

Online Course in Science Journalism

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Lesson 6 - Reporting on Controversies

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6.1 Introduction

In 1988, disgruntled doctors at a medical institute in Delhi went on strike, bringing hospital services to a halt. While media coverage focused on the strike and how it affected patients, this author knew it was the best time to ferret out "inside" information from normally reticent doctors who were now in a mood to talk against the administration. They revealed that hospital researchers, unethically testing the efficacy of a Swedish company's new abortifacient drug, smothered to death an aborted fetus that "was born alive and crying."

This author obtained a photocopy of the mother's medical record, with help from an insider, prior to the publication of the story – an act that saved him and his news organization when the institute director dashed to the reporter's office the next day threatening to sue. The director was removed soon after.

The event is a good reminder of how controversial some stories can be, and how important it is to be scrupulous in your preparation of such a story.

There are many different types of controversy, and some will present themselves more obviously than others to science reporters. Most often the controversy may be quite obvious e.g. a scientist claiming the Earth is not round. In other cases, the seeds of controversy may lie hidden e.g. the sudden withdrawal of a drug from market.

In contrast, most science stories belong to the straight or traditional variety – new technology or discoveries; stories based on interviewing scientists; papers presented at a science conference or published in a professional journal; a company press release announcing a new drug, and so on. Earlier lessons in this online course teach you the techniques of developing and presenting science stories in general.

In this lesson, you will learn how to handle science controversies with confidence.

6.2 Why should you report controversies?

As Christine Gorman, former associate science editor for Time magazine, once said: just as in good literature, conflict or controversy often drives science stories.

Readers and audiences like controversies and these stories may also appeal more to reporters. Editors of a newspaper are more likely to upgrade a run-of-the-mill science story from third page to the front page if it has a controversy angle that can sell the paper or enliven a telecast.

Controversial issues provide an opportunity to educate readers and raise public awareness of issues like climate change or AIDS.

Informed coverage of a controversial scientific issue could lead to benefits for the public. For instance, reports of the health hazards of traditional wood stoves for cooking led to an Indian programme on "smokeless chulas."

The rewards of a highly visible or controversial story may be substantial to reporters: your byline gets noticed in newsrooms and by the scientific community. This raises the prospects of your being alerted by would-be whistleblowers and "insiders" who may become your new sources for more controversial news in future.

Every journalist longs to do a controversial or investigative story during his or her career. The opportunity for this is may seem greater for reporters covering beats such as crime or politics.

This lesson will try to convince you that there are equally good chances of reporting such stories in the science beat, but only if you know how to identify and pursue them.

6.3 What constitutes a scientific controversy?

Any new point of view that **questions current concepts** or **overturns accepted dogma, theory or practice** is a potential controversial story. Creationism and the origin of the universe are often subjects of controversy.

As scientists further our knowledge, they **can cast doubt on devices and applications** based on previous understanding, and this can become controversial. For instance, genetic modification (GM), hailed as a tool to grow better crops, became a hot issue after the report in Nature on the death of monarch butterfly larvae fed on GM corn.

[<http://www.nature.com/nature/journal/v399/n6733/pdf/399214a0.pdf>]

Publicly funded projects based on **flawed science or unsure technologies** are topics for controversial stories. Examples include dumping iron in the ocean to create a sink for carbon dioxide [<http://www.scidev.net/en/news/iron-fertilisation-has-small-impact-on-climate-ch.html>] and India's "Sethusamudram" project, which involves dredging the sea between India and Sri Lanka to create a shipping lane. [<http://www.scidev.net/Opinions/index.cfm?fuseaction=readOpinions&itemid=678&language=1>]

Statements and observations by scientists of repute can spawn a controversy. For instance, Nobel laureate James Watson's comments that black people are less intelligent than whites triggered a controversy leading to his resignation from Cold Spring Harbor Laboratory [<http://www.guardian.co.uk/world/2007/oct/18/uk.research>]. (See later in this lesson how this controversy was reported).

Science controversies **need not concern only science** - they are usually multi-dimensional with ramifications in politics or religion. The core of the climate change issue is atmospheric science but actors in this controversy are politicians, industry and ordinary people. The controversy over India's proposed nuclear deal with the United States is another example of controversy that transcends one discipline. [<http://www.hindu.com/2007/08/05/stories/2007080561610800.htm>]

6.4 How do you find science controversies?

Controversies do not come to you on a silver platter or via a press release.

