy, they can feel a need to protect their colleagues and agencies from misleading coverage. Finally, at least one PIO also said that part of their job does include promoting specific administration policies.

However, the reluctance of some agencies to provide information or scientists for journalists to interview struck reporters as counterproductive not only for the reporters' own work but for that of the agencies as well. When agencies strategically frame or withhold information for political reasons, journalists argued, it is easier for journalists and their colleagues, segments of the public, and policy makers to lose trust in those agencies. Journalists posited that agencies should view embracing transparency as a defense against political criticism and that agencies' public service missions should trump political considerations.

"I was looking into the Hyundai fuel economy deal, where Hyundai was accused of misrepresenting their fuel economy numbers," Steve Everly recounted. "I called the [EPA] press office and said I have some questions that I would like to get answered." Everly told the press office exactly what he wanted to talk about and why he needed to speak with a particular individual. "It took about a day to get a response," he recalled. "And the response was: 'We have nothing to say on this.' I pursued it a couple of other times, and they referred me to a press release they had done a couple months earlier when they announced they were going to do an investigation of Hyundai." After Everly's story came out, the agency contacted his editor to complain that he had not talked to agency experts to obtain their perspective.

Though often mentioned by survey and interview respondents, the EPA was not the only agency where journalists encountered interview denials, negatively impacting the quality of reporting. For example, survey respondents remarked on their ability to speak with scientists only off the record at the Department of Health and Human Services and Centers for Medicare and Medicaid Services, and Steve Everly commented on the Department of Energy, "When you call them ... you're never going to get through to any staffer. It's impossible. The best you can hope for is you make an inquiry, and they'll try to reach out to someone—sometimes you won't know who—and get back to you with an answer to your question. This is becoming more the norm [at the

TABLE 1. Interview-monitoring at Federal Agencies: Differences in Written Policies versus Anecdotal Accounts of Practice

Agencies	Written Media Policy Grade (Goldman et al. 2015)	Anecdotal Comments on Actual Practice
Centers for Disease Control and Prevention	A	"Almost all interviews with CDC … are monitored."
Environmental Protection Agency	A-	"When I interviewed [a well-known expert on sea-level rise], it was pretty clear he had been reined in." "I've never been able to speak with a scientist or expert on the record except with someone sitting in."
Food and Drug Administration	C	"Almost all interviews with … FDA are monitored…. They want to monitor and also demand quote approval. I have declined interviews because of these conditions. These conditions have worsened under the Obama administration." "FDA is actually pretty good. PIOs get back pretty promptly, and they do regularly set you up with an expert. The PR minder [public relations monitor] is on the phone, but they regularly do let you talk to people on the phone."
National Aeronautics and Space Administration	B	"Nowadays, I can directly contact scientists at NASA and ask them questions. About a decade ago, this was not the case."
National Institutes of Health	C	"NIH, my main beat, usually lets me talk to scientists unmonitored, and when they do sit in, they say it's because they want to get up to speed with what the researcher is doing for planning their own coverage, which I think is usually legitimate."

Orange = Survey Response Indigo = Supplemental Questions

At some agencies, good written policies may be masking poor implementation. At others, policies that less clearly protect the rights of scientists to speak to the media translate into relatively more transparent practices. (The comments in this table represent the subjective experiences of the journalists surveyed and should not be taken as an objective or generalizable measure of agency practice.)

Department of Energy and other agencies]. It's better than nothing but not much more, because you really don't have a free exchange of a conversation where you can get into some various areas on the questions and do some follow up." A survey respondent echoed this: "Much of the time it's difficult or impossible to talk to the persons most knowledgeable in federal agencies. They are usually scared rabbits, and if you call directly they will simply refer you to public affairs. Even if you start with public affairs, you will often be told that comments should come from them [the public affairs office] only."

FAVORITISM

Some journalists perceived that PIOs may play favorites with regard to who gets access to scientists. A freelance investigative journalist found a demand among PIOs for publication name recognition put her at a particular disadvantage as a freelancer. "All of these agencies do some cherry-picking as to who they'll talk to depending on what kind of coverage they think they'll have," she said, expressing concern that she was sometimes denied interviews because she was unaffiliated, even though her stories regularly appeared in national outlets. She was also concerned that information leaked by

agencies to major outlets ahead of press calls prevented freelancers from being on equal footing when it came to asking questions.

