Science Television: Colleagues on Cable

It may seem far-fetched now, but in a couple of years you could be attending conferences without leaving the laboratory

IMAGINE TURNING ON YOUR TELEVISION to "This Week in High Energy Physics." Before you sits a panel of top researchers discussing developments in the field. Or setting your home VCR to catch a Julia Child-style demonstration of how to cook up the latest recipe for DNA-detection. This would be science television—not "Nova" or "Nature" for the lay public but hard-core stuff for scientists—and, of course, punctuated by ads for equipment and research jobs.

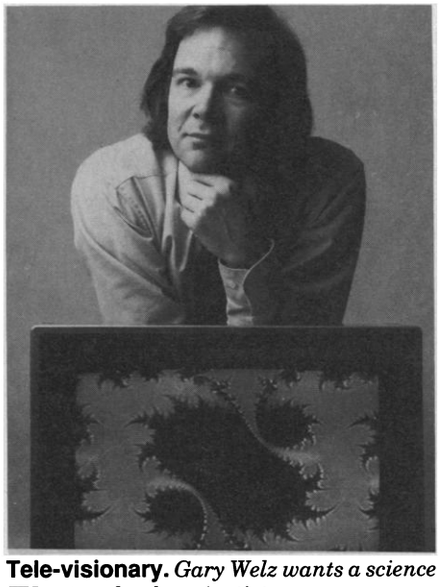
The idea may not be all that far-fetched. Similar cable and satellite programming is already pitched at physicians and engineers. And in the next decade, the number of TV channels available to private subscribers via cable or direct satellite broadcast is likely to mushroom into the hundreds. Indeed, just last week in New York, Time-Warner announced that it would soon be installing new fiber-optics cables to deliver 150 channels to some subscribers. And NBC is working on plans for Sky Cable, a satellite service that would beam up to 108 channels directly to households. So the infrastructure is on the horizon. And with all those channels, some think it is inevitable that someone will start one for scientists.

"The sheer flow of information coming out of the scientific community is gigantic," says John Palfreman, a science producer at WGBH public television in Boston. "[Television] could play a good kind of role in keeping people informed, and pointing out what is important."

But not all are as enthusiastic as Palfreman. Some observers feel that broadcasts of conferences might even hinder scientific communication, as some researchers become wary of talking about their latest results in front of a camera. Others ask whether specialized scientific broadcasts could ever attract enough viewers to pay their way. Gary Welz has an answer—actually a lot of them.

Perhaps the strongest believer in science TV at the moment, Welz, the New York producer of science and math videos, has put together a proposal for a science television network supported by advertising or subscriber fees, and he's looking for backers. Welz claims television offers scientists a dimension of communication and publication that print can't. "Interviews, panel discussion formats, these work well in video, but aren't as successful in print," he says.

Whether Welz succeeds or not, there are signs that some form of television for scientists may be on the way. The National Technological University in Fort Collins, Colorado, produces four channels of round-the-clock television for engineers, including graduate level courses and teleconferences. The American Chemical Society (ACS) also has recently gotten into the business of teleconferences, which it beams by satellite to 30 to 60 university or industry sites, each of which pays $1000 to $2000 per conference. And the Institute of Electrical and Electronics Engineers has been running such teleconferences for a decade.



Tele-visionary. *Gary Welz wants a science TV network—for scientists.*

ACS conference organizer Cyrelle Gerson questions whether audiences for such events will ever be large enough to attract advertisers, but there is at least one example of professional programming supported by advertising. That example is Lifetime Medical Television, which runs every Sunday on the Lifetime cable channel. Its programs for physicians, supported mostly by pharmaceutical ads, include instruction in procedures and news updates and features on different medical fields. On the air since 1983, the programs reach more than 100,000 physicians per month, says Lifetime Healthcare Communications president David Moore.

Surveys have shown physicians like the shows because they don't talk down to them, and they offer information they can use, says Jonathan Ward, owner of the Washington, D.C.–based Universe Group, which has produced programs for Lifetime. "They want graphics on the screen long enough to read the chart," says Ward. "They want references to papers they can look up."

But Ward worries that academic scientists might be a more elusive audience than clinicians: "They are already buried under information. To get them to sit and watch television is a very difficult thing." Robert Simoni, chairman of biological sciences at Stanford, isn't worried about that: "I think it's a terrific idea," he told *Science*, adding, "I absolutely would use it. And I could see the whole lab getting together and watching a televised seminar." Berkeley geneticist Gerald Rubin agrees: "For graduate students who don't get the opportunity to travel, to be able to sit down and watch the Cold Spring Harbor Symposia would be very useful." Rubin believes such a network would have little trouble getting top scientists to give seminars for broadcast. "Most of us get invited to give seminars [in out of the way places] and, because of time constraints, we are unable to go to, but we feel bad because there are grad students and people there that are being cut off."

But Rubin also warns that televising a seminar or a conference session could make scientists cautious about presenting their hottest preliminary results, since unseen competitors could be videotaping them. Albert Teich, director of science and policy programs at the AAAS, adds a similar concern: "When you [give a talk] at a meeting, it's a relatively closed, small circle of people," he says, "but when you broadcast it on the air, it goes out to the world.... Anybody who is not a scientist can pick it up, and that might open it to all kinds of misinterpretations."

To find out whether he can overcome such hurdles, Welz—who envisions daily science news, "Nightline"-style shows, and video seminars—is going to have to find somebody willing to put up some bucks. Welz is looking for investors for a pilot, to be broadcast on an existing cable network, but as yet he hasn't found anyone to take the plunge. Palfreman says he might convince WGBH to help get things started in an even more limited way, perhaps on a closed system between several large universities, to see what kind of programming has the biggest appeal. "The idea is to get the network up and running, so it can find its destiny," he says. "It would be rather strange if scientists couldn't make use of it."

■ MARCIA BARINAGA