Careful reading of journal articles or conference presentations may show the "tip" of a controversy. After that, you will need to do legwork such as a literature search, interviews and, if need be, a little bit of detective work. Ganapati Mudur's explosive story on an unethical Indian clinical trial is a fine example. [<http://www.bmj.com/cgi/content/full/314/7087/1065>]

Do not accept a press release as gospel. Check the underlying science or methodology used and speak to experts in that field to unearth any hidden controversy behind the study.

Presentations by a scientist containing any controversial element will evoke comments from rival researchers, which may be heard not in the lecture hall but during coffee breaks. So mingle with ears open. But you must have sufficient scientific background to identify the controversial angle, know whom to talk to further, and what to ask.

You may also get tips from **careless or oblique references during interviews**. A World Health Organization (WHO) official's remark that the information sought by a reporter was "sensitive to the Indian press" propelled an investigation by the reporter that resulted in the government closing down a WHO unit in India.

[<http://www.nature.com/nature/journal/v256/n5516/pdf/256355a0.pdf>]

[<http://www.nature.com/nature/journal/v257/n5523/pdf/257175b0.pdf>]

In another case, a casual statement by a government official that "only today we destroyed some plants harbouring dangerous nematodes (worms)" resulted in the unearthing of a racket by some breweries to hop plants (for beer making) whilst bypassing plant quarantine regulations. After a debate in parliament, the government amended its quarantine law.

Also keep your eyes and inquisitive mind always open because tips for controversial stories can sprout from vigilant observation of **objects and happenings around you in everyday life**. For example, an astute reporter noticed, while driving at night over a long bridge in Delhi, that bright and rapidly flickering flashes hitting straight in the eyes triggered a hallucination effect. Authorities – apparently to reduce cost of street lighting with lampposts – had positioned the lamps at eye level every three meters in the handrails along both sides of the bridge. After talking to neurologists, he wrote a story that the gleaming lights flashing cyclically could trigger seizures in children predisposed to epilepsy. A controversy followed, but authorities removed the lights after more doctors supported the article.

Political reporters instinctively know that if there's an election next month there ought to be some kind of controversy before then! Science reporters should smell a controversy **whenever a new technology or medical breakthrough emerges**. Historically this has been the case – whether it was biotechnology, mobile phones or heart transplants. Nanotechnology – currently the buzzword – has its own share of controversies.

[http://www.goodwinprocter.com/~media/Files/Publications/Newsletters/Client%20Alert/2007/Nanotechnology_Risk_Framework_k_Spurs_Controversy.pdf] So when someone announces a breakthrough, ask yourself what its likely impact will be and start probing.

6.4 How do you find science controversies? (continued)

You are very likely to find some controversy lurking behind any scientific project, medical experiment or trial **done in secrecy** behind closed doors. So keep knocking.

Remember that controversies are not stereotypical – **what may cause a scientific dispute in one country may not be an issue in another country**. Electronic waste is not an issue in developing countries that are yet to be invaded by computers and the information technology industry. The adverse impact of the green revolution is a controversial issue in India but not in the U.K.

As a reporter, keep monitoring controversial issues elsewhere by visiting websites (see the assignments for this lesson [<http://www.wfsj.org/course/en/L6/assignL6.html>]) in order to know how these issues are being covered in the media of other countries. Although it is necessary to inform your audience about these issues (which may someday become relevant to them) look for current and potential controversies at home.

Some local controversies can have universal relevance. One example is the brown cloud from bio-fuel burning over northern India, which could affect the global climate. [<http://www.ens-newswire.com/ens/aug2007/2007-08-01-02.asp>] Another is the warning by an Indian journalist about the danger posed by a pesticide factory in Bhopal storing poisonous gas. This began as a local controversy. But when the gas escaped and killed thousands in December 1984, it became a global issue over corporate liability. [<http://www.scidev.net/en/features/scientists-return-to-bhopal-20-years-after-disaste.html>] Similarly, claims made about traditional medicines or clinical trials in developing countries could become topics of controversy. Costly space exploration is rarely an issue in the West, but manned space flight or a moon mission by a developing country that has yet to significantly reduce poverty at home are ripe topics for controversy. [<http://www.scidev.net/News/index.cfm?fuseaction=readnews&itemid=966&language=1>]