Among the PIOs we talked to, one acknowledged that he paid more attention to some publications and reporters than others and explained it as an issue of pragmatism and limited resources—higher visibility publications and reporters who published more frequently were more likely to get information and interviews through his office because they would reach more people. One survey respondent, who acknowledged having positive relationships with PIOs, attributed the ease of access he experienced not to his relationships but to his affiliation with a specific publication, the publication's status, and the size of its audience. "Due to my news organization," the respondent said, "I'm considered a high-profile journalist by some agencies," which he believed caused PIOs to go out of their way to accommodate his requests for information and interviews.

Changes in the journalism landscape over the past several years, however, have reduced the numbers of science, environmental, and health reporters at major outlets. As a consequence, much of the reporting on these issues is done by freelancers. Even when their stories are published in major outlets, they often do not know where a story will be accepted before it is written. The freelancer we spoke with, who is widely published and well respected by other journalists, put it this way: "Sometimes you want to do some research on background. As a freelancer, I need to do this before I pitch a story to an editor. PIOs want to know, 'What's the outlet? What's the deadline? Are you still freelancing?' The implication is they won't talk to a freelancer." When agencies opt to reduce interactions with the growing number of freelance science writers and talk only to reporters affiliated with high-profile publications, public access to scientific content is diminished.

Several reporters we spoke with thought that decisions about which journalists were granted interviews was less a pragmatic effort to increase visibility than a deliberate attempt at message control through avoiding more complex questions. Ken Ward believed that "fluff interviews" with agency leaders were often given to less experienced reporters or to generalists at prominent publications who might not know the tough questions to ask.

4. TOUGH QUESTIONS ARE AVOIDED

Agencies must be prepared to respond to inquiries from press all over the country—and, indeed, all around the world. The PIOs we spoke with estimated annual inquiries in the thousands. Budget, staffing, litigation, and other constraints affect their ability to respond to journalists' inquiries in the timeliest, most efficient, or most thorough manner. For journalists, however, having to make multiple requests for information and interviews with scientists—or frequently having requests to speak with specific experts selectively routed to other agency employees—can be exasperating and is perceived as agencies' avoiding tough questions.

More than two-thirds of survey respondents said that they had to make multiple requests to get information or interviews at least some of the time (44.8 percent "some of the time," 17.8 percent "most of the time," and 4.9 percent "all the time"). More than half said that their requests for interviews with specific agency employees were selectively routed by PIOs to other agency employees (33.8 percent "some of the time," 14.8 percent "most of the time," and 3.8 percent "all the time"). These experiences corroborate what we found in *Grading Government Transparency*. Only seven of the 17 agency policies graded received full credit for "no selective routing of media contacts" (Goldman et al. 2015). One freelance journalist complained, "Sometimes it takes a long time. Sometimes they never get back to me." Having to make multiple requests or having requests selectively routed can make it difficult for journalists to get their stories out in a timely manner—especially when interviews are ultimately denied or the information or interviews they eventually do receive do not answer their questions.

OVERRELIANCE ON TALKING POINTS

A specific problem described by journalists in terms of question avoidance was receiving talking points that referred them to agency materials they had already seen or answers that side-stepped the issues they raised without an explanation of why more precise answers were unavailable. Like the presence of PIOs during interviews, the use of talking points is not unique to government science agencies. Universities, nonprofit organizations, and corporations utilize them to facilitate public communications. However, the sole reliance or an overreliance on talking points can hinder journalists' reporting ability, with negative consequences for the public's access to and understanding of scientific information.

More than two-thirds of survey respondents said that they had to make multiple requests to get information or interviews at least some of the time.

BOX 3.

Amidst Transparency Barriers, Some Agencies Stand Out for Their Openness

In our survey, when it came to ease of access to information and interviews with scientists, sometimes agencies' media policies made a difference. Survey respondents experienced better access at a subset of federal agencies whose policies do not require journalists or scientists to go through the PIO. One survey respondent explained, "NOAA is one of the few agencies—NASA is the same—where I do not have to go through public information officers (except if I need to find people to talk with who [sic] I do not know and in that case they are helpful).... [L]uckily, I spend more of my time with NOAA and NASA, which generally have good press practices unlike most of the federal government."

