SCIENCE AND BUSINESS

"Fat Hormone" Poses Hefty Problem for Journal Embargo

At 9:19 a.m. on 26 July, Teena Lerner, a biotechnology analyst with visions of fat profits spurred by skinny mice, sent some hot financial news to several thousand clients. Lerner, who works for the New York City brokerage firm of Lehman Brothers, announced that in 2 days, *Science* magazine would publish a clutch of papers on a newly discovered hormone that slims down hefty rodents (*Science*, 28 July, pp. 540, 543, and 546). The findings might lead to a treatment for human obesity, and that could translate into hefty earnings for Amgen Inc. of Thousand Oaks, California, the biotech company that owned rights to the hormone.

Lerner's alert—sent over an electronic wire service—triggered a surge in Amgen's stock. It also triggered problems for Amgen, *Science*, and several dozen science journalists. *Science* had embargoed the news until the evening of 27 July, a policy designed to give reporters advance access to technical information and time to prepare accurate stories for the public. But once Lerner's announcement filtered out, *Science*—pressured by news reporters—decided to lift the embargo a day early. "We decided the genie was out of the bottle," says Nan Broadbent, director of communications for the American Association for the Advancement of Science (AAAS), which publishes *Science*.

That genie may be escaping more and more often, as the stakes taken by pharmaceutical and biotech companies in new discoveries trigger more collisions between the business world and the culture of scientific publishing. Undeterred by press embargoes, investment analysts say they will jump at the chance to pass along advance information that will benefit investors. And if that happens, companies like Amgen and their investors could be at risk for "differential disclosure," an illegal practice. Although the embargo system is widely used by journals, such as *Nature* and the *New England Journal of Medicine*, a Wall Street reporter (whose publication would not allow him to speak for attribution) says it "just isn't realistic. ... Journals have an obligation to try to understand how important their information can be to the stock market and to come up with a much better solution."

Ironically, the embargo policy itself likely gave Lerner her initial tip-off. The AAAS press office sends out packets of embargoed material to reporters 4 business days before the publication date of the magazine. Lerner says she gathered her information indirectly from a number of sources, including two unnamed journalists who had advance copies and called her to ask for comment. "All I have to know is that reporters are doing research on a certain topic, what the journal is, and what the publication dates are, and I can put these things together into an alert for our clients," Lerner says.

By noon on 26 July, less than 3 hours after Lerner's alert went out, Amgen stock had jumped 4% in value (see graph). Reporters at the *Wall Street Journal* and other news organizations noticed the stock fluctuation, tracked down Lerner's report, and appealed to *Science* to call off the embargo, arguing that it had become moot. At 3:00 p.m., *Science* officials gave in. "We were not helping our journalistic friends by holding them to an agreement that had already been broken through others' actions," says *Science* Editor-in-Chief Floyd Bloom.

Taking stock in science. Amgen's stock price rose sharply on 26 July, after a stock analyst leaked news of a big discovery.

Reporters weren't the only ones hoping the embargo would fall. Amgen was becoming concerned that the stock movements might attract the attention of regulatory authorities. David Kay, Amgen's associate director of corporate communications, says that "the companies whose research is mentioned have an obligation to avoid differential disclosure of information that could be material to investors." Essentially, differential disclosure means giving some investors information not available to others. And while the Securities and Exchange Commission had no official comment on the Amgen episode, one SEC administrator confirms that leaks of embargoed data can put companies in a difficult bind. They can either remain silent—which was impossible in Amgen's case, as the company had already given advance interviews under the embargo policy to many journalists—or attempt to reach all potential investors simultaneously by putting out a statement, which would break the embargo.

Despite the commotion, Lerner believes she was within her rights and not bound by any embargo. Her job, she and other analysts say, is to help her clients make money. "An analyst is part investigative reporter, trying to unearth information not generally known," says David Molowa, a biotechnology analyst at the investment firm Bear Stearns in New York City. "If you become aware of a major scientific result prior to publication, that can be very valuable information for your clients." And Lerner maintains that the embargo is primarily self-serving. "In order for journals like *Science* to cultivate their own prestige, they want a media blitz on the day they publish papers, so they have to release the embargoed information to thousands of individuals. Maybe they can enforce the embargo on the recipients of their information, but they can't enforce it on the rest of the world," she says.

Broadbent dismisses suggestions that *Science*'s embargoed releases are purely self-promotional. "If we were to distribute the night before publication, we'd run a very big risk of having inaccurate stories run about things that are very important," she says. The news stories appearing last week on the anti-obesity hormone, Broadbent says, didn't suffer because most reporters had received their press packets well before the embargo was lifted, and so had ample time to report and write their stories. But had the embargo been broken earlier, says Broadbent, "the information would have gotten out piecemeal" and probably without needed context.

Still, Bloom acknowledges that the growing links between scientific publication and stock prices may force some changes in how journals operate. "If there is going to be this rush to judgment that a hot new discovery is going to have a financial reward, we are going to have to discuss the most equitable way to distribute the information in advance," he says. Although Bloom says the journal's embargo policy remains unchanged, a possible future modification could be to ask journalists to share prepublication data only with those who agree to honor the embargo. Bloom says that scientific journals, research corporations, and journalists will have to examine together "how the mores of these two systems might intermingle"—and how to keep hot results from becoming too hot to handle.

–Wade Roush