In countries where government scientists have to obey strict conduct rules and cannot talk freely, it is always useful to **cultivate contacts with leaders of scientists' unions or associations or disgruntled scientists within the establishment**. They may not be quotable sources because of obvious bias, but you should not underestimate their value as providers of helpful tips that could help you uncover a controversy. For example, a union leader's tip-off that four workers at an Indian atomic plant were hospitalized for radiation injury was enough for a reporter to uncover unsafe operations in the reactor. [<http://www.tribuneindia.com/2003/20030723/edit.htm#2>]

Scientific issues usually get resolved over time but some controversies persist. Keep revisiting the websites to know the latest. For instance, although cold fusion has been debunked by mainstream scientists, research is very much alive in some labs. So far they have not been successful in convincing the scientific community about their experiments. [<http://newenergytimes.com/>]

6.5 Types of controversies and how to handle each

A good place to start learning about covering science controversies is the Nieman Foundation reports, [<http://www.nieman.harvard.edu/reports/contents.html>] like the Fall and Winter 2002 issues (environmental reporting) and Spring and Summer 2003 issues (health and medical reporting) and the Summer 2004 issue (the energy beat).

Another excellent resource is "Reporting on controversies in science" by Tim Radford, former science editor of The Guardian. [<http://www.scidev.net/en/practical-guides/reporting-on-controversies-in-science.html>]

Controversies can be grouped into (at least) eight categories:

1. "**Passive**" controversy reporting, where a reporter presents opposing viewpoints of an already recognized controversial issue (e.g. is sex selection causing the decline in the proportion of females in India and China? Is bio-fuel the answer to energy shortages in developing nations?), leaving it to readers to arrive at their own conclusion. Another example is Rex Dalton's report in Nature on the theory that prehistoric mass extinctions were caused by volcanic eruptions in India – and not a meteorite impact. [<http://www.nature.com/news/2007/071031/full/news.2007.205.html>]
2. The "**active**" type is one where a controversy is brought to light for the first time by the reporter himself or herself, on the basis of information diligently collected by the reporter's own investigation. Rachel Carson's "Silent Spring," which exposed the harms of the pesticide DDT and launched the environmental movement, belongs to this category. [http://en.wikipedia.org/wiki/Silent_Spring]
3. **Faking of data, plagiarism, and other forms of misconduct** belong to a class of controversy usually brought to light by scientific journals, rival scientists or whistleblowers. Other than reporting these, your own role will usually be limited to follow-up stories and analyzing the implications of the fraud. The Korean stem cell controversy, however, involved both – the fraud was first suspected by a journalist writing for Nature [<http://www.nature.com/nature/journal/v429/n6987/full/429003a.html>] and was then exposed by a South Korean TV network. The subsequent fallout was documented by Nature's news team as well as many other news media [<http://www.nature.com/news/2005/051219/full/news051219-3.html>] [<http://www.nature.com/news/specials/hwang/index.html>]
4. Another type of controversy is one that may concern sensitive scientific issues having a bearing on **national security and defence**. These can be topics for investigative journalism but data for the story may not be available from officials and the stories must be handled with the sensitivity they deserve. For example, there were serious doubts over India's claim in 1998 that it successfully tested a hydrogen bomb. But in the absence of inside information, it was still possible to probe the claim as this reporter has done for The Hindu newspaper. [<http://cndyorks.gn.apc.org/news/articles/asia/need.htm>]
5. The fifth variety is controversies that **target a scientist per se** and not the research he or she is doing. It is preferable to keep away from these unless the nature of the controversy is such that it harms publicly funded projects or institutions. The way Nature handled "Watson's folly" is a practical guide for treating similar controversies that you may come across in your career. [<http://www.nature.com/nature/journal/v449/n7165/full/449948a.html>]
6. Another type of controversy reporting is in a **public crisis**, such as following a tsunami or earthquake, air crash or floods, when the journalist's role is no longer to stir controversy but to foster calm discussion among the public and help with crisis management. Here the journalist's role may be to understand people's needs, win their trust, give scientific background and practical advice and also let the public know about what is not known. [<http://www.japantimes.co.jp/news/tohoku-kanto-earthquake-news.html>]
7. Also, there are controversies where science is challenged by **other approaches, knowledge systems or ideologies** (e.g. religion, alternative healing approaches, ideologies) or where science challenges them. [<http://www.scientificamerican.com/article.cfm?id=creationism-controversy-state-map>]
8. And there are big **political or economic** controversies where actors from the scientific community or their findings can play a role. For instance, the environmental cost to the Karnataka state of India from exporting iron ore for economic reasons has become a major controversy. [<http://economictimes.indiatimes.com/news/news-by-industry/indl-goods/-svs/metals-mining/implications-of-karnatakas-iron-ore-export-ban/articleshow/6953996.cms>]

Covering controversies, risk reporting and investigative reporting are different shades of muckraker journalism, with lines between each often blurred. But one thing common among all is that they ought to be grounded on facts.