Although there were exceptions in some of the open-ended survey responses, the journalists and PIOs we interviewed considered, in general, that gaining access to scientists at research-focused agencies was easier than at regulatory agencies focused on policy. One freelance journalist reflected, "Anything that involves policy is more constrained than if it's just research." In her experience, research agencies or the research side of agencies with both research and policy-making regulatory authority are more accessible. "NIH and NOAA," she observed, "are pretty good about letting you talk to people. I don't see any problem there. I have gone through the [public relations] office and they suggest people to talk to and connect me to people I ask for."

At the Energy Information Administration, Steve Everly found scientists quite accessible. "It's been my experience," he said, "that you can basically call anyone that works there directly. And they'll pick up the phone themselves. You identify yourself and say what you're calling about, and they'll try to answer your questions. Sometimes, they'll say they have to look something up, but they'll get back to you." A survey respondent noted that "scientists at NASA are the easiest to interview" and that this agency, in contrast to others, has improved in recent years: "Nowadays, I can directly contact scientists at NASA and ask them questions. About a decade ago, this was not the case."

NASA

NASA Expedition 32 crewmember Chris Hadfield, right, speaks directly with reporters during a prelaunch press conference, while in quarantine.

The PIOs with whom we spoke explained the challenges of maintaining a boundary between research and policy. One PIO said that, in his experience, reporters sometimes asked scientists questions about research that felt like they were meant to elicit answers that could be easily misconstrued as supporting a particular policy agenda. Another PIO felt that some reporters simply conflated science questions with policy questions, whether intentionally or not. He saw his responsibility as a PIO to help the scientists being interviewed navigate where their expertise would allow them to answer a question in an official capacity and where it would not.

That said, talking points can help scientists stay focused on key research findings without digressing into technical details that non-experts might find hard to follow. They offer structure, guidance, and confidence for scientists with limited experience speaking with the media. And they can provide a reliable tool allowing PIOs to speak accurately at those times when an expert is unavailable or unwilling to speak with the press. Sometimes, journalists receive written talking points simply because agency scientists are busy and do not have time to talk to them. Two of the PIOs we asked about the prevalence of replying to interview requests with written talking points said that it was a "resource issue"—agencies simply did not have the capacity to respond fully to every request.

The value of agency talking points and other prepackaged information sources, like a webpage, can vary significantly depending on the type of story the journalist is working on. They can be very helpful to those seeking quick facts for short pieces. One survey respondent, who did not interview subject-matter experts, said, "I gather information via press

TABLE 2. Agency Responses to Journalists' Denied Requests for Interviews

Response Type	Percent of Survey Respondents	Selected Survey Comments
Employee was not available within the time frame.	30%	"[The p]erson [was] not available in my time frame, which was a pretty big time frame." "Usually there are just massive delays. When we get a reply back, the article has been published for days." "I was not prohibited, but it took several months before I got a response and by then the story had long since been written."
Employee was not allowed, was unwilling, or was too busy to talk to the media.	26%	"[The p]erson wasn't authorized to speak to the press." "[A] biologist said his supervisor told him only he, the supervisor, could answer questions." "The official is 'too busy.' And that is after the gentleman in question had agreed to talk to me." "Officials spoke at length off the record and refused to answer my questions on the record." "[They said they preferred] not to speak to a representative of [my] publication."
No reason was given.	24%	"[I am o]ften not given a reason." "The information office just keeps stalling until it's too late for the story." "No reasonable answer given; just because."
PIO gave prepared answers, questions were forwarded to PIO, or interviewee claimed not to know the information.	14%	"If my phone call is answered or returned, I get a vague answer and reassurance they're doing everything they can to keep everything safe." "Sometimes, I am given sanitized, talking-point-like answers." "Most rank-and-file employees are told to refer media questions to the PIO, even if the PIO winds up referring me to the original employee in the end."
The request was completely ignored.	4%	"I am not usually given a reason for not being able to interview someone in government. The PIO simply drops the ball and ignores my request."
New policy or existing policy prohibiting interviews was in place.	2%	"New policies had been set up so that an employee I once talked to could no longer talk to press."

