

particularly those from Darwin's study, donated by his family. In 1993, the management of the house was taken over by London's Natural History Museum, but a survey quickly revealed a serious state of disrepair. In 1995, the museum mounted a campaign to raise \$5 million and won a grant of \$1 million from the Wellcome Trust, the biomedical research charity, as well as funds from the National Lottery. This secured the building and 15 hectares of land under the protection of English Heritage.

English Heritage has restored all the main ground floor rooms to reflect how they looked during Darwin's life. His study contains his library, microscope, and many other personal artifacts. Also on display is his well-worn chair, whose wooden legs Darwin sawed off and replaced with iron bed legs on wheels so he could move while seated. Alongside is the board Darwin used to place over the armrests of his chair to hold the manuscript of *The Origin of Species* as he wrote. Curtained off in the corner is Darwin's "sick bay," where he retreated during

his many bouts of illness.

Around the house are reminders of the endless experiments Darwin carried out with enthusiastic help from his children. In the drawing room, two plant pots sit on top of the piano. Darwin wanted to know which notes caused earthworms to rise to the surface, and captives in the pots were subjected to a family assault by piano and bassoon in an effort to find out. Says Bryant, "We hope to inspire people about science and show them how with Darwin it fitted in with family life."

The garden underlines this point. The remains of one experiment, called the "worm-stone," can still be seen. Seeking constantly to find evidence of gradual change to bolster his evolutionary ideas, Darwin and his son Horace sank two metal rods 2.5 meters through the clay and into the underlying chalk. They placed a flat stone with a hole in it over the ends of the rods in an effort to measure sinking over time due to the activity of worms below. "Darwin knew that he would

be dead before any result could be obtained, and it was 10 years after his death before Horace found that the stones, measured against the rods anchored well below worm activity, had begun to sink," says Randell Keynes, one of Darwin's descendants.

Visitors can also walk Darwin's "thinking path," called the sand walk, through woods at the edge of the garden. "Darwin took this walk every day, and during it he would think over the mounting implications of his work," says Nick Bidden, the garden curator appointed by English Heritage to restore the grounds to their state in Darwin's time.

Although Down House was remote, Darwin benefited from Britain's new national postal service. This allowed him to keep in touch efficiently by mail with a vast range of fellow scientists and correspondents. "It was the World Wide Web of its day. Without it Darwin could never have carried out what he did at Down House," says Bryant.

—Nigel Williams

PUBLIC UNDERSTANDING

Report Deplores Science-Media Gap

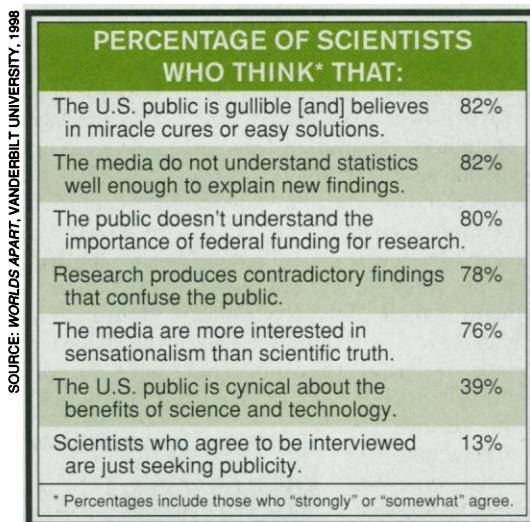
A communications gap between scientists and journalists is preventing the public from learning about scientific discoveries and their impact on society, according to a recent survey of 1400 professionals in both fields. The results of the survey are part of a new report* that recommends narrowing the gap by training scientists to be more media-savvy and by giving reporters better access to databases and to scientific spokespersons.

"This report examines an attitude of ignorance by journalists, and arrogance by scientists, that stand in the way of public understanding of science and the need to bring those worlds closer together," says John Seigenthaler, a former newspaper executive and founder of the First Amendment Center at Vanderbilt University in Nashville, Tennessee, which funded the study. The survey is the sixth in an annual series on the relationship between journalism and other sectors such as the military, religion, and the economy. "Of all the studies, the distance is greatest here," says Seigenthaler. "There is a clear alienation between the two worlds."

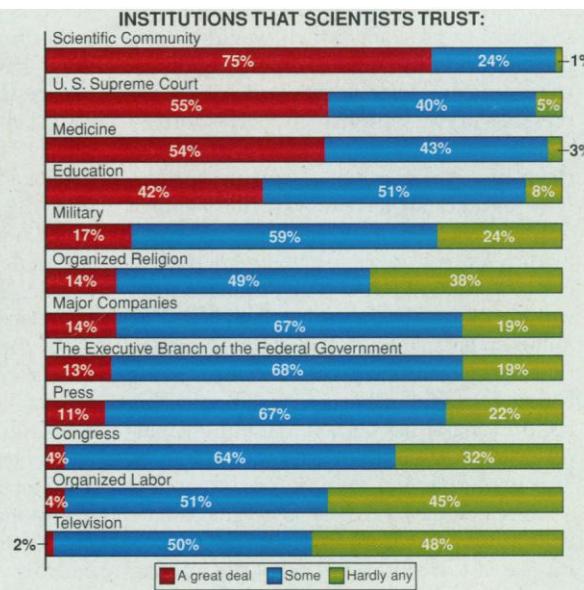
The survey was carried out by television

journalist Jim Hartz, a former co-host of *The Today Show*, and former NASA space scientist and astronaut Rick Chappell, now at Vanderbilt. "Our motivation [in writing the report] is not to lobby for science, but to help

what news stories might report. Among journalists, 39% rarely or never seek independent verification for a science story they are writing, and only 15% find scientists to be very accessible as sources. To bridge the gap, Chappell proposes that scientists write a clear, nontechnical summary of each paper



Big challenge. Scientists don't trust the media to convey their message to a confused public, new survey finds.



find ways to tell the story about what is happening in U.S. science," says Chappell, who directs a new undergraduate program in science writing that features an equal mix of courses in science and communications.

The survey provides strong evidence of the current strained relationship between the two professions. Some 72% of scientists want the public to know about their work, but 41% are afraid of being embarrassed by

that includes a ranking of its importance, and that journalists ask scientists to review their stories before they are published.

The study reported a 34% response rate among scientists, and the typical respondent was a white, male physical scientist over the age of 50 doing basic research. The typical journalist was a white male editor, 35 to 49, working for a newspaper.

—Jeffrey Mervis

* *Worlds Apart: How the Distance Between Science and Journalism Threatens America's Future*, 1998.