

Scientists must tell their stories

Leading Australian scientists and media experts met in Adelaide to explore how to improve public access to and understanding of science in a fast-changing media world. Karen Phillips reports

Australians living in the 21st century cannot afford to be ignorant about science. When the daily media covers subjects as diverse as nuclear power, RU486, stem cell science, the health impact of mobile phones and the psychology of being trapped underground, what Professor Bob Williamson, Professor of Medical Genetics at the University of Melbourne, calls “scientific literacy” is no longer a luxury.

“If (people are) making decisions in a vacuum, they’re usually bad decisions,” adds national science broadcaster Dr Robyn Williams. “Science information concerns everybody.”

Members of the board and advisory panel of the Australian Science Media Centre (AusSMC), who attended a forum on the science/media relationship in Adelaide, consider the media to be the primary mechanism by which science information can be disseminated to a time-poor Australian public.

Yet, as even its proprietors concede, the Australian media does not give its audiences much science: if the public is to receive the information they need to understand the world, both science and the media must change. Such change is not easy, particularly when developments in information technology are happening so quickly that even the media are unsure of their industry’s future. They are traditionally constrained by responsibilities to owners and shareholders who may not put the ‘public interest’ benefit in increasing the coverage of science at the top of their priority list. Now they are also faced with emerging media alternatives that threaten their futures.

Mark Scott, the former editor-in-chief of metropolitan newspapers at Fairfax and now managing director at the ABC, says newsrooms have been forced to react more rapidly than ever before. Five years ago, an exclusive story would have been tightly held by a media organisation for publication the next day; now it appears within hours on the organisation’s website. Journalists and media in 2006 are “operating in a 24-hour, immediate news cycle, rather than a newspaper news cycle. That’s the business that we’re going to have in the future.”

Complicating the challenge is the fact that members of Generations Y and Z and subsequent generations – the people who should become the media’s key market in the near future – do not read newspapers or watch TV news. Mr Scott says the number of people watching commercial TV news in the past 10 years has dropped by 25 per cent. Newspaper circulations around the world are also declining.

The Bulletin’s outgoing editor-in-chief, Garry Linnell, told the panel that his 17-year-old son “won’t read newspapers”. Yet his son has his own, non-traditional news sources: it was he who informed his impeccably-connected father about the London bombings, having heard the news via a MSN Messenger

discussion from a friend who lived very close to the one of the tube stations that was hit. It was several minutes before any of the world’s ‘real’ media had the story. “The era of the editor deciding and dictating what is news and what is not news may well be over,” Mr Linnell reflects.

Even its managers admit they do not know how the media will address the requirements of future generations. “The great challenge is that the next generation of media consumers coming through are all going to demand very different things from their media,” Mr Scott says. “They may not want authoritative broadcasting, but may want a media experience that they contribute to and interact with. This is a major challenge to the way we conduct our news now.”

Technology has reached the point, says the editor of Adelaide’s *Advertiser*, Melvin Mansell, that “anybody has the capacity to be a journalist”. News, both text and photographs, can be sent via mobile phones. All the most dramatic photographs of the London bombings, Mr Mansell says, were taken by commuters using their phones. “There’s a website in South Korea,” he adds, “that has 200,000 ‘journalists’, and not one of them is a journalist.”

Mr Linnell suggests that this emergence of what he calls “participatory journalism” – SMS messages and pictures, blogs, personal websites and news channels to which viewers are invited to contribute content – is a type of revolt: people are sick of being fed information managed and manipulated by spin doctors and media advisers, in science as in politics and other sectors of 21st century life. “The public out there has become so cynical and tired of what they’ve been picking up all the time that they’ve actually decided to take control,” he says, “and the technology has finally arrived to deliver that to them.”

Adelaide-based science communicator Dr Rob Morrison, the president of the Royal Zoological Society of South Australia, says scientists and their employers are complicit in the manipulation. Anxious to successfully compete for more funding and wider recognition they “create a media unit, hire media officers, hire PR merchants – and tell them to spruik their supremacy, particularly in the media”.

Young communicators at the mercy of middle management are ordered to distribute something to the media, no matter how informative or newsworthy, and as a result distribute beat-ups filled with the type of misleading information and labels – ‘breakthroughs’ that are anything but, ‘cutting edge’ research that clearly isn’t – that editors hate.

