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# Teaching Scientists to Interact with the Media

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**Many scientists lack the skills or encouragement to speak to the media successfully. Media skills training provides a way for scientists to confidently use the media to talk about their work.**

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**T**o many scientists, the opportunity to discuss their work publicly is more a threat than an opportunity.

But pressure on scientists to communicate is mounting. The audiences vary, but the pressure to get their message out succinctly and clearly is constant. To be successful, speakers have to accommodate the different demands of addressing the media, their colleagues at conferences, politicians, funding bodies and perhaps partners from industry.

We have run hundreds of media skills workshops for scientists. Scientists have particular concerns about accuracy, precision and their scientific reputation, and the workshops are tailored to meet these concerns. We have taught thousands of scientists to distil often-complex science into a few key points that match the interest and the needs of journalists.

Training scientists in media skills is an important part of encouraging scientists to communicate with the media and helping them to feel comfortable.

A survey of 446 Australian scientists in 2007 found that scientists, especially those from government research agencies, have little regular interaction with the media. The survey was conducted by the Australian Science Communicators (ASC; [www.asc.asn.au](http://www.asc.asn.au)) and the

Australian Science Media Centre (AusSMC; [www.aus-smc.org](http://www.aus-smc.org)), to test concerns that scientists were not able to speak freely to the media. While the official policy of many government-funded research agencies is to encourage scientists to interact with the media, it is unusual to find this formal policy backed up by initiatives to encourage scientist–media interactions.

The objectives of ASC, as expressed on its website and in its constitution, are to:

- foster professional communication of science and technology, especially through high standards in the crafts of journalism and other forms of communication;
- promote national awareness and understanding of science and technology; and
- encourage discussion and debate of ethical, policy, economic and social issues related to science and technology.

The aim of the AusSMC is “to better inform public debate on the major issues of the day by improving links between the media and the scientific community”. Clearly, if scientists don’t feel comfortable speaking to the media, the objectives and aims of ASC and AusSMC will not be achieved.

The questions asked in the survey test some of the results of previous research published by us in 1997 in an article in *Science Communication*.

## Media Interactions Are Seen as an Optional Activity

Most of the respondents to the survey interacted with the media less than twice per year. For them, media activity was an optional activity. Only one-third of the respondents had received media training, which indicates that media engagement is not considered a core business for most organisations.

These results agree with our findings, and show that little has changed over the 10 years since the original survey. Respondents recognised the negative attitude of their organisations to the media as a problem, and identified this as an important or very important issue.

## Scientists Have Mixed Views on Media Interaction

The 2007 survey respondents with media experience rated media interaction as “mostly positive”. Some scientists enjoyed interacting with the media, and also enjoyed the public exposure it brought their work:

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ABC did an online segment about my work. They were helpful, friendly and encouraged me on how to speak and how to act. It was not too repetitive and a great day. I felt proud of what I do.

I have great interactions with journalists, know several science writers and enjoy giving them information on the side.

However, even those with a positive view of the media had reservations:

Most media are really good and accommodating, but sometimes go off topic and miss the point of the release. They also often misquote and rarely allow editing or accept suggestions on fixing misunderstood statements, often as a result of not understanding the topic or its complexity.

Mostly positive, but a few times where things were sensationalised, or misrepresented, but that's the nature of the beast also and you have to expect that.

Scientists with a positive attitude towards the media are more likely to have had formal media training and frequent interactions with the media. These scientists can handle journalists: they are less concerned about media inaccuracies

and more positive about the media in general. This reflects our findings.

Those more experienced with the media better understand how it operates:

It's important to understand their perspective.

Given my expectations I have generally been satisfied and occasionally pleasantly surprised by the outcomes. (interacts once per month)

We need to understand that their perspective is different to ours, so our messages need to be put in their terms. (interacts once per month)

The media skills workshops developed by us 16 years ago, “Talking Science with the Media”, involve at least three working journalists in a 1-day workshop and five in a 2-day workshop. Scientists value direct contact with journalists because they like to meet the people with whom they will deal. This is the quickest way to learn how to tell their stories. As participants are interviewed by each of the journalists, they gain new insights on what the journalist needs to make the story work. Over the course of a 1-day workshop, participants may completely reshape the way they talk about their work based on the response and advice of journalists.

## Scientists Are Concerned about Misquoting and Sensationalism of Their Research

The 2007 survey showed that concern about misquoting and over-sensationalism of research is the most frequent barrier deterring scientists from speaking to the media:

By-and-large, the media [are] unable to grasp the combined need for keeping the science simple and accessible to the non-scientific public without sacrificing the truth.

The journalists' understanding of the science tends to be limited and hence issues are often misrepresented and out of context.

You need to be very careful that your answers are not taken out of context or not mis-interpreted.

The media seek controversy before accuracy.

Some scientists in the 2007 survey had other concerns: that their work had significant policy implications and might involve them in political controversy; that they would not have the time to handle media enquires; or worries they might make a scientific mistake in public. We identified the major barriers to using the media as commercial agreements, no access to qualified

science communicators and lack of time. These results are similar but not identical to the present study.

Together, the results of these studies indicate that Australian scientists are deterred from speaking with the media by a combination of three main factors: a lack of experience or training; lack of time to prepare for interviews; and a fear that journalists will give an inaccurate account of their work.

Our workshops seek to overcome the negative view of the media that many scientists have. The workshops promote a shared understanding and collaborative approach to scientists working with journalists. Many of the participants report a more positive view of journalists after participating in our workshops.

Participants are asked to rate their initial and final views of journalists. They do this by completing a sheet where positive and negative words (as indicated below) are separated by a seven-point scale.