The variety of responses journalists received from PIOs reflects the difficulty some journalists have in obtaining interviews.

releases and vet [it] in other ways." Another explained, "I do a zillion stories per day and just e-mail people.... I didn't really care who I interviewed; I just wanted to give quotes giving [the agency's] side on issues." And some reporters are simply looking for agency perspectives and have no need for technical details. One survey respondent said, "I don't really try to go around PIOs. I'm usually asking for company or agency responses, not really looking for personal opinions."

But while information an agency has prepared in advance may suffice in many situations, journalists sometimes have very specific questions—particularly senior science writers and investigative reporters who may have pre-existing knowledge about an issue that they have researched and written about before. Those seeking background information or working on longer, investigative pieces found talking points frustrating when they perceived PIOs to be providing these as a substitute for interviews with subject-matter experts. A freelance investigative journalist said of her experiences with PIOs at certain agencies, "I have requested interviews with specific people in the past. I have never gotten one. And I have almost given up trying." A Washington, DC–based energy and environment reporter underscored reporters' own constraints: "There are reporters at dailies that have to get the story out so quickly" that they accept talking points even when they would prefer to be able to ask a few follow-up questions during a quick call with an expert.

> ***Journalists can draw attention to an agency's refusal to answer questions by publishing the questions that were posed.***

In situations where journalists sought answers to specific, technical questions, and not just general information about an issue, they perceived the talking points they received from PIOs to be inadequate substitutes that had a direct impact on the quality of their reporting. For example, a science and health journalist whose work has appeared in *Nature and Science* described an experience she had with a pesticide-related story that fell through because of PIO lack of responsiveness around her repeated requests to speak with scientists. She intended the story to be an exploratory piece on agency testing processes to help the public better understand how the toxicity of certain pesticides is determined. She felt that interviewing agency scientists for this story was so important that she was willing to travel to speak with them in person. In her email request to an agency PIO, she outlined the technical questions she wanted to discuss with an expert. After speaking at length with a PIO, the journalist received "a very generic email offering three links to pesticide registration data and fact sheets." The PIO also "chose not to facilitate interviews or be of any substantive help. Her refusal to cooperate caused what was already going to be a difficult story to report to ultimately fall through."

Given undue congressional scrutiny, litigation, staff capacity, and other limitations, it may be necessary at times for agencies to deflect questions and interview requests. But agencies can also be clear to journalists about why they are unable to answer a question or grant an interview, instead of simply referring to talking points or a website. In the situation described above, the agency might have said: "Given the agency's statutory authority, we can talk about other specific aspects of that issue, but we cannot answer the questions the way you've framed them." In Ken Ward's view, journalists can draw attention to an agency's refusal to answer questions by publishing the questions that were posed.

Crisis Situations and the Role of Social Media

During a forum held by UCS in 2012 on improving public access to government scientific information, experts—scientists, journalists, emergency responders, and others—commented in a working group session that in crisis situations "the default should be disclosure" (UCS 2012). Survey responses to questions on this issue suggest that, to a certain extent at least, agencies are indeed defaulting to transparency when disaster strikes.

Ninety-one survey respondents reported recently seeking information from government agencies during a variety of emergency situations: wildfires, tuberculosis at a local high school, deaths from a mysterious disease, asbestos released during building demolition, hurricanes, earthquakes,

National Guard

Following the 2014 chemical spill in West Virigina's Elk River, conflicting information and lack of access made it difficult for the media to assess the safety of the local water.

BOX 4.

Inconsistencies and Gaps Journalists Faced Trying to Access Information About Deepwater Horizon

Following an explosion on the Deepwater Horizon Macondo oil drilling rig in April 2010, a massive oil spill spread across the waters of the Gulf of Mexico and coated surrounding shorelines (NOAA 2015). Although the rig sank two days after the explosion, millions of barrels of oil continued to gush out over several months, and the well was not declared officially sealed until September. Eleven workers on the rig died, and BP, the company that owned the rig, eventually pleaded guilty to manslaughter and other charges. Environmental and health consequences were severe (Scott 2015).

