

Briefings

edited by CONSTANCE HOLDEN

Drugs and Biotechnology

Eight years after Eli Lilly won approval to market human insulin as the first product of the new biotechnology industry, the pharmaceutical pipeline is bulging with genetically engineered medicines. Today, 104 are being tested in human clinical trials or are being reviewed by the FDA, according to the 1990 annual survey by the Pharmaceutical Manufacturers Association (PMA). That represents a 24% increase over last year. Well over half of the new drugs are for cancer or cancer-related conditions—the nation's second leading cause of death. Another 15 are being tested for treating AIDS or HIV-related conditions.

Of the 104 drugs, only 11 actually have been approved by the FDA for physicians to prescribe. But 18 others have completed clinical trials and 14 more are in the final stages of human trials.

The PMA claims that drugs and health care products accounted for almost half of all biotech patents in 1989. The others were primarily for agricultural and environmental cleanup products.

Climate Experts Say It Again: Greenhouse Is Real

The White House may be sending the message that there's no need to hurry on global warming, but, according to a new poll, the world's climate scientists think otherwise. The survey, conducted by the *Global Environmental Change Report* newsletter in Arlington, Massachusetts, got responses from 330 of 1500 "global environmental change" scientists polled in 41 countries. Almost 90% favored taking immediate

steps to reduce carbon dioxide emissions even though the science of greenhouse warming is still not all that solid. Only 65% believed there is a better than 50:50 probability of a moderate greenhouse warming (at least 2°C) during the next 100 years. But to most of those polled, that threat seemed sufficient to justify action now to reduce greenhouse gases.

Developments since another survey was conducted in the mid-1970s suggest that climate scientists are not all wet when it comes to such predictions. In that poll, by the National Defense University in Washington, D.C., 24 selected climatologists from seven countries predicted a slight temperature rise by 2000 as carbon dioxide-induced warming would begin to overcome the cooling trend that had been under way since the mid-1940s. That survey came before the realization that anthropogenic gases other than carbon dioxide would double the expected warming. As soon as this poll came out in 1978, the cooling trend ended and the global temperature began its leap into the sizzling 1980s.

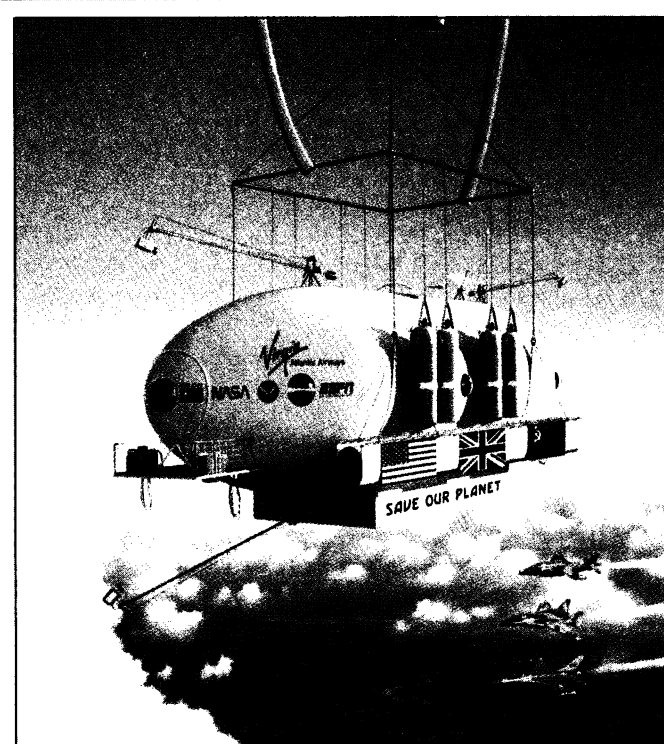
Baltimore Assembles Team

David Baltimore is acting expeditiously to get his team together as Rockefeller University's new president. On 15 May he announced that Rockefeller biologist James E. Darnell, Jr., has been appointed to the new post of vice president for academic affairs, effective 1 July. Baltimore has also tapped Fred-



James Darnell

John Sholtis



Richard Dowling/World Space Foundation

EARTHWINDS Around the World. A trio of American, British and Soviet adventurers are planning the first nonstop circumnavigation of the earth in a balloon. A high-tech contraption with a closed 24 by 10 foot gondola slung beneath a helium balloon, their vehicle is a far cry from novelist Jules Verne's wicker-basketed rig. A lot faster, too. It will spend only 12 to 21 days riding the jet stream across North America, the Atlantic, Europe, the Soviet Union, Japan, the Pacific, and back to the takeoff point in Akron, Ohio. NASA and NOAA will provide satellite communications, and the crew will use the Global Positioning Satellite system to track their location to within a few feet. Riding the EARTH-WINDS balloon will be American pilot Larry Newman and British entrepreneur Richard Branson—both veterans of transoceanic balloon crossings—and Soviet cosmonaut Vladimir Dzhanibekov. The balloon, whose design is still proprietary, will be launched some time between November and February, depending on the weather, from the Lorain Airdock in Akron. Sponsors of the project are Branson's Virgin Atlantic Airways and cable television network ESPN.

erick M. Bohen, currently vice president for finance and administration at Brown University in Providence, Rhode Island, to be Rockefeller's executive vice president. He will replace Rodney W. Nichols, who will move to New York's Carnegie Corporation in the fall.

Darnell has been especially supportive of Rockefeller's effort to attract young researchers through its university fellows program. His appointment is taken as a sign that this will be a priority with the Baltimore administration. The appointment also presages a move toward organizing the university

around scientific disciplines rather than around distinguished individuals.

Science for Nonscience Majors

"The call for education reform has finally reached higher education," says Audrey Champagne, study group director for the AAAS Project on Liberal Education and the Sciences. Last year the AAAS issued a report, "Science for All Americans," outlining goals for pre-college science