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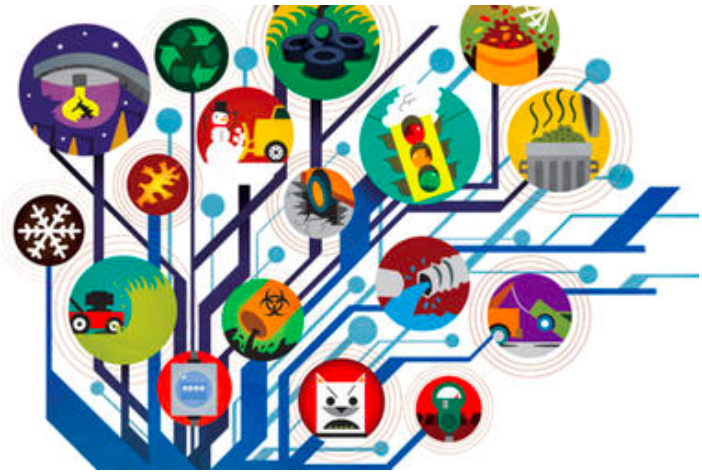
As Climate Change debate wages on, scientists turn to Hollywood for help

Politicians and the public question global climate change evidence, so scientists look to Hollywood and websites for a new voice. Lights, camera, science!



The importance of getting the word out on global climate change and other important findings has science organizations scrambling to explore new channels, such as Hollywood.
(Newscom)

By Gregory M. Lamb Staff writer
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Keeping the public looped in on what scientists are discovering has never been easy. For one thing, the traditional explainers – journalists – can distort, hype, or oversimplify the latest breakthroughs. But the need to communicate science broadly and clearly has never been more urgent.

Understanding science helps people know “where the truth speakers are on an issue” such as climate change, says Robert Semper, the executive associate director of the Exploratorium, a hands-on science center in San Francisco.

“The more educated and knowledgeable the public is about science ... the more responsible they can be when it comes time for voting or expressing opinions about public policy,” adds Leslie Fink, a public affairs specialist at the National Science Foundation in Washington.

The importance of getting the word out has science organizations scrambling to explore new channels, from souped up websites to asking Hollywood for help.

The current climate-change furor has become the poster child for what happens when there’s a communications gap between scientists and the public. The vast majority of scientists see compelling evidence that the world’s climate is about to change significantly, and that the change is largely driven by human activity. Yet polls show public opinion becoming more skeptical about climate change.

Contributing to that swing have been efforts by skeptics to point out flaws in specific portions of the landmark 2007 report from the Intergovernmental Panel on Climate Change and question whether other findings might have been manipulated. An usually snowy winter in parts of the United States has also brought scorn from critics, who ask, “Where is the global warming?” (Data tell another story: Worldwide, last January was one of the warmest on record, and the decade 2000-2009 was the hottest on record, according to the World Meteorological Organization.)

The result has been a “corrosion” of public confidence in climate science, says Ralph Cicerone, president of the National Academy of Sciences (NAS). That “damage,” he says, “has spilled over into other fields of science.”

At the same time, traditional news media outlets have been cutting back on science writers. In 2008, CNN dismantled its entire science reporting staff. While few newsroom cuts have targeted science coverage so directly, countless examples of thinning ranks – including ABC News announcing in February that it will shed about 25 percent of its news division – have displaced many specialist reporters.

“Professional journalism has been cut to the bone. And the first people to go are science journalists,” says Bora Zivkovic, who writes the science blog “A Blog Around the Clock” from Chapel Hill, N.C., and serves as online community manager for PLoS One, a peer-reviewed science journal. With fewer authorities in the media, “scientists have to take that over,” he says. Mr. Zivkovic spoke as part of a panel on how to better communicate science at the annual convention of the American Association for the Advancement of Science in San Diego last month.

One effort, announced at the meeting, will recruit Hollywood to help scientists tell their stories. NAS and the University of Southern California will team up to draw on USC’s expertise in film, TV, websites, and video games. The partnership will be the first between a federal agency and a film school.

“Entertainment media has been pretty much untapped as far as science literacy goes,” Dr. Fink says. A huge portion of the public doesn’t go to science museums or watch science programming on TV, she says. “Those are the eyeballs we’re trying to capture.”

Feature films such as “Apollo 13” and “Contact” show that movies can be both box-office successes and inspire careers in science, says Elizabeth Daley, dean of USC’s School of Cinematic Arts, whose graduates are used to winning Oscars, not Nobel Prizes. She hopes the program will provide screenwriters, producers, and directors with knowledgeable science sources to advise them.

The short cartoon within the 1993 film “Jurassic Park” that showed how one might clone dinosaurs provides a terrific example of what could be produced, Dr. Daley says. “It’s a very clear, simple

explanation of DNA that people can understand.”

As news outlets scale back science coverage, the Exploratorium’s Dr. Semper says that “nonprofits are actually becoming the intermediary between science and the public more than in the past.”

Semper’s center has reached out directly to scientists to help them tell their stories online. For example, the Exploratorium’s online feature “Ice Stories” was the result of giving polar scientists cameras and blogs to report back on what they learned in the field. Young scientists in particular are “very excited about talking about their work to the public,” he says.

Some might look for today’s Carl Sagan, the scientist who popularized astronomy through books and TV shows decades ago. Dr. Sagan had a way of engaging people by explaining the wonder of space – a very positive message, Semper says.

Today’s climate story is often framed as a sober warning, not as an exciting adventure. Some of that is by necessity. “It’s important for the public to know that scientists are coming across this evidence [of climate change] – it’s real evidence – that there may be some disagreements among the details but that doesn’t negate the entire picture,” Semper says. But the effort to better understanding earth’s climate is also exciting, a message that has been lost, he says. “The scientific questions are absolutely fascinating.”

Universities have stepped up their communication efforts as well. At the Massachusetts Institute of Technology in Cambridge, Mass., the paper-and-ink campus newspaper is long gone. But in September, the MIT News Office unveiled a new website aimed not just at the college community but at readers around the world, says Nathaniel Nickerson, editorial director of the news office. Five full-time science

writers don't try to "hype" the work of MIT scientists, he says. Instead, as journalists would do, they seek sources outside MIT to critique the research. The new website is attracting 350,000 to 400,000 unique visitors per month, Mr. Nickerson says, more than expected and accomplished "without any marketing whatsoever."

Even the US government has joined in with a new site called climate.gov, aimed at being a reliable source of data and facts on climate change.

"It's clear that there's been an insufficient job of communicating climate information to the public," says Jane Lubchenco, the administrator of the National Oceanic and Atmospheric Administration, which runs the website. "I think much more needs to be done to communicate to policymakers and citizens everywhere how important this issue is, what's at stake, and what the opportunities are for addressing climate change."

Scientists must learn that in the online era, sharing with the public is now a two-way conversation, not a one-way broadcast, blogger Zivkovic says. "Talking 'one to many' is now seen as talking down," he says. Scientists today also need to know how to produce compelling videos and still images that explain their work. "We don't need one Sagan," Zivkovic says. "We need several hundred of them, each in a different place."