Reporters who covered this unfolding disaster faced numerous challenges. One experienced freelance journalist we interviewed described the process of attempting to obtain information and access to experts as "completely extraordinary." The lack of coordination among agencies and other parties made it difficult to know whom to contact—and the access to information and scientific experts varied considerably. "Depending on who picked up the phone on what day and which office you called," she said, "you could get somebody from the Coast Guard or you could get somebody at BP at the same phone number.... Answers were all over the map, and the information didn't coincide with stuff that was being put out by the [Obama] administration."

Lack of coordination meant that reporters sometimes obtained unprecedented access to experts—and sometimes information simply disappeared. "Eventually I did go down there for about a week," the freelance journalist said, "and at one point I ended up with a half day private tour from the Park Service and the [FWS] to see an oil rig in Alabama." But later, after the well had been sealed, she filed Freedom of Information Act (FOIA) requests when she realized from her own email records that numbers the agencies had been putting out—and details of who was responding when—had disappeared from their websites. A year later, she received a response to her FOIA request saying they could not find what she was looking for. "I dropped it," she said, "because I didn't have a pressing need to report on it, but I'm still really wondering."

DVIDSHUB/Creative Commons (Flickr)

DEEPWATER HORIZON FLARING OPERATION
Gas from the damaged Deepwater Horizon wellhead is burned in a process known as flaring. Journalists who covered the spill reported a lack of coordination among agencies and actors and were unable to get scientific perspectives on the spill.

droughts, oil spills, and storm-related power outages. A majority (51.6 percent) of survey respondents reported that the information they needed had been posted on an agency's website or social media accounts within hours of its availability, and more than 25 percent said that it was there within minutes. Of those who sought to speak with an expert for information not posted on a website or social media, about half were connected within hours, and most (84.3 percent) said they got the interview in time to meet their deadline.

Two reasons for the degree of transparency and access perceived during crisis situations—relative to other situations—may be that the information often sought by reporters during these situations is more basic and that agencies use social media to communicate it almost instantaneously. However, Steve Everly pointed out that a problem with journalists' relying on social media is that there is no way for them to "follow up in a meaningful way." While it may not always be necessary for reporters to follow up on a crisis that is quickly resolved, agencies' reliance on social media is contributing to less detailed and less varied reporting. "It's the same story all over the place," said a freelance journalist, "only one angle on it."

Agencies' not allowing journalists to ask follow-up questions about information the agencies are releasing was something all four reporters we interviewed mentioned. They said that journalists' inability to ask follow-up questions can have direct consequences for the public's ability to make evidence-based decisions. For example, when several thousand gallons of "crude MCHM," a chemical mixture consisting mostly of 4-methylcyclohexane methanol, spilled into West Virginia's

Elk River in January 2014 from a Freedom Industries facility, the public looked to federal agencies for advice about the safety of their drinking water. Ken Ward, a local reporter who covered the disaster for the *Charleston Gazette*, recalled, "We spent a week trying to get someone from the CDC who could come up with this number for how much [water] we could drink and not get sick, and they just ignored us.... The government refused to give the media enough information so the public could educate itself."

Conclusion

Restraining access to scientific information and ideas has serious consequences. It muddles the understanding needed to solve problems, even among scientists themselves, and can subvert the public interest for political ends or special interest gains. As politicians, citizens, and other stakeholders place science under greater scrutiny, agency scientists face threats ranging from unfounded criticism to the misrepresentation of their work to outright harassment. At the same time, as agencies face significant resource constraints, major media outlets are jettisoning science, health, and environment beats, and many science writers—"an endangered breed" (Lucibella 2009)—must fend for themselves as freelancers. It is vital that communication between journalists and agency scientists be improved in order to ensure the public's access to scientific information produced or utilized by the government and the context in which it is used. The challenge for PIOs is to develop and implement communication policies that protect scientists from inappropriate political and special-interest interference and undue scrutiny—without undermining transparency.

RECOMMENDATIONS FOR REMOVING BARRIERS TO TRANSPARENCY

The PIOs with whom we spoke all emphasized that agencies deal with constraints that journalists may not always fully appreciate. Sometimes an agency response that fails to satisfy a journalist's inquiries has roots in the complexities of the regulatory process or in congressional actions—or lack thereof. For instance, Congress has not given any federal agency complete responsibility for regulating hydraulic fracturing (fracking)—with some exceptions, it is regulated at the state level—and the science being done at the federal level may be spread across several agencies. A reporter may have a hard time distinguishing between an agency trying to stay within its technical expertise and one trying to avoid speaking out because of how politicized the issue is.

