

# GETTING INSIDE HEARTS AND MINDS OF JOURNALISTS WILL HELP SCIENTISTS MAKE BETTER USE OF THE MEDIA

BY PETER CALAMAI

One of the show-stoppers in the musical *My Fair Lady* comes when Professor Henry Higgins laments “Why can’t a woman be more like a man?”

Without intending to trivialize the concern and even angst of many Canadian researchers over media coverage of the fate of the NRU reactor and related issues, I believe that a large part of the problem is that scientists often want journalists to be more like them. Or more precisely, to think more like them.

It would indeed be good for journalists to better appreciate the scientific ethos and culture. But it would also be beneficial for scientists to improve their understanding of the journalistic ethos and culture. A better appreciation of what makes the media tick would allow the research community to develop strategies that could change the reporting of issues such as securing a supply of medical isotopes for Canada and the future of neutron scattering. A few examples of these possible new strategies are spelled out below.

My view is that the public and political dialogue about the production of medical isotopes in Canada has suffered from half-truths, fundamental misconceptions, ignorance of basic nuclear science, and a lack of historical perspective. As well, with most of the public focus on medical isotopes the other crucial issue – the clouded future of neutron scattering research in Canada – has received short shrift.

## SUMMARY

**Without intending to trivialize the concern and even angst of many Canadian researchers over media coverage of the fate of the NRU reactor and related issues, I believe that a large part of the problem is that scientists often want journalists to be more like them. Or more precisely, to think more like them.**

Some, but not all, of the blame for this can be laid at the feet of the mass media whose coverage of the crisis has largely failed to move beyond the episodic approach of breaking news and whose narrative frame for the story has been predominately one of crisis and conflict.

Several further observations must be allowed to temper this assessment:

- all media are not the same. Some coverage has striven to present the complexities of the issue. As far back as Nov. 1, 1998 the *Toronto Star* printed a 1,300-word news feature I had written about the looming global “neutron gap” and the essential role of these “unstoppable explorers of the atomic world.” On Feb. 25, 2008, the *Star* devoted the front page main article and two complete pages inside the first section to an investigation into the original NRU shutdown. In *The Globe and Mail*, reporters Patrick White and Anna Mehler Paperny have been assiduous in keeping tabs on the bigger picture, with a half-dozen articles in 2009 alone.
- one definitive contrast between scientific writing and journalism is the emphasis on narrative. Scientific communication emphasizes the destination, while journalism is all about the journey. Hence the challenge for science writers: researchers may draw a ringing conclusion, but the task of bringing that conclusion to a lay audience involves describing what went on beforehand.
- an episodic approach focusing on crisis and conflict is the default mode for the media for many stories, not just those with a scientific component.

Scientists regularly bemoan the media’s preoccupation with *sturm und drang* and active seeking out of controversy. “I suppose those sorts of headlines sell newspapers,” is a common refrain conjuring up images of boys in knickerbockers on street corners shouting “Read all about it.” The reality is that most daily newspapers in Canada are “sold” a month in advance, through home delivery subscriptions, and that headlines have minimal impact on day-to-day circulation. Similarly radio listeners or TV viewers aren’t drawn primarily by the presentation style but by the intrinsic news value of the items. A senior edi-



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tor of *The Times* said at a London conference last summer that the three stories which attracted the most reader interest in 2008 were the election of Barack Obama, the financial crisis at British banks and the start-up of the Large Hadron Collider at CERN.

The fact that many scientists so readily voice the headlines-equals-sales claim suggest they haven't applied the same intellectual rigour to understanding what makes the media tick that they devote to scientific questions. Yet without applying that intellect to develop insight into the media ethos and culture, scientists are unlikely to succeed in getting coverage that reflects their concerns, whether we're dealing with H1N1, climate change or the fate of the NRU.

Consider the following as potential jumping-off points:

**1. Journalists will put the most energy into topics that they believe can be made to resonate with their audience. First those topics have to resonate with journalists.**

The topics need not be sexy or even high-profile to start. Look at how the media in the 1990s latched onto the notion of eliminating the deficit. Journalists could easily grasp the notion that a nation's finances should abide by the same rules as their own.

**2. Journalists are in the news business.**

A topic remains attractive to journalists only so long as there are new angles to exploit. They need not be truly new angles; they simply have to lend themselves to being tarted up as new.

**3. As a corollary, because journalism is fixated on the new it often ignores background crucial to understanding the current story**

**4. In journalism, the urgent almost always trumps the important.**

Again, it need not be true urgency but it must appear to be urgent. That's why a story which says something will happen today will almost always be given more prominence than a story which says something happened yesterday. Even when the yesterday event is intrinsically more important.

**5. Names make news.**

And the bigger the name, the bigger the boost in news value for the topic being reported.

**6. Conflict, disagreement and controversy are more innately interesting (and more newsworthy) than peace, agreement and accord.**

This holds except in the cases where the norm has been conflict and peace breaks out, viz Northern Ireland or Question Period in the Commons.

Now apply these observations to the fate of the NRU reactor, the supply of medical isotopes and the future of neutron scattering research.

1. Medical isotopes certainly resonate with journalists (who tend to lead unhealthy lives and are prone to hypochondria). The fate of the NRU reactor resonates less but still has some attraction because of its age and iconic status. Neutron scattering simply isn't on the media radar.

