Embargoes Dictate Media Coverage of Science

In a media culture that revels in the breaking story, the thought of the press uniformly agreeing to quietly sit on a story until an appointed time seems ridiculous. But in the realm of science journalism, it is "the embargo" that remains and maintains the order of the day, with reporters getting press releases, tables of contents, even entire articles from scientific journals up to a week in advance of the journal's publication and using that time to prepare their stories.

An embargo is a deal among journalists, institutions, scientists, and journal editors, in which the journalists agree not to publish or broadcast a story until a given time in exchange for the advance notice. But this "gentlemen's agreement" is increasingly pressured in a world of cable television, the Internet, and the resulting 24-hour news programming.

Time Without Temptation

Most journals send reporters information one week ahead of the publication date, and embargo it until some time the day before publication. There is an attempt to strike a balance between giving reporters enough time to develop the story accurately, but not so much time that the temptation to break the embargo becomes too great.

The rationale most often given for the existence of an embargo is to mitigate some of the problems science has when confronted with daily journalism. The embargo creates a level playing field, with everyone having equal access to the information in advance, with a virtual guarantee that no journalist will try to scoop another. The hope is that without the pressure to be first with the story, and time to do further research, the journalists will produce better, more accurate stories.

If the media only found out about research stories at publication, "then journalists would climb all over each other to try and produce stories from that moment," said Richard Smith, editor of the British Medical Journal. "They would also have to produce stories at breakneck speed, meaning that the quality of those stories would inevitably be impaired."

While the drive for more accurate reporting is ostensibly a noble one, the embargo also lets journals claim some control of the information being reported. The important journals get free publicity reconfirming them as newsworthy. The primary weapon wielded by the journals to protect their embargo and place of prestige is the threat to not publish any scientific paper prematurely reported by the media — the so-called "Inglefinger Rule."

The Inglefinger Rule is practiced in one form or another by most medical journals. It is named for the former editor of the New England Journal of Medicine, Franz Inglefinger, M.D., who instituted it in response to a paper submitted to the NEJM whose results appeared elsewhere first. Inglefinger claimed that prior coverage degraded the value of publishing the paper in his journal and circumvented the all-important peer-review process.

Another justification given for the Inglefinger rule is that doctors should not find out about new scientific findings from the popular press before they have had a chance to see the published article. This is especially true in the case of medical findings, where a doctor must be prepared to deal with the aftermath when patients hear of some finding in the popular press.

Strains on the System

"With the 24-hour news cycle, more television news broadcasts are earlier," said Michael Darden, publicist for the journal Cancer. As a result, Cancer is experimenting with moving the embargo time from 6 p.m. the day before the journal comes out to 4 p.m., to catch the earlier news broadcasts. The British Medical Journal has come under pressure from the British evening news to move its embargo time to accommodate the earlier television news schedule, but has so far refused.

International concerns factor in as well. Science moved its embargo time earlier to allow reporters in Japan to get the story on Friday mornings instead of Saturday. The arrival of the Web has also forced publishers to consider when an on-line version of an article should be available, before or after the embargo time. Many on-line versions of journals go up at the same time as the print edition is shipped, or just after the embargo is lifted.

Business reporters present a new challenge to embargoers. Financial interest in medical news has gone up with the value of biotech stocks. Business reporters, working from a reporting culture that has no embargoes, have become more interested in reporting the latest medical findings.
Still, embargoes are rarely broken. Scot Roskelley, senior public information officer of the Journal of the American Medical Association, said that it is often inadvertent when it does happen, "a new intern overlooked the embargo time, somebody was filling in for a regular and didn't know about the embargo, etc."

Public information offices of the researchers involved also appreciate the lead time the embargo gives them. The universities or research institutions want publicity for their work, and may announce upcoming articles or hold press conferences on their own. Many journals try to coordinate their efforts with the institute's public information office in order to have everything on the same embargo deadline. Often the institution will have different local contacts, the journal stronger national and international ones. Dividing up the labor makes for maximum coverage.

Other journals include provisions for public affairs offices in their embargo deadlines. The Journal of the National Cancer Institute stipulates that institutions not release any findings from an upcoming article until 8 a.m. the same day as the Journal's 4 p.m. embargo time.

Joe Palca, science reporter for National Public Radio and president-elect of the National Association of Science Writers, calls that policy misguided. He says that by not allowing the authors or institutions to provide any information to the media until just before the embargo is lifted anyway, the Journal defeats one purpose of the embargo, that of giving reporters time enough to do the story accurately.

Embargoes "are mechanisms for delaying the reporting of information," Palca said, "not mechanisms for not giving out the information."

"It's a double-edged sword," said Johnathan Bor, science writer for the Baltimore Sun. Bor said an embargo can help by giving the reporter a chance to preview and read a study, to work on it "in a relatively sane manner." With the complicated nature of much cutting-edge research, several days of lead time is helpful.

