Health and Safety Research Slated for Sizable Gains

Heeding calls for increased basic research on the health and environmental implications of nanotechnology, the Bush Administration has proposed a $3-million-a-year network of academic centers to pursue the topic and disseminate the findings. But that network, part of President George W. Bush’s 2008 budget request sent last week to Congress, doesn’t address what many consider a bigger problem for the field: the lack of research tied more tightly to the development of new U.S. regulations.

In 2006, the federal government funded $38 million in research on nanotechnology environmental health and safety. That is likely to grow to $46 million this year (Congress was expected to take final action on the federal budget this week), and the president’s budget would boost it to $59 million. At the cornerstone of this new push is a network of centers, funded by the National Science Foundation and modeled after existing NSF networks.

Vicki Colvin, a chemist at Rice University in Houston, Texas, who directs Rice’s Center for Biological and Environmental Nanotechnology, says that she believes spending more money on basic research and a network of centers is the right way to go. “It’s great news,” Colvin says. She notes that nanotechnology remains in its early development despite some 380 products containing nanomaterials that are already on the market. At this stage, she says, it’s important to learn more about how nanomaterials interact with biological systems.

The NSF network proposes to do just that, she says, by investigating how the structure of a wide array of different nanomaterials affects their environmental behavior. “Forming a network that permits everyone to exchange supplies and methodology will really fast-forward this field by a couple of years,” she says.

But not everyone agrees that basic research is the best investment the government could be making to understand the environmental health and safety aspects of nanomaterials. Nanotechnology “has stopped being a pure science project,” says David Rejeski, who directs the Project on Emerging Nanotechnologies at the Woodrow Wilson International Center for Scholars in Washington, D.C. “Nanotechnology is being commercialized at a very fast pace right now. You’ve got to position the science ahead of that.”

Rejeski argues that U.S. regulatory agencies, such as the Environmental Protection Agency (EPA) and the National Institute for Occupational Safety and Health, are struggling to keep up with the questions being raised about how best to regulate nanotech products entering the market. And although EPA would receive $9.6 million in 2008, up from $3.7 million in 2006, Rejeski argues that considerably more is needed.

Last September, both Republican and Democratic leaders of the House Science Committee called for expanding the research needed for regulatory agencies to ensure the safety of nanomaterials in the environment. And supporters have reason to believe legislators will heed that plea: In every year since the U.S. National Nanotechnology Initiative began in 2001, Congress has topped the president’s request.

—ROBERT F. SERVICE

Radcliffe Historian Named Harvard President

Harvard University’s search for a new president to succeed the controversial Lawrence Summers ended this week with the appointment of a Radcliffe dean and civil war historian. Drew Faust, 59, will become the first woman to lead the oldest and wealthiest university in the United States. She emerged as the top candidate in the yearlong search after Thomas Cech, biochemist and president of Howard Hughes Medical Institute, withdrew his name from consideration earlier this month.

After her selection was announced on 11 February, Faust spoke out strongly in favor of a new initiative to increase interdisciplinary work in Harvard’s extensive science program (Science, 26 January, p. 449) and added that she wants to break down the barriers between the sciences and the humanities. She takes over 1 July from interim president Derek Bok.

Some search committee members wanted a physical or biological scientist for the post, but friends and colleagues of Faust insist she has a good track record in supporting research in her current job as dean of the Radcliffe Institute for Advanced Study, a school within Harvard. “She is not a scientist, but I am certain she has the ability to ably lead the university’s expansion of its science efforts,” says Barbara Grosz, a computer scientist and Radcliffe science dean who has worked closely with Faust.

“Right from the start, I had many people say to me, ‘You should give up on having science at Radcliffe,’ ” Faust says in an article appearing in the most recent issue of the Radcliffe Quarterly. “It was clear to me from the outset that science needed to be an important commitment for the new institution.” It also runs in the family: Her husband, Charles Rosenberg, is a historian of medicine and science at Harvard.

Female faculty members at Harvard said they were delighted with the appointment of Faust to succeed Summers, whose controversial comments about women’s ability to succeed in the sciences contributed to his resignation last February. “This is an inspired choice,” says Evelyn Hammond, senior vice provost for faculty development and diversity and a historian of science, who has known Faust for years. “She has extraordinary leadership qualities and enormous integrity.”

In a press conference after she was named, Faust praised Summers, an economist and former treasury secretary in the Clinton Administration, for his analytical skills. But then she added, “I think women have the aptitude to do anything, and that includes being president of Harvard.”

—ANDREW LAWLER