Caveats aside, implementation of the following recommendations would go a long way toward removing barriers that journalists encounter in their efforts to obtain scientific information from agencies and interviews with agency scientists.

AGENCIES SHOULD:

- **Within reasonable constraints of time and resources, respond to journalists' requests for interviews and information in an efficient and appropriate manner.** An agency should connect a journalist to the scientist that he or she requested within a mutually agreed-upon time frame, or if the scientist lacks the expertise, is unavailable, or is unwilling to be interviewed, should connect the journalist to an appropriate alternative. If the journalist does not request a specific person, the agency should identify an appropriate subject-matter expert in a timely manner. If PIOs must decline an interview, they should be transparent about their reasons.
- **Remove preapproval as a required condition for interviews.** Instead, agencies' policies should state that employees should notify the PIO about an interview as a professional courtesy, either before or after it takes place, especially if the topic intersects with the responsibilities of other agency employees or is particularly sensitive. Unless the issue is under litigation or a congressional subpoena or is in a critical phase of a regulatory proceeding, notification should not be a blanket requirement, nor should it be an excuse for slowing the news-gathering process.
- **Permit journalists to interview subject-matter experts who can answer their questions.** If such experts are available and willing to speak, agencies should refrain from responding solely with talking points or selectively routing requests for specific scientists to other employees.
- **Within reason, embrace a broad definition of "reporter"** that puts freelance journalists, new media journalists, and journalists working for legacy news outlets in the same category. The prevalence of social media and the elimination of science beats at many traditional media outlets have changed the science-reporting landscape such that significant in-depth science coverage is often done by freelancers before they have successfully pitched a story to a specific publication. Further, new media such as online media and non-profit journalism organizations are doing critical, in-depth reporting. If agencies selectively provide access to journalists from major, legacy media outlets, this can unfairly shut out journalists and publications that play an increasingly important role providing the public with access to government science.

BOX 5.

Perspectives from the Agencies

We reached out to 13 public information offices at federal agencies that survey respondents and interviewees mentioned by name, and we spoke to PIOs at the EPA, the FWS, NASA, and the NIH. We were provided with a written statement from a PIO at the FDA. The PIOs at NASA and FDA agreed to be quoted unreservedly; others spoke on background or requested that they be able to approve any quotes we wanted to attribute to them. We have integrated their perspectives throughout the report and summarize them below.

THE ROLE OF THE PIO

All four agency PIOs described themselves as "facilitators." At NASA, the 1958 Space Act mandates the dissemination of the agency's scientific findings to the widest possible public. As one of NASA's lead PIOs put it, "The answers are what the answers are," and the role of his office is to make those answers available. He explained his philosophy succinctly: "Be accurate and be first." In other words, work independently and with the press to get the agency's science out to the public.

At agencies that perform both research and regulatory functions, like the EPA and the FWS, PIOs have the added challenge of designating clear boundaries between communicating science and communicating policy. Those boundaries can be complex, and lines are not always easy to draw. In responding to a reporter's inquiries, a PIO must make decisions about separating and clarifying where the responsibilities of scientists end and those of policy makers begin.

RESPONSES TO REPORT FINDINGS

We asked PIOs what they thought about the barriers that reporters had identified. At NASA, where preapproval for interviews is not required, the PIO explained that he asks scientists, on principles of professionalism and collegiality, to let his office know "as a courtesy, what the interview was about and what we can expect [to come from it]." All of the PIOs said that they strive to facilitate, and not inhibit, conversations between scientists and reporters. In a written response, the PIO of the FDA stated: "Press officers staffing interviews add tremendous value to the interactions. The agency press contact helps to put the issue into a larger context, often reminds an interviewee to mention an important issue the public needs to know, and serves as a resource should the reporter have a follow-up question related to the discussion or a question that is outside the official's scope of expertise."

