their next move. "We are collaborating to solve the problem we all face, as there is no authority in Japan to deal with such a matter," says Miyazaki's Tetsuo Munekata. In New Mexico, the fossil is on temporary display while museum officials await promised paperwork from the dealer. If documents showing legal export are not produced, director Richard Smartt says that the museum will either relinquish its prize or seek to obtain permission from the Chinese government to display the fossil. The Senckenburg received assurances from its dealer that the fossils had gone through proper channels, says former assistant director Stefan Peters, who adds that "it would bother me a little if they really were illegally imported." Still, Peters says, "it is better that museums acquire these specimens rather than some private collection."

Hou says he hopes the controversy will highlight the importance of proper stewardship of valuable fossils. "Exhibits must come from legal sources," says Hou, who at a 1996 international conference in Washington collected 75 signatures on a letter condemning the smuggling of bird fossils and asking authorities at the Chinese Academy of Sciences to exercise greater control over fossil excavations. "I think SACR should immediately collaborate with the Ministry of Foreign Affairs to approach the Japanese government for the return of these fossils. At the same time, our government should crack down on fossil dealers."

Those not directly involved in the controversy say they hope the outcome will not restrict the ability of museums to serve the public. "I understand the need to ban the export of very rare fossils or fossils under research," says Keiji Matsuoka, a curator of Toyohashi Museum of Natural History in Aichi. "But if there are already a lot of fossils [of *Confuciusornis*] for researchers, I hope that the Chinese government clarifies the law and agrees to provide some fossils by a legal route."

–MUTSUMI STONE AND JENNIFER COUZIN IN WASHINGTON AND LI HUI IN BEIJING

AGRICULTURAL RESEARCH

Plant Biologists Score Two New Major Facilities

The city of St. Louis, home to agricultural biotech giant Monsanto, will soon host a powerhouse in basic plant research as well. Later this month, a public-private consortium plans to announce the creation of a $146 million center in St. Louis devoted to basic plant science and sustainable agriculture. With a $15 million annual budget and a staff that will include more than 80 scientists, the new not-for-profit center, to open in 2000, would be rivaled in size nationwide only by the Boyce Thompson Plant Research Institute in Ithaca, New York. And it won't be the only new kid on the block. Later this summer Novartis AG is expected to announce a $250 million plant genomics institute to be built outside San Diego. The blockbuster developments, says Charles Arntzen, president of Boyce Thompson, are "an indication of the emerging importance of plant science in the United States."

WASHINGTON UNIVERSITY IN ST. LOUIS

Spirited in St. Louis. William Danforth says center will be unique.

Although the two centers will fund a wealth of new plant science projects, their patrons each have differing expectations. The St. Louis center will operate independently of its backers, an unusual coalition of public and private organizations. "There's nothing exactly like it that I know of," says William Danforth, chair of the center's board as well as the board of Washington University in St. Louis. The Danforth Foundation, a St. Louis philanthropy, is chipping in $60 million to the center's endowment; until now it has funded mostly education projects at a national level. The other major contributors are the Monsanto Fund—the philanthropic arm of Monsanto company—and the company itself, which together will provide $81.4 million in funding and other support. The other founders are Washington University, Missouri Botanical Garden (MBG), and the University of Missouri, Columbia.

Independence for the St. Louis center means that it—not Monsanto or its other sponsors—will receive its own patents and any income from licensing deals that it would award without any special preference to its founders. The payoff for Monsanto, says Sam Fiorello, assistant to the company's president, is the "pool of talented people" that the center will attract to plant science. "Ultimately, it will help us," he says. According to Chris Somerville, chief of the Carnegie Institution of Washington's plant lab at Stanford University, Monsanto "recognizes the advantages of being nestled up beside a first-class research institute where people and ideas may spill both ways." A rumored candidate to head the center is Roger Beachy, a plant pathologist at The Scripps Research Institute in La Jolla, California. The center's research plan has been left "deliberately vague" for now, says MBG director Peter Raven, because it will depend largely on the incoming center chief.

Novartis, a Switzerland-based drug company, is keeping plans for its center close to the vest. But a company spokesperson con-

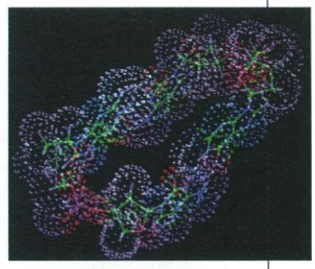
ScienceScope

USER FEE FOR PROTEIN DATABASE

Plagued by a funding crunch and inundated with new data, SWISS-PROT, a widely used amino acid database, will soon start charging a fee to industrial users.

SWISS-PROT contains sequences and other information on more than 70,000 proteins and is used by some 200,000 researchers in 100 countries, according to its developer, Amos Bairoch of the University of Geneva. But managers have a backlog of about 150,000 computer-generated sequences from which to winnow out protein information, and the database's $3-million-a-year budget is only half of what it needs, he says.

So, starting in September, SWISS-PROT—managed by the Swiss Institute of Bioinformatics and the European Bioinformatics Institute—will try to make up the deficit by charging corporate users anywhere from $2500 to $90,000 a year. Big companies are not likely to complain: The charges are "very modest in terms of the value of the database" for analyzing and comparing protein structures, says a Glaxo Wellcome spokesperson. Bairoch says that with smaller firms, fees may be negotiable. Academic and nonprofit users will still get free access to the database.



WILL MCINTYRE/ALLSTOCK/PN

ARMENIA BUCKS TREND

While Russia's competitive grants agencies are struggling (see p. 319), one former Soviet republic seems to be on the right track: Armenia is taking its baby steps in peer-reviewed research.

Next month, a new outfit, the National Foundation of Science and Advanced Technologies (NFSAT), will award 10 15-month grants to Armenian–U.S. projects in areas such as biosensors and cocaine antagonists. NFSAT's $300,000 endowment, from the U.S. Agency for International Development, will see it through the end of 1999. "Crucial for the future," says NFSAT chair Harutyun Karapetyan, will be donations from the active community of Armenians living abroad.

Contributors: Nigel Williams, Richard Stone