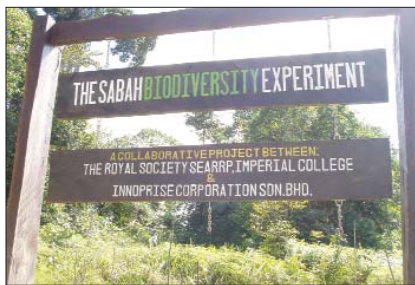


RANDOM SAMPLES

edited by Constance Holden

Forest Ecologists Go Mega

British and Malaysian scientists and volunteers are planting 120,000 trees in the largest-ever experiment on the role of biodiversity in ecosystem function. Researchers are nearly done planting the 124 patches of seedlings in a 6-square-kilometer swath of logged-over rainforest near the Danum Valley Field Centre in Malaysian Borneo. Some of the 4-hectare plots hold just one species, while others are sown with up to 16. Over the next 60 years, the researchers hope



It's a jungle out there.

to document how tree diversity influences both timber production and the storage of carbon.

The study has implications for designing climate-change policies, notes ecologist Andy Hector of the University of Zürich in Switzerland, who designed the experiment with Glen Reynolds and Charles Godfray of Imperial College in London.

Many nations currently propose to offset the production of carbon dioxide, a key warming gas, with single-species tree plantations. But a more diverse mix of trees might produce a richer ecosystem that stores more carbon, Hector says.

David Tilman

of the University of Minnesota, Twin Cities, a veteran of similar experiments in prairie grasslands, has high expectations for the Borneo initiative. His high-diversity grassland plots have shown three times the pro-

ductivity of more homogenous plantings, he notes. "If that happened in forest, it could have a big impact on our ability to remove carbon dioxide."

Where in the World Is Columbus?

The mystery surrounding the fate of the body of Christopher Columbus—and perhaps even his origins—could soon be solved. An international team of forensic experts earlier this month exhumed the supposed remains of the great explorer—along with the bones of a son and brother—at the Spanish Cathedral of Seville. Now the team, led by forensic scientist José Lorente of the University of Granada, is trying to extract DNA that could determine if Columbus was laid to final rest in Spain or the Dominican Republic.

Historians say Columbus was buried in Spain after his death in 1506. But he wanted to spend eternity in the Americas, so in 1537 the bones reportedly were sent to the cathedral in Santo Domingo. But some experts believe the remains were repatriated to Spain in 1899. To resolve the puzzle, Lorente and his colleagues will attempt to extract mitochondrial DNA (mtDNA), which is passed on

Skating on Bumpy Ice

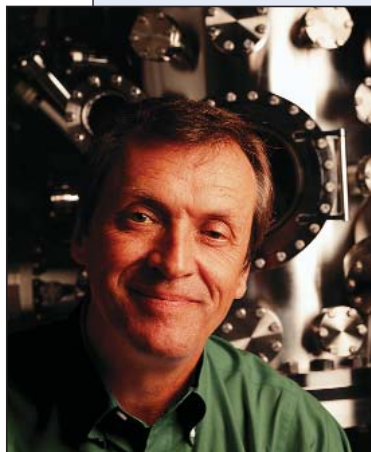
Robert Dyne learned agility and toughness as a junior hockey player in Canada. Those traits may come in handy in his new job as president of the towering but troubled University of California (UC) system.

Last week Dyne, a physicist and currently chancellor of UC San Diego, was picked by UC regents to succeed Richard Atkinson, who retires in October after 8 years as head of the country's largest educational institution. The 60-year-old Dyne earned a Ph.D. from McMaster University before coming to AT&T Bell Laboratories in 1968 as a condensed matter specialist. In 1991, he moved to UC San Diego "because I saw that the locus of American innovation was shifting from industry to the academy," he said in remarks after his selection. He became chancellor in 1996.

As president, Dyne says he'll focus on maintaining UC's status as academe's top dog. He also wants to boost its economic punch by emphasizing "RD&D—meaning research, development, and delivery" of academic discoveries to commercial users and the public. But before he does, he'll have to resolve two press-

ing matters: sizeable state budget cuts and the university's precarious hold on its management of the Department of Energy's Los Alamos National Laboratory in New Mexico.

Dyne has "the right temperament and background" for the job, says astrophysicist Robbie Vogt of the California Institute of Technology in Pasadena, who served with Dyne on a panel overseeing the national laboratories. He may be easygoing and funny, Vogt says, but "inside he is as tough as steel."



PERFORMERS

Keep your day job. His scientific reputation earned David Tilman a spot as chair of a National Academies panel on a controversial proposal from the National Science Foundation to build a network of ecological observatories called NEON (see page 1869). But last week's opening meeting suggested that the University of Minnesota ecologist might be auditioning for another line of work.

To include those who couldn't travel to Washington, D.C., the panel arranged to Webcast the proceedings. That prompted Tilman to open with the comment: "Live from the



National Academy of Sciences, it's NEON." He also sprinkled "station breaks" throughout the 4-hour meeting, reminding listeners that "this is the National Academy panel on NEON. Your questions are welcome." No word yet on whether the NBC talent scouts have called.

THEY SAID IT

"Our mantra ... [is] not: ready, aim, fire. It's: ready, fire. We're launching. We're moving initiatives ahead."