6.6 Basic requirements for developing controversial stories

Maintaining a good **rapport** and building up a relationship of **trust with scientists** is a shrewd investment. They can tip you off about any controversial research in the making and you will need them to corroborate your findings as you begin to write your story.

Having said that, it is preferable to keep the relationship with your sources at a professional level and not too personal lest it compromise the objectivity of your reporting. In such an eventuality, you must be prepared to put your professional work ahead of your personal relationship.

Good investigative stories take **time** – days, weeks or even months – and **patience** is vital. Be prepared for failure.

Most importantly, you must have an understanding **editor**. While doing the story, keep your editor in the loop so that he or she is sufficiently prepared to deal with any extraneous pressure to stop its release.

Remember, the mark of a good investigative piece is that it will spark complaints. Therefore, before releasing the story, keep the **answers and documents** ready to answer possible denials, rejoinders and brickbats or even libel suits – as this author found in 1988 (see the example at the beginning of this chapter [<http://www.wfsj.org/course/en/L6/L6P00.html>]).

A reporter should never publish anything controversial that he or she cannot prove in a court of law. Usually editors consult with their publication's legal team before printing or airing any potentially libellous story.

6.7 Controversy checklist

When you are preparing a story that may be controversial, consider the following:

- **Does your story have a controversial angle?** If you can spot this, you have done 50 per cent of the work already.
- **Which controversies are worth pursuing?** This decision must be reached judging by the impact your report is likely to make on the society at large. This article discusses the issue in more detail:
[<http://currenteventscience.net/controversies.html>]
- **What are the different perspectives on the controversy, and who has rival views?** You can find out by doing a thorough literature search using the internet and visits to libraries. Consult your sources and other scientists – preferably a rival group – to see who has differing or contrary opinions on the issue. Sort out who is credible and who is not.
- **Are you distorting the debate?** Your job is to do a good story based on facts. Do not show bias. Distorted news reports, especially when covering health controversies, can generate false hopes or unwarranted fears.
- **Are you sensationalising the story?** Try to bring out the controversy without sensationalising. A medical finding reported in a sensational way may create an unwarranted media frenzy. For example, the reporting on mad cow disease reached an absurd level of hysteria, with reporters emphasizing the scariest aspects of the story, driving the government to spend millions over an "infinitesimal threat," according to David Ropeik of the Harvard Center for Risk Analysis
[<http://www.mad-cow-facts.com/2003/12/31/mad-cow-and-the-media/>]
- **Are you exaggerating?** Headlines and choice of words (for instance "tiff" instead of "fight") to describe different viewpoints are crucial as they can belittle or exaggerate the issue and accordingly condition the public's reaction to the dispute. For example, India's Sethusamudram project, mentioned in Section 6.3,
[<http://www.wfsj.org/course/en/L6/L6P02.html>] is now being treated by the general public as a political issue, though it started off as a scientific and environmental issue, because reporters kept quoting politicians.
- Like five blind men describing an elephant, the same controversial issue may be viewed differently by academics, activists and, notably, by people directly involved in the controversy. Therefore, while covering a controversy, use the journalistic norm of **balanced reporting** (more on balance in the next section).

6.8 Balancing act

Telling "both" sides of the story is a basic journalistic diktat. However, balance in reporting science controversy doesn't mean giving all viewpoints equal weight "but rather exercising judgment and giving each piece of scientific evidence the weight it merits." This priceless piece of advice comes from the combined wisdom of experienced reporters writing in the journal *Science Editor*, Vol. 29;2006 [<http://www.councilscienceeditors.org/files/scienceeditor/v29n3p099-100.pdf>]

While different viewpoints must be reported, generally agreed-upon scientific findings should not be presented alongside the viewpoints of a handful of sceptics in order to provide the "balance." This will serve the readers poorly, as argued by Chris Mooney in Columbia journalism review. [<http://blogs.discovermagazine.com/intersection/2010/01/15/blinded-by-science-how-balanced-coverage-lets-the-scientific-fringe-hijack-reality/>] Leading science journals themselves avoid accepting papers that question theories on which consensus already exists such as on global warming or the existence of black holes. [<http://www.telegraph.co.uk/news/worldnews/northamerica/usa/1489105/Leading-scientific-journals-%27are-censoring-debate-on-global-warming%27.html>]

Present the views of all sides but do give the readers hints that will allow them to judge who is right because it is not always easy or possible for them to sort out who is credible and who is not.

