yet succeeded in bringing private industry into the picture. Novartis, the Basel-based pharmaceutical company, moved its R&D center to Cambridge last year and expressed interest in joining this partnership. Negotiators failed to reach an agreement before the memorandum of understanding was signed last week, however. “I think Novartis’s plate has been so full, it was a timing issue,” says Schreiber, “and maybe they were a bit overoptimistic.” Mark Fishman, Novartis’s biomedical research chief, says that “we want to be part of such things, and this is just one of the possible ways.”

Lander and Schreiber say the new institute will emphasize the need to make data freely available, and they predict that companies will understand the need to collaborate openly. Institute staff members, many of whom worked on the genome project, “are all inclined to put things in the public domain,” says Lander, adding that the universities would share patents.

Although the institute won’t exist as a legal entity until November, a couple dozen researchers from Schreiber’s lab already have moved into space adjacent to Lander’s team. Eventually they all will move into a new building nearby. In the meantime, Lander has a chance to savor a new research agenda. “I’m thrilled” by the challenge, he says, noting that this one is much broader than the goal-driven human genome project. Schreiber likewise is happy that the long period of uncertainty is over. “But I woke up this morning with a feeling of anxiety,” he adds, “I thought, be careful what you wish for.”

—ANDREW LAWLER

ASTRONOMY

NASA Panel to Ponder Hubble’s Demise

Pulling the plug on one of the world’s most popular and productive scientific instruments is an unpleasant—but inevitable—task. So NASA has asked a high-powered group of astronomers and astrophysicists to share the burden of determining how and when to shut down the Hubble Space Telescope.

A critical issue facing the panel is how often to use the shuttle to replace instruments and equipment on the space telescope, which requires human assistance to remain in orbit and generate data. NASA officials have been planning to service the 13-year-old orbiting facility one last time in late 2004, which could extend its life to the close of the decade, but many researchers are pressing for an additional servicing mission that would keep Hubble operating well beyond 2010. Although Hubble’s successor, the James Webb Space Telescope, is slated for a 2011 launch, scientists worry about the possibility of a data gap.

“This is a very hot potato issue,” says Princeton University’s John Bahcall, who has agreed to chair the NASA panel. “This is not a job to take on to win friends.”

Hubble’s fate is complicated by the Columbia disaster, which puts even the next servicing mission into question. “The equation has changed,” says David Black, visiting scientist at Houston’s Lunar and Planetary Institute, who recently chaired a NASA panel that failed to win unanimity on the need for, and content of, a second servicing mission. He fears that any Hubble mission may be seen as too risky, because the shuttle astronauts would be unable to rendezvous with the space station in an emergency.

NASA science managers want to present a united front this fall, after the Columbia investigation panel completes its report. And Bahcall was a savvy choice to win consensus. He chaired a much-praised 1991 National Academy of Sciences panel that set a long-term vision for astronomy. He will be joined by five other distinguished colleagues, including Nobelist Charles Townes of the University of California, Berkeley, and Martin Rees of the University of Cambridge, U.K. The panel will hold a public meeting in Washington, D.C., on 31 July, and it is also soliciting opinions from the community. “We don’t have decision-making powers,” adds Bahcall. “But we can [come to a] conclusion.”

NASA space science chief Ed Weiler—who was once chief scientist for Hubble—strongly supports ending Hubble’s life by 2010 to provide money for other efforts. But others note that Congress might be willing to pony up money for an additional servicing mission to keep Hubble active. To date, Weiler has chosen not to ask lawmakers for new resources. “He has a certain amount of political capital to expend on new missions—but he hasn’t wanted to spend it on Hubble,” says one astronaut.

Some of the strongest advocates for continued Hubble operations are at the Space Telescope Science Institute in Baltimore, Maryland. “Hubble is right now the highest impact scientific mission at NASA,” says Steven Beckwith, the institute director. “It’s a living mission, and we have not tapped its full potential yet.” But both sides agree that the new panel, officially the Hubble Space Telescope–James Webb Space Telescope Transition Plan Review Panel, will be highly influential. “They have both the wisdom and the freedom to ask good questions,” adds Beckwith.

—ANDREW LAWLER