Suggestion: Media accounts mostly repeat the same few examples of the application of neutron scattering (e.g. the Challenger shuttle welds). Yet if hundreds of scientists across Canada rely on NRU for neutron scattering research, it should be possible to find scores of examples of how that research intersects with the lives of ordinary Canadians. These would resonate in communities most directly affected and with journalists whose reports reached those communities.

2. All three topics present limited opportunities for even the most inventive journalists to develop ostensibly new angles. There's a noticeable absence of real people whose health can be shown to have suffered because of delays in diagnostic procedures, despite the repeated doom-laden pronouncements from nuclear medicine advocates. There was a brief burst of new angles with the various competing schemes to replace the NRU reactor and the release of the expert panel report in early December but that petered out quickly. The Canadian Institute for Neutron Scattering repeats the same very valid points. But these, by definition, are no longer newsworthy after so many repetitions.

Suggestion: Those multiple (but unspecified) real-life applications of neutron scattering could be packaged into new angles through comments from the affected end-users, rather than the researchers. Corporate executives holding a news conference to stress how vital such research is to their products could almost be guaranteed to attract media coverage. Especially with "before" and "after" examples available for visuals.

3. The international standing once accorded nuclear research at Chalk River may be well-known to many scientists but doesn't rank in the public consciousness with Banting and Best. As well, the steady erosion of that expertise through funding cuts and poor strategic direction from Ottawa is hardly common knowledge. Finally, the nature of the difficulties with the Maple isotope replacement reactors, although elucidated by journalist Alison Motluk on CBC radio's *Quirks and Quarks*, remains a mystery to most people.

Suggestion: Any pronouncements by researchers about isotopes, neutron scattering or the fate of NRU should include a potted history covering these points so journalists can help the public understand how this complicated story arrived at its current juncture.

4. Almost all the coverage has been “yesterday” reporting rather than “today.”

Suggestion: Instead of hoping that journalists will attend hearings of the Commons natural resources committee into the NRU issue and then report what’s said, media-savvy researchers would make sure key journalists had advance copies of their prepared submissions, embargoed for the day of the hearings. This is the same procedure followed every week by *Science*, *Nature* and other major research journals.

5. The media have dutifully reported the comments of officials representing organizations such as the Canadian Institute for Neutron Scattering and the Ontario Nuclear Medicine Association. To increase the prominence given such news reports, however, requires names with some public recognition.

Suggestion: When the first Canadian Neutron Facility was proposed by AECL and NRC in 1998, the proponents lined up support from the likes of Fraser Mustard, Burt Brockhouse, a raft of university presidents and Tom Brzustowski, then NSERC president. Names of similar weight today would be more likely to attract current media attention. The best science stories also thrive on characters, something alien to the scientific mindset while eschews emphasis on personality.

6. There’s been a surfeit of conflict and controversy in this unfolding story, starting with a nasty spat between officials of AECL and the Canadian Nuclear Safety Commission, escalating to Prime Minister Stephen Harper’s partisan attack on CNSC President Linda Keen, segueing into lawsuits between MDS Nordion and AECL and most recently descending into the Prime Minister’s communications director characterizing AECL as “dysfunctional” and a \$30-billion “sinkhole” for taxpayer money.

Scientists are no strangers to conflict and controversy over purely scientific matters (after all, Thomas Kuhn wrote about “scientific revolutions”) but they tend to avoid similar levels of engagement in the public arena. As the current furor over climate change demonstrates, however, it is bad tactics to leave a vacuum even if a debate has become excessively polarized.

Suggestion: Many reporters might find it newsworthy if the research community spoke up more forcefully and with a more united voice about what scientists see as a serious threat to Canada’s standing as a nation that claims G-8 status. One opportunity was missed at the science policy con-

ference held in Toronto last October. Another will present itself in May when the Professional Institute of the Public Service of Canada is staging another science policy meeting in Ottawa. It would also likely strike many journalists as newsworthy if the various interests which are promoting competing proposals to replace NRU could nonetheless agree on a strong joint public statement about the wisdom or folly of doing nothing.

These few thoughts are far from an exhaustive complete media strategy. There is another important initiative that intends to address the continuing lack of communication and understanding between journalists and scientists.

This is the nascent Science Media Centre of Canada ([www.sciencemediacentre.ca](http://www.sciencemediacentre.ca)). One of the first programs planned by the Centre is “Science 101 for journalists,” a half-day workshop for journalists which will explain the scientific method, examine how scientists view the world, discuss why scientists appear overly cautious to reporters etc. In summary, let journalists peer inside the hearts and minds of scientists.

But the Centre also intends to offer a counterpart workshop that will help researchers peer inside the hearts and minds of journalists. It will examine journalist value systems, dissect what makes news, explore media economics and discuss how journalists view the world. Such a program, called “Introduction to the Media”, has been hugely popular with researchers in the U.K. where the Science Media Centre concept originated in 2002.

The intention of the workshops isn’t to have journalists suddenly thinking like scientists or, horrors, scientists thinking like journalists. Success could be as simple as having both groups gain an appreciation of what underlies the actions and attitudes of the other.

Right now the Science Media Centre of Canada consists of an Executive Director and administrative assistant in modest office space donated by the Canada Science and Technology Museum in Ottawa. The Canadian Association of Physicists contributed \$1,000 to this beginning by becoming the first scientific society Charter Member.

Before it can open its doors, the Centre needs to raise about \$2 million for initial start-up costs and to guarantee first year operations. The SMCC will concentrate on hooking non-specialist reporters up with credible and communicative experts in all fields of research across the country. The counterpart workshops to improve understanding and communication between journalists and scientists are an another early priority.