Andrew von Eschenbach
National Cancer Institute (NCI) director, responding last week to questions from the National Cancer Advisory Board about how NCI plans to achieve its goal of eliminating suffering and death from cancer by 2015.

CREDITS: (TOP TO BOTTOM) PETER KOONEN; THE REGENTS OF THE UNIV. OF CALIFORNIA; TIM RUMMELHOFF/UNIV. OF MINNESOTA NEWS SERVICE



Columbus's tombstone at the Seville Cathedral.

from mother to son. They also want DNA from the male-only Y chromosome. If the remains are indeed the explorer's, Columbus's mtDNA should match that taken from his brother's bones, whereas the Y-chromosome DNA should match his son's. The studies may also help settle another historic dispute: Columbus's nationality. Italians contend that he was born in Genoa, but others claim he was the illegitimate son of the Spanish Prince Carlos de Viana, whose bones underwent DNA testing last year.

Helping the Enemy?

The U.S. Army is catching some flak for patenting two devices that could be used to launch bioweapons. Critics say the patents may violate a weapons-control

treaty—and could give terrorists a blueprint for manufacturing the devices.

The U.S. Patent and Trademark Office issued the two patents (numbers 6,523,478 and 6,047,644) over the last year. One details a "nonlethal cargo dispenser" that attaches to the end of a rifle and uses a bullet's momentum to zip a chemical or biological payload to its target. The other describes a cartridge that can spread an aerosol cloud.

The Sunshine Project, a nonprofit arms-control group with offices in Austin, Texas, and Hamburg, Germany, first raised questions about the patents last month, saying they appeared to violate the Biological and Toxin Weapons Convention, which bars the development of delivery devices. And this month, Greg Aharonian, publisher of the prominent Internet Patent News Service, piled on. "Which words in the phrase 'aiding and abetting the enemy' does the Army not understand?" he asks, adding that "it is hypocritical to complain about countries developing biological and chemical weapons when we are openly educating them on how to do so." He says the military should have classified the patents. The Army says it is looking into the issue.

Japan's Vanishing Breed

Science magazines in Japan have lost two-thirds of their readership since the peak of their popularity 2 decades ago, according to a study by a group at Japan's National Institute of Science and Technology Policy (NISTEP). Compared to the early 1980s, when eight monthlies attracted 12.6 million people hungry for scientific news, there were just five titles competing for 4.2 million readers by 2001.



For a country that built its economy on high technology and is boosting spending on research, "the public understanding of science and technology is an extremely important issue," says study co-author Kiyohito Ohnuma, a NISTEP senior research fellow. Reversing the decline in the public's interest in science, he says, might have to start with introducing smarter textbooks in schools and providing more opportunities for scientists to communicate directly with the public.

IN THE COURTS

Have microbe, will sell. Yin Qingqiang, a Chinese researcher who was arrested last summer in Syracuse, New York, for attempting to smuggle yeast cultures to China, last week was sentenced to a year in prison by a federal court in Syracuse. Yin, 39, took the materials from an animal science lab at Cornell University, where he had worked as a postdoc.

Yin was preparing to board a flight to Shanghai with his wife and 4-year-old daughter when security officials found vials, test tubes, and petri dishes in the family's luggage. The contents included strains of bacteria that Cornell researchers, including Yin, had been using for a federally funded project to develop phytase, an enzyme intended to improve nutrition intake in livestock.

Yin was convicted in December on charges of stealing federal property and lying to the FBI. Among the evidence presented against him was a

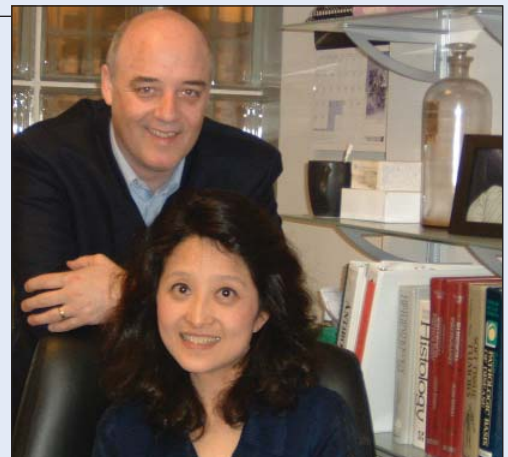
letter intended for a Chinese lab in which Yin offered the bacteria for commercial use in China.

AWARDS

Labmates forever. Being partners in both marriage and in research often means bringing work home every night. But there are also rewards. Last week pathologist Yuan Chang and molecular biologist Patrick Moore received one of the biggest—the \$250,000 Charles Mott Prize from the General Motors Cancer Research Foundation.

Chang and Moore, professors at the University of Pittsburgh in Pennsylvania, were honored for discovering the virus responsible for Kaposi's sarcoma, the most common cancer in AIDS patients. "The project grew out of a discussion over the kitchen table," says Moore, whose experience in epidemiology complemented Chang's genome-sequencing expertise in searching for the cause behind the malignancy. Having "a shared research goal" has also strengthened their marriage, says Chang.

The couple met in medical school at the University of Utah in 1981, tied the knot in 1989, and began their scientific collaboration in 1992. But the arrival of Jackson, now 2, has added another dimension to their lives. "He's considerably reduced our time spent in the lab," says Moore.



PEOPLE

edited by Yudhijit Bhattacharjee

Got any tips for this page? E-mail people@aaas.org

CREDIT: (TOP) JOSÉ LORENTE