6.9 Ethics in reporting science controversies

It would be highly irresponsible to create a controversy when it actually does not exist by manufacturing an artificial difference of opinion. By doing so you will lose credibility – the main currency of science journalists – and be seen as serving the agenda of interested parties.

Controversial stories should be designed to provoke a debate within the scientific community (or in the public at large if the issue has implications for society) and should not be reported as if the reporters' message is the last word.

Those who provided you information in confidence during news gathering must be protected at any cost and their names should not be revealed without their consent. (Remember Bob Woodward's secret source "Deep Throat" in the Watergate story? [<http://www.washingtonpost.com/wp-dyn/content/article/2005/05/31/AR2005053100655.html>])

Controversies make good copy. But once resolved, subsequent news stories should not feature the controversy. If the "victim" of your controversy story has been **absolved subsequently of fraud or wrongdoing**, it would be unethical not to report that.

The decision to write on a controversy should be based on its scientific merits and not on the fact that other reporters and competitors are doing so. [See "serial" controversies later in this section].

In your anxiety to make the story "look" really controversial, you should not ignore views of critics who are better informed about the issues in dispute.

Scientists named in the controversy should be allowed to compete with informed criticism by experts in the same field. It is unethical to set up unbalanced contests between scientists on one side, and sportsmen, politicians or film stars on the other side. **Proficiency in one field does not translate into authority in another.**

Remember that science journalists have been accused in the past of using anti-abortion activists instead of scientists in presenting the debate on link between abortion and breast cancer (ABC) despite crushing scientific consensus that the ABC link is not true [<http://www.cancer.org/Cancer/BreastCancer/MoreInformation/is-abortion-linked-to-breast-cancer>]

Journalists have also been criticized for writing stories on the link between the MMR (measles, mumps and rubella) vaccine and autism, despite a lack of evidence of any connection between the two. [<http://news.bbc.co.uk/1/hi/health/4311613.stm>]

At times you may have to make the difficult choice between writing a story (for instance about an accident or tragedy likely to happen), and suppressing it (to protect authorities who would be drawn into a controversy.) Remember, your responsibility is to your audience. It would be unethical to suppress any information of importance to the public just because the authorities say its revelation would show them in bad light or create unnecessary panic in the public. **Your job is to report facts.** Other mechanisms exist in society to handle the panic.

Sometimes media coverage of science controversies can take on the appearance of an epidemic. Like an infection spreading from one person to another, the unearthing of a controversy by one newspaper prompts its competitor to follow suit with a different exposé and with such attention-grabbing openers as "In yet another controversy..."

With readers conditioned and hooked by such "appetizers," reporters may unwittingly create a festive season of "serial" controversies. But this hyperactivity carries the risk of journalists ignoring basic ethics and norms.

R.J. Azmi of India's Wadia Institute of Himalayan Geology became a victim of "serial" reporting when the fossils he discovered in central India in 1998 were dismissed as fakes by "experts" and reported as such in the media. It was unfortunate that Azmi had made his claim soon after Nature's expose of fossil fraud by another Indian geologist V.J. Gupta. [<http://www.nature.com/nature/journal/v343/n6257/pdf/343396a0.pdf>] Swedish geologists then vindicated Azmi's findings at the American Geological Society meeting in Colorado in October 2007, but Azmi says the damage had already been done because of press reports written under the shadow of the Gupta episode.

"I was denied promotion and the opportunity to present my fresh data. The healthy scientific debate (progress) in the Indian geology... got delayed by about one decade."

The lesson here is that before harming the reputation of a scientist by reporting the views of so-called "experts," make sure the credibility of the "experts" is better than that of the scientist whose claim they trash. Coverage of nanotechnology has all the makings of another such "serial" with more reports on the potential hazards of this technology rather than its benefits. Coverage of such topics should, wherever possible, include risk-benefit analysis for balance.