"But if the story is a really good one, you're hamstrung," Bor said. If the story is hot enough, interesting enough, or it's of some urgency, a reporter's instincts are not to wait. Despite that, Bor thinks very few outright violations of an embargo happen, although he can understand the occasional accidental embargo break. Bor also said that some situations

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### Embargo Policies

**British Medical Journal:**
- Published weekly on Saturday.
- Reporters get 2 press summary Tuesday of the week of publication.
- Embargoed until 12:01 a.m. Friday London time (7:01 p.m. Thursday Eastern time).

**Cancer:**
- Published the 1st and 15th of every month.
- Reporters get a press release 1 week in advance.
- Embargoed until 6 p.m. the day before publication.

**Journal of the American Medical Association:**
- Published weekly on Wednesday.
- Reporters get copies of JAMA articles 1 week in advance.
- Embargoed until 3 p.m. Central time the day before publication.

**Journal of the National Cancer Institute:**
- Published twice monthly on Wednesday.
- Reporters who subscribe get a memo summarizing articles 1 week in advance.
- Embargoed until 4 p.m. Eastern time the day before publication.

**Nature:**
- Published weekly on Thursday.
- Reporters get a table of contents 1 week in advance. Full text is available on request the next day.
- Embargoed until 2 p.m. Eastern time (7 p.m. London time) the day before publication.

**New England Journal of Medicine:**
- Published weekly on Thursday.
- Reporters who subscribe get a table of contents 1 week in advance.
- Embargoed until 6 p.m. the day before publication.

**Science:**
- Published weekly on Friday.
- Reporters receive notification of articles one week in advance.
- Embargoed until 4 p.m. Eastern time the day before publication.
fall into a gray area that isn’t really an embargo break, but merely looks like one.

“It gets sticky if a reporter has been following a study for some period of time,” Bor said. If the reporter has followed the preliminary work and is keeping tabs on the research, it is possible to write the story ahead of the embargo date without ever seeing an embargoed copy of the research paper. Because the reporter gathered the material for the story on his own, he isn’t breaking the embargo, even if the effect is virtually identical.

“You need to look at these things on a case-by-case basis,” Bor said. “It may look like an embargo break, but it’s just good journalism.”

According to Palca, embargoes can be annoying or frustrating at times to journalists, but he doesn’t see them disappearing soon. The trade offs are ones all sides have grown accustomed to. “We’ll still have the embargo until it’s proven not to be feasible,” Palca said.

— Laurent Castellucci

Post Office Will Issue Stamp to Benefit Breast Cancer Research

The U.S. Postal Service will issue in August the first U.S. postage stamp to have its net proceeds from sales earmarked for research organizations. The stamp, called a semipostal because of its use for more than postage, will cost 40 cents.

Seventy percent of the net proceeds from the stamp’s sale will support breast cancer research funded by the National Institutes of Health and 30% will support breast cancer research supported by the Department of Defense, agencies that were identified in the law that required the Postal Service to issue the stamp. The legislation directed that the stamp be valid for first-class postage, now 32 cents, and allowed the Postal Service to charge up to 25% above the first-class rate to recover reasonable costs associated with the stamp and to support research.

After the stamp is issued next month, the Postal Service will join with breast cancer organizations and other groups to hold “awareness” events around the country for the stamp. The stamp’s colorful design contains the phrases: “Fund the Fight” and “Find a Cure.”

The stamp was designed by Ethel Kessler of Bethesda, Md., and illustrated by Whitney Sherman of Baltimore. Kessler is a breast cancer survivor and is working on other U.S. stamp designs. The stamp can be viewed at the Postal Service’s web site (http://www.usps.gov/fr_stamps.html).

Inhibitors of Angiogenesis Enter Phase III Testing

Most cancer centers will not forget May 3, 1998, and the week that followed. That Sunday marked the publication of a New York Times piece suggesting that two molecules, angiostatin and endostatin, would cure cancer in 2 years. During the crush of calls and intense media coverage that followed, the public learned that human trials were at least a year away, awaiting production of large quantities of the compounds and testing in animals for toxicity.

What was largely overlooked in the brouhaha was the fact that about 20 similar drugs, angiogenesis inhibitors, have already begun testing in humans. Three — Ag3304, Bay 12-9566, and marimastat — are in phase III trials, with results from the marimastat trial expected as early as next year.

“At this point, however, it’s impossible to say whether any of the angiogenesis inhibitors will work,” said James M. Pluda, M.D., senior clinical investigator of the Investigational Drug Branch of the National Cancer Institute. “We simply don’t have the data. The trials have not been completed.”

Angiostatin and endostatin were discovered in the laboratory of Judah Folkman, M.D., at Harvard Medical School and Children’s Hospital in Boston. Over the last 30 years, Folkman has amassed data showing that tumor growth and metastasis are dependent on the development of new blood vessels, a process known as angiogenesis. Preventing blood vessel growth, he reasoned, would prevent tumors from growing beyond the size of a pinhead, at which point most tumors are likely to be benign.