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New Alliance Pushes to Save Crop Genes

For years experts have deplored the state of the U.S. germplasm bank, the nation's storehouse of crop diversity. Now this resource has a new champion: An unusual advocacy group, including seed companies and grass roots organizations, has set out to double the bank's \$23 million budget over the next several years.

Most every crop on the planet can be cloned from a sample of its germplasm, maintained as stores of seeds or living plants. To create new cultivars, U.S. plant breeders rely on the agriculture department's National Plant Germplasm System (NPGS)-440,000 samples from around the world, such as Kazakh apples and Bolivian potatoes. But this countrywide network of labs and storage facilities is suffering from neglect. In a report last fall, the General Accounting Office noted that there are scant data on traits of many samples, and that more than one-third aren't properly protected from natural disasters like fires or floods. Observers largely blame staff cuts resulting from dwindling resources: NPGS's budget shrank 14% (after inflation) between 1992 and 1996.

Alarmed at this trend, Steve Smith, a plant geneticist at Pioneer Hi-Bred International, last year united disparate partiesfrom individual organic gardeners to the Union of Concerned Scientists to giant seed companiesunder a banner called the American Genetic Resources Alliance (AMGRA). Last fall the alliance celebrated a modest success: Congress boosted the bank's budget by \$1.5 million. But "that's just Band-Aid work," says Smith. To build support for a doubling, AMGRA and nonprofit Genetic Resources Communications Inc. (GRCS) in Bethesda, Maryland (publisher of Diversity), plan to merge into a dues-funded education and advocacy group. "It will be the first real presence for the agro-biodiversity issue in Washington," says GRCS's Deborah



Going to seed? According to a new coalition, USDA's germplasm system needs an infusion of cash.

Strauss. "We really hope to [put under one] umbrella all the concerns involved."

NSF Researchers to Explore Biomed Jungle

Physical scientists and engineers may soon be trekking into foreign territory and tackling problems in the alien world of biomedicine. The ticket to this cross-cultural science adventure is a new fellowship program, sponsored by the National Science Foundation (NSF) and the National Institutes of Health (NIH), that aims to parachute-drop up to 10 senior scientists into NIH labs each year.

"The idea is to encourage interactions between mathematicians, physicists, and engineers and real-world clinicians ... who are working on problems in biomedicine on a daily basis," says NSF's Denise Caldwell. NSF is putting up \$1 million for stipends, while NIH will supply the labs and research materials. The project, Caldwell says, got started with a push from biophysicist Robert Bonner of NIH's National Institute of Child Health and Human Development, a leader in developing laser microdissection, a critical technique for genetic analysis of cancer cells. Bonner says NIH needs the help of mathematicians, for example, to develop new methods to analyze the complex interactions among genes in gene-expression studies. The long-term goal, he says, is to create not just new technologies, but "whole new fields" for physical scientists and engineers.

NSF-funded researchers have until 8 April to apply for 1998 fellowships, which will pay salaries for 6 months to 1 year while they serve as "scholars in residence" at an NIH intramural lab in Bethesda, Maryland. But to qualify, one must be invited by an NIH lab.

Drug Merger Promises Research Powerhouse

Companies in the throes of merger negotiations can be forgiven a degree of hyperbole, but in the case of the proposed marriage of British drug giants Glaxo Wellcome and SmithKline Beecham, announced last week, exaggeration hardly seems necessary. At an estimated market value last Monday of \$190 billion, the new company would be larger than every other in the world, except General Electric Co. And the two companies' combined R&D budgets, \$3.3 billion, would make it the global leader in corporate R&D spending.

Financial experts say the driving force behind the merger, which must first satisfy U.S. and European regulatory authorities, isn't to cut R&D costs. If anything, says analyst John Murphy of Goldman Sachs in London, the companies probably want to combine R&D efforts "to build a critical amount of spending." Not that the merger is likely to be painless: The press has reported speculation of job losses of between 10,000 and 20,000 from the companies' combined global workforce of 110,000. Most observers believe these cuts will initially come in production, sales, and marketing, not research. However, Roger Lyons, general secretary of MSF, a union that represents the companies' U.K. scientific staff, is concerned that research slots might inevitably be trimmed if the firms seek to consolidate their R&D efforts, now concentrated in four centers in the United States and United Kingdom.

Neither company has revealed much about the future conglomerate's plans, but both have stated in the past that new drug discoveries will come from genetics.

Space Station Deal Lauded, Lamented

It took 4 years to hammer out an agreement for how 16 nations will build and operate the international space station, so most participants at the signing ceremony in

Washington last week expressed relief—particularly because the first launch toward completion in 2002 is less than 5 months away. The exception was French science minister Claude Allègre, who looked decidedly grumpy. "I signed, but I made an addendum that we will not accept any increases in the budget," he said afterward. "If it ends up costing more, we will not pay." European officials say Germany will likely shoulder most of Europe's share of

any increase in the station's \$30 billion price tag or in its operating costs, which will top \$1 billion a year.

But cost isn't Allègre's only gripe. "I am not a big fan



of human flight in space," he told *Science*. The former geochemist isn't convinced the station's life sciences and microgravity experiments will yield worthy science: "If you

ask me will I sponsor a trip to the top of the Himalayas, I will say yes if you bring me back some rocks. If not, I will say no."

Others at the gathering, however, were more upbeat. Jack Gibbons, President Clinton's science adviser and a past skeptic of the station's science mission, opined that the partners are "pursuing something larger than the space station"—cooperation, he says, that will lead to other joint R&D efforts. And Japanese

ambassador Kunihiko Saito seemed thrilled about the prospect of his country establishing a toehold in space: "My favorite movie is 2001: A Space Odyssey," he said.