6.10 Hurdles in reporting controversies

The first hurdle is your editor, publisher, or producer. They have to be convinced that the controversial story will not have a negative impact on advertising revenues or other vested interests. You may have to battle with editors and colleagues whose level of scientific literacy may be no higher than that among the educated but general population.

Journalists in developing countries face special problems, like getting access to information, as superbly analyzed by Tamar Kahn, science and health editor of the South African newspaper Business Day: [<http://www.scidev.net/en/features/controversy-and-science-reporting-in-south-africa.html>], and Mike Shanahan former news editor of SciDev.net. [<http://www.scidev.net/en/features/trials-and-tribulations-of-science-writers-in-the.html>]

Those likely to be affected by a story's publication may threaten reporters or tempt them with bribes to kill the story. Journalism, especially health and medical reporting, in today's highly commercialized environment, is more vulnerable to business and economic pressures than before, as exemplified by the public health controversy over leaded gasoline. [<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1646253/>]

Depending on the nature of the controversy, the news management may come under pressure from politicians or industry not to release the story. Governments, especially of developing nations, may also stop publication or broadcast of stories that they think might be detrimental to national security or their economic interests.

6.11 Occupational hazards in reporting science controversies

Writing an investigative or controversial story is like investing in stock. If your story is proved correct, you are a hero. Otherwise you lose face in newsrooms and in the scientific circuit. **Moral: do not write on a controversy unless you have double-checked the facts.**

Whether or not your story holds up, you are most likely to alienate the scientists your story would directly or indirectly target. This is the price you have to pay. But there is no need to despair because you will win admirers, new sources and probably new tips for more such stories.

The day your story is released, you may get congratulatory calls from some for your brave exposé and threats of rejoinders or even libel notice from affected parties. **You need not worry as long as your editor is on your side and your facts are right.**

If your story failed to produce the intended impact, derive consolation from what psychologist George W. Albee of the University of Vermont said: "Scientific findings may elicit passionate opposition, censorship, and official (religious and secular) condemnation, but scientific findings that are valid and reliable persist, whereas their critics do not. It took 500 years for the Catholic Church to publicly admit that it was wrong in its opposition to Galileo's findings. Lysenko's genetics, supported by powerful political authority, were doomed from the start."

6.12 Examples of controversy reporting

A reading of how some controversial issues were covered in the lay press and professional journals may be a guide for controversy reporting:

- A \$600 million project to deepen the sea between India and Sri Lanka has been stalled by a controversy – half scientific, half political and with some religion thrown in. Ramachandran's coverage of the controversy in Frontline magazine is a masterpiece: [<http://www.frontlineonnet.com/fl2419/stories/20071005500500400.htm>]
- Korean scientist Woo Suk Hwang's stem-cell research kicked up what many call the mother of all controversies. Read this analysis in Harvard University Gazette of how this issue was reported in the lay press: [<http://news.harvard.edu/gazette/story/2007/10/media-cant-separate-stem-cell-science-from-politics/>] and [<http://news.harvard.edu/gazette/story/2007/10/panel-investigates-media-reporting-on-science-and-politics-of-stem-cells/>]
- Some claim it is a new dimension of the outsourcing boom but others see it as a sign of India becoming a nation of guinea pigs. This article by Jennifer Kahn in Wired magazine, about how India became the global hot spot for drug trials, is a fine example of reporting a medical controversy that may hold true for other developing countries: [<http://www.wired.com/wired/archive/14.03/indiadrug.html>]
- What is the lesson learned from coverage of the SARS controversy? In the words of Sun Yu, a 1999 Nieman Fellow, "SARS coverage can and should be used as an example of why threats of disease should be handled in a scientific way and how journalists' coverage should not push the public into overreacting to the threat." [<http://www.nieman.harvard.edu/reports/article/100974/Lessons-From-SARS-Coverage.aspx>]
- Lisa Stiffler, environmental reporter for the Seattle Post who "enjoys hot issues in science" has a word or two for budding muckrakers: [<http://www.washington.edu/alumni/partnerships/biology/200610/reporting.html>]
- Mike Shanahan who critically reviewed media reports on climate change controversies in different countries concludes that problems persist in the way it is reported. While the media is not entirely to blame it can do much to improve its telling of climate change stories: [<http://www.iied.org/pubs/pdfs/17029IIED.pdf>]
- Setting up a seed bank as an insurance against global famine would have normally been treated as a routine science story. But when Bill Gates decides through the Gates Foundation to invest some \$30 million of their hard earned money in a "Doomsday Seed Vault" in the Arctic, 1,100 kilometers from the North Pole, investigative reporter William Engdahl of Global Research gets curious. The result is a story of great controversy (category 2 in section 6.5): [<http://www.globalresearch.ca/index.php?context=va&aid=7529>]