Not helpful	Helpful
Unreliable	Reliable
Sensationalist	Non-sensationalist
Trivialised	Serious
Rough	Thorough
Distort	Accurate
Superficial	In-depth
Bored	Interested
Unconcerned	Concerned
Unprincipled	Principled
Lazy	Hard-working
Untrustworthy	Trustworthy

Some of the participants initially complain about “generalising” about journalists, saying that some journalists are good to work with while others are not. However, comparing the before-and-after assessment of journalists indicates that workshop participants are much more positive about journalists after interacting with three of them over 1 day or five of them over 2 days.

In particular, after doing the workshops participants are more likely to think of journalists as helpful, thorough, concerned, reliable, accurate, trustworthy, interested and hard-working. On average, workshop participants do still tend to think of journalists as being superficial with a tendency to trivialise or sensationalise their stories. However, participants record positive changes to these three aspects and are less likely to think of journalists as being likely to sensationalise,

distort, trivialise or be superficial about their stories.

## Scientists Value Media Skills Training

Just over one-third of the 2007 survey respondents had participated in media training, and they were overwhelmingly positive about its benefits. They reported that training helped them to understand the media and how to get the most out of media interactions:

It was excellent. After the training I was confronted with a situation where I had to do an impromptu interview and I was able to do so well with the training I had received.

Essential for any scientist wishing to engage with the media.

Other respondents who had not experienced media training said they would like this opportunity, but many of their organisations did not make it available to staff.

These results coincide with the conclusions of our previous studies and echo those earlier views that scientists value media skills training and feel it improves their confidence in communicating with the media.

Many of the 2007 respondents felt that media training was useful but needed to be more frequent, and that refresher courses would be of value. Some respondents said large class sizes were a limitation because they did not allow a one-on-one interview experience.

## Scientists Believe Their Organisation Only Outwardly Encourages Media Interaction

The majority of 2007 survey respondents reported that their organisation officially encourages media interaction. But most also reported that Australian scientists were sometimes discouraged from speaking to the media, which suggests a significant gap between official policy and reality:

Our organisation sends mixed messages on the subject. It wants (and encourages) communication but is afraid of what we may say.

The department encourages warm, fuzzy success stories. It discourages anything that might be controversial.

These results are similar to our previous research, suggesting that scientists feel their organisations do not support media activities with any enthusiasm.

When the 2007 survey respondents were asked whether they thought Australian scientists in general were discouraged from talking to the media on issues relevant to their area of expertise, most (41%) said “sometimes”; 15% said “yes”; 32% said “no”; and 12% did not know. For those replying “yes”, 92% thought this was a very important or important issue.

Organisations that encourage and support media training of their scientists and back this up with ongoing support for media interaction will overcome this negative perception.

## Research Organisations Should Be Concerned

The results of the 2007 survey indicate that

Australian research organisations should be concerned that:

- the majority of scientists have very little contact with the media;
- 40% of scientists feel they are either discouraged or not specifically encouraged to use the media;
- only 35% of scientists have had media training; and
- most scientists feel that Australian scientists, in general, are sometimes discouraged from interacting with the media.

## Media Skills Training Is Valuable

The 2007 survey results largely back up those found by us a decade earlier. In particular, they emphasise the value of media skills training for scientists (see Seven Steps for Scientists in the Media).

## Seven Steps for Scientists in the Media

**1. Objective:** Have a clear concept of what you want to achieve. Why do you want to use the media? Be clear about the role you want to play. The message and media strategy will be different if you're taking an advocacy role compared with being an impartial expert, especially when dealing with contentious issues. Having a clear objective helps to evaluate how successful you have been.

**2. Audience:** Who do you want to reach? Who will your work affect? Which media outlets are these people likely to use and what papers do they read? This will determine the best form of the media to use. Journalists always look for stories relevant to their readers/viewers/listeners, and their questions will be those their audiences would ask.

**3. Message:** Have a clear message. This should take into account your objectives and the needs of the audience. What are your boundaries – what do you want to say and what don't you want to say?

The same story may need to be reshaped to appeal to different media. For example, financial media are interested in implications for industry and you'd want to put dollar figures prominently in this version of the story. The general media may be more interested in another aspect of the story, such as new recreational spaces opened up as a result of your work.

**4. "The key bit of paper":** Write down the two or three key points about your work and provide this for media that might be interested in covering the story. This might be a formal media release or series of key points. Aim to give journalists something in writing before doing an interview.

**5. Preparation:** If you want TV or print media coverage you will

need to think about picture opportunities. Arrange to do the interview in a practical situation: if your work is based on health, do the interview in a hospital where TV and print can get interesting shots. This is better than doing the interview in a visually dull office.

Think about any dollar figures you can provide (estimated savings, cost of research, potential industry benefits). And prepare for the interview by thinking of simple, colloquial explanations for your work and its implications.

**6. Rehearsal:** Practice with your communicator or with a family member or friend. (But not your colleagues – they'll ask you questions that they're interested in rather than what your targeted media audience may want to know.)

**7. Interview:** Know what you want to say before an interview starts. You are the expert, you know what the story is about, and you know what the implications are. Think in advance about what you want to say and make sure these points come out in the interview (even if the journalist does not ask the right questions). The responsibility is yours. With the media a journalist's question does not equal an exact answer; rather, it provides an opportunity for you to get out a prepared point.

This is the hardest thing for scientists to come to terms with: they like answering questions! That's why they did science and so, when a question is posed, they like to provide as much detail as they possibly can. But this is not how the media works, and that's the value of media training in supporting scientists to get across a clear message to the media.

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J. Metcalfe and T. Gascoigne, "Talking Science with the Media" workshops