## **NEA Dumps on Science Art**

"Filthy pictures" are not the only kind of art that rattles the National Endowment for the Arts (NEA) these days; now, it seems, filthy places are also taboo. NEA Chairman John E. Frohnmayer last month vetoed a \$10,000 grant for a project by a conceptual artist whose proposal involved the use of plants to help restore toxic waste sites. Suddenly, it seems, art about the underside of technology has become as controversial as naughty performance art, blasphemous sculpture, and homoerotic photos.

Frohnmayer scotched the project by New York artist Mel Chin after it had been approved both by an NEA panel and by the advisory National Council on the Arts. In a letter to Chin, the NEA said, "The chairman was not persuaded...that the artistic aims...were sufficient to merit" funding. But according to *The Washington Post*, a minority

of the council members criticized the project as being "political."

Chin got the idea for his "earth art" work by reading about hyperaccumulators, plants that are good at soaking up heavy metals, in *The Whole Earth Catalog*. In Chin's mind, plantings at toxic waste sites and sewage sludge disposal dumps would "sculpt" the environment by cleansing it and helping restore it to the way nature intended. Chin eventually found his way to Department of Agriculture agronomist Rufus L. Chaney, who added variables—measurements of soil pH and the effects of fertilizer—to make the project scientifically useful.

Chaney says the use of plants to

"bioremediate" polluted soils is a promising approach, and one that he proposed to the Environmental Protection Agency (EPA) in 1981 but was unable to get funded because of budget reductions. "It's a low-tech solution to widespread aerosol pollution from zinc, cadmium, nickel, and cobalt," Chaney says. Whereas most plants suffer toxicity with more than 500 parts per million of zinc, hyperaccumulators—unusual herb-like plants that occur naturally at toxic sites—can absorb up to 2500 parts per million of zinc without injury. What's more, the agronomist says, the biomass can be reprocessed to recover the metals, thus offsetting the costs of remediation.

To Chaney, one of the attractions of Chin's unusual art proposal, which was sponsored by the Citizens Environmental Coalition of Houston, was that it would have been a way to get support for an innovative experiment that the government has balked at funding under the name of science. Neither the EPA nor local authorities have



"Green Remediation." Artist's mockup of waste site planted with dwarf corn, a cadmium hyperaccumulator; bladder campion, which soaks up zinc and cadmium; and merlin red fescue, a metal-tolerant species, as a control plant. The work is titled "Revival Field."

been willing to allow bioremediation experiments, says Chaney. "Many of these places don't seek attention to their pollution problems." And the EPA reportedly doesn't want outsiders doing research at its hazardous waste sites.

Chaney, who planned to offer his services (as part of his job) to Chin's project and publish the results, says the project would have been a bargain for the government: the proposal he submitted, which included a field test equivalent to Chin's art piece, would have cost \$70,000. But NEA Chairman Frohnmayer clearly saw it as potentially toxic to his embattled arts program.

mittee agreed that cystic fibrosis screening was too important a precedent to let slip—even though they could get stuck with the tab. Watson and his deputy Elke Jordan will meet with acting NIH director William Raub next week to ask for his help in coordinating efforts at NIH. "I only hope it is not too late," said University of Michigan geneticist Francis Collins.

## No Conflict on Conflict of Interest

Potential conflict of interest among recipients of federal funds is one of the hottest topics in science policy these days. So, when the National Institutes of Health called a public hearing for 30 November to discuss the problem as it relates to clinical trials, they reserved the largest auditorium on cam-

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pus for the whole day. Officials even distributed color-coded badges so that the low-priority guests could be asked to leave if the crowd got too big.

The precautions proved unnecessary: As it turned out, less than half the auditorium was filled, and almost nobody had anything to say. Shortly after the prepared remarks were made, the session chairperson, Michele Applegate of the Alcohol, Drug Abuse, and Mental Health Administration found herself looking over the sparse audience searching desperately for a raised hand. "I'm beginning to think that this issue has been debated so many times that everybody feels they're starting to say the same things over and over," she said. She brought the meeting to a close about two and a half hours after it had opened.

NIH official George Galasso later insisted that the meeting was a success. It meant, he said, that the scientific community is generally supportive of NIH's conflict-of-interest proposals, which, in essence, require investigators to disclose their financial interests and require institutions to be sure that trials aren't compromised by investigators' financial interests. Now that NIH has the community's latest input-such as it wasthe next step is to write formal rules, which must be approved by the secretary of Health and Human Services and then published in The Federal Register for more public comment.

## **Paradigm Wars**

Moderates and conservatives within the Bush Administration have been at odds over a lot of things lately, but one particularly fertile debate has been over a domestic policy initiative to be

unveiled in next month's State of the Union Address. At the urging of White House domestic policy adviser James Pinkerton, President Bush is ready to push the conservatives' concept of "empowering" the poor through such programs as tenant-owned public housing, education vouchers, and lowtax enterprise zones for innercity businesses. Pinkerton, inspired by (says The Washington Post) philosopher of science Thomas Kuhn-who put paradigm shifts on the map with his book The Structure of Scientific Revolutions-even coined a grandiose catchphrase for it: the New Paradigm.

Moderates in the executive branch aren't impressed. White House budget chief Richard Darman, one of many who hate the policy, took a stab at it in a recent speech, proposing a new administration slogan: "Brother, Can You Paradigm?"