HOW PIOS WOULD APPROACH THEIR OWN AGENCIES IF THEY WERE REPORTERS

In contrast to the barriers identified by reporters, PIOs cited three issues that they wished reporters were more cognizant of:

STAFF CAPACITY

Public information offices receive thousands of requests from reporters annually. Under constraints of budget and staff availability, it is impossible, realistically, for PIOs to respond to all press inquiries to the satisfaction of all reporters.

BUREAUCRACY

Agency structures also affect PIOs' responsiveness. At the NIH, for instance, each center or institute has its own communications office. Requiring clearance on media interviews is viewed by the agency as a mechanism of coordination, not control. Moreover, when multiple agencies have authority over different sides of a complex issue, it can take time and coordination on the part of PIOs just to ascertain the facts, put together a coherent and accurate statement, and connect reporters with the most appropriate experts.

LITIGATION

PIOs at agencies with regulatory authority noted how legal considerations factored into official communications by agency staff, including scientists. They stressed their need to be cautious in speaking with reporters because quotes taken out of context could lead to litigation around sensitive issues, for example, the Endangered Species Act and numerous rules implemented by the EPA. Reporters are not accountable when this happens and, the PIOs believed, should be more mindful of the policy and political landscape in which these issues are discussed, even when their questions are not overtly policy-oriented.

A final issue mentioned by PIOs was the messiness of the research process itself—or scientific "sausage-making," as one called it. At NASA, when scientific opinions differ, PIOs remove themselves "from the equation" until the issue is resolved and a consensus reached that the agency can speak about publicly. This should be recognized as part of the scientific process, not an attempt to hide information.

Ultimately, PIOs expressed respect for the work that journalists do—and for journalists' frustrations. "If I were a journalist approaching my agency," said one, "I would probably be as demanding as the worst and most difficult reporter."

- **Monitor interviews only to support the scientist being interviewed and to facilitate the information-gathering process.** Survey respondents indicated that PIOs can be helpful during and after interviews in making sure the scientist and reporter understand each other, preventing misquoting, and following through on the reporter's requests for additional information. When PIOs sit in on interviews, they should always explain why they are there. Interviews between journalists and scientists should be open conversations between those individuals, not scripted exchanges.
- **Ensure that media policies and practices are consistent with standards of scientific integrity.** Public communications should support the quality and objectivity of an agency's scientific research. Agencies should update their media policies to protect the news-gathering process and protect the role of agency scientists in serving the public interest.
- **Fully implement media policies** by keeping them visible, introducing them to new employees, evaluating their effectiveness periodically, and conducting regular trainings for all staff so they understand their roles, responsibilities, and rights when engaging with the media.

JOURNALISTS SHOULD:

- cultivate positive working relationships with agency scientists and PIOs;
- be respectful of agencies' time and resource constraints and the awkward positions agency employees often find themselves in when grappling with difficult, complex scientific and policy issues;
- commit to accurately representing the information and nuances that scientists and PIOs share with them;
- refuse unreasonable interview terms, such as required preapproval of questions, quote checks for on-the-record interviews, or required interview monitoring against the wishes of interviewees;
- publicly share the questions that agencies refuse to answer; and
- call out agencies that obstruct transparency.

SCIENTISTS SHOULD:

- know their agencies' public communications policies;
- be willing to share and explain scientific information to journalists;
- differentiate between their personal and professional opinions when being interviewed as an agency employee, and between describing data and giving their professional interpretation of data;
- speak clearly about what they know and do not know, especially during times of crisis; and
- assert their right to speak with the media about science without political interference and invoke a personal views disclaimer as needed.

The findings in this report shed light on one aspect of the broader issue of transparency in policy making. The 2010 White House scientific integrity memorandum laid the groundwork for robust scientific integrity and public communications polices (Holdren 2010). The Obama administration continues to have a pivotal leadership role to play in helping remove remaining barriers to transparency and improving the public's access to information.

THE WHITE HOUSE SHOULD:

- assess agencies' progress toward better media policies and speak forcefully about the need for media policies and practices that protect scientists' freedom to speak about their work and the public's right to know;
- prioritize strong and effective agency policies and practice on public communication to ensure that transparency is part of the president's legacy; and
- hold agencies' leadership accountable for ensuring the free flow of scientific information to the public.

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