6.13 Self-teaching questions (1-4)

QUESTION 1:

A hospital press release says its heart surgeons successfully grew new muscles in a damaged heart by injecting a genetically engineered enzyme. What would be your first question to the hospital spokesman if you were looking for a controversy?

QUESTION 2:

You notice rag pickers collecting used syringes, cotton bandages and other items from trash cans outside a tuberculosis hospital for resale. What would be your next move if you want to be an investigative reporter?

QUESTION 3:

Read this report:

[http://www.redorbit.com/news/health/949334/stemlifeline_introduces_first_service_allowing_ivf_patients_to_develop_persona/index.html] which says stem cell banking is now available for everyone; and another article on same topic that appeared in Guardian: [<http://www.guardian.co.uk/science/2007/oct/16/stemcells>] What is the main difference in the two reports?

QUESTION 4:

You get a tip off that authorities of a nuclear plant have informed the local administration to be ready for a possible evacuation of people near the plant but they do not want this information to become public to avoid panic. How will you react?

6.14 Answers to self-teaching questions (1-4)

A number of answers are possible, but some very good suggestions are listed below. Your answer may be phrased a differently.

QUESTION 1:

A hospital press release says its heart surgeons successfully grew new muscles in a damaged heart by injecting a genetically engineered enzyme. What would be your first question to the hospital spokesman if you were looking for a controversy?

Answer:

Do you have approval from the regulatory body?

QUESTION 2:

You notice rag pickers collecting used syringes, cotton bandages and other items from trash cans outside a tuberculosis hospital for resale. What would be your next move if you want to be an investigative reporter?

Answer:

Follow the rag pickers to find out the next destination of the trash and visit hospitals to see whether or not they have waste incinerators.

QUESTION 3:

Read this report:

[http://www.redorbit.com/news/health/949334/stemlifeline_introduces_first_service_allowing_ivf_patients_to_develop_persona/index.html] which says stem cell banking is now available for everyone; and another article on same topic that appeared in Guardian: [<http://www.guardian.co.uk/science/2007/oct/16/stemcells>] What is the main difference in the two reports?

Answer:

The first report is based 100 per cent on the company's press release while the Guardian report is not.

QUESTION 4:

You get a tip off that authorities of a nuclear plant have informed the local administration to be ready for a possible evacuation of people near the plant but they do not want this information to become public to avoid panic. How will you react?

Answer:

Confirm the "tip off" and release the story.

6.15 Assignments

ASSIGNMENT 1

Select a specific (1) science (2) environmental and (3) health controversy in your country. Give the background for each controversy, outline the arguments of each side, and critique the media's coverage of the issues. List key resources you would have used if you were reporting on the story, and catalogue selected readings for each issue.

ASSIGNMENT 2

You hear a radio report that two out of some 2000 school children in your locality died after a being vaccinated with an imported cholera vaccine used in your country for the first time. Do you smell a controversy here? List the key steps you would take to investigate and report.

ASSIGNMENT 3

Telemedicine is assiduously promoted as a means to bring high-class health care to rural areas. Those who can provide this technology are satellite operators, medical instrument maker, software producers and corporate hospitals. Do you see any potential for an investigative story here? (Are the targeted people really benefitting?) If so how will you proceed? List your selected readings, the people you would interview, documents you would consult and places you would visit for visit.

ASSIGNMENT 4

Monitor the following websites and blogs for tips on potential controversies

[<http://www.guardian.co.uk/science-blogs>]

[<http://www.nanopolitan.blogspot.com>]

[<http://www.sciencecommunication.org/>]

[<http://world-science-blog.blogspot.com/>]

[<http://www.huffingtonpost.com/dinesh-dsouza>]

[<http://ksitracker.mit.edu>]

[<http://www.nytimes.com/pages/science/>]

[<http://www.fair.org/index.php?page=1978>]

[<http://www.noplacethide.net/>]