“We have overplayed the ‘breakthrough’ game and have earned understandable mistrust from editors with whom we’ve been trying to curry favour,” Dr Morrison says.

In addition, he says, scientists themselves are being trained to perform these 'tricks' for the media, instead of being instructed to stick to the subject and to cull the cumbersome detail that will be discarded in the newsroom.

But how can science frame its media-bound message when the media does not know in which direction it is headed, the composition of its audience and what technology it will be using? The chair of AusSMC, the former chief executive officer of PBL, Peter Yates, suggested that science as an information genre has certain structural differences compared with other kinds of stories. These make it difficult for science to compete with politics, business or sport and so successfully engage the editor's interest.

Science, Mr Yates points out, is not a complete story.

The search for knowledge never ends and thus the story has a beginning and sometimes a middle but rarely an end. Often it is so specialised and technical that editors and general news reporters find it difficult to convert the facts into meaningful information for a general audience.

On this point at least, scientists are aware that they must move if they want a wider public appreciation of science and its applications. Sir Gus Nossal, Emeritus Professor of the University of Melbourne's Department of Pathology, says scientists must stop being media-shy. "It is absolutely crucial that scientists now do communicate their research at all levels," adds Professor Michelle Simmons of the University of NSW's School of Physics, who urges her peers to "step out of their comfort zone", initiate contact with journalists and seek and capitalise on opportunities to spread their messages at conferences and other public forums.

Too often, says Professor Nossal, scientists are more worried about what their colleagues may think of their attempts to publicise their work than the potential outcome of such publicity. "It is, of course, quite proper, this concern about not taking too much credit when you're publishing a scientific paper," he adds. "But in terms of interaction with the media, we have to simplify. We have to learn to use the right language."

Yet even he admits he occasionally gets it wrong. He recently met someone who had just heard him deliver a talk to 400 engineers: "You used such a lot of words the engineers didn't understand," the acquaintance told him apologetically. "See, I've been learning this stuff for 40 years now and I am guilty of that," Professor Nossal says. "You've got to learn not to do it."

The key, says Mr Scott, is to make it compelling. He says the scientific community does not understand the news value it is sitting on. He summed it up as the ability to ask why: "Why would people be interested in this discovery? How will it change



The AusSMC board, staff and science advisory panel: (front row, left to right) Professor Robert Hill, Professor Michelle Simmons, Peta Newbold, Marilyn Chalkley, Dr Susannah Elliott, Professor Lyn Beazley; (middle row, left to right) Garry Linnell, Sir Gustav Nossal, Robyn Williams, Dr Tim Flannery, Professor Malcolm Walter, Professor Bob Williamson, Professor John Zillman, Professor Snow Barlow, Emeritus Professor Frank Fenner, Linda Cooper; (back row, left to right) Mark Scott, Peter Yates, Associate Professor Rob Morrison, Russel Caplan, James M Millar, Professor John Yovich, Professor Derek Denton, Dr Richard Head.

their lives? If you can help the media explain that, then you've got a compelling story."

Mr Linnell agrees, pointing to evidence that science can work for the media and for itself: *The Bulletin* put diabetes on its cover and sales increased by 25 per cent. When *The Sunday Age* printed a special lift-out about what a meteorite found in the Atlantic can tell us about life beyond Earth, sales leapt by 25,000 copies. Each was a terrific lesson, he says: fashion your scientific subject, give it a sense of excitement without dumbing down and it sells.

It is into this ever-changing and unpredictable landscape that AusSMC has landed. Its role, says Dr Morrison, is to forge "a better dialogue, particularly one which encourages professionalism in the whole business of science communication". AusSMC (www.aussmc.org) was established in 2005 to provide journalists with up-to-date scientific information and access to experts in specific fields that are making news. In its first six months of operation, AusSMC organised media briefings and distributed for media use comments from scientists on 'breaking news' topics including RU486, drugs in sport, nuclear energy and mental health.

Its supporters agree AusSMC must be a catalyst rather than a campaigner; that it should "take all this noise and make it coherent," as Dr Williams says. With centres like AusSMC as facilitator, and backed by the boundless capacities of cyberspace, science may send its message through the media to be gathered, coordinated, broadcast and downloaded, then absorbed and acted upon, by millions of people around the world.

"Putting these things together to get coherence instead of noise is what we're about," he says, "using both the old-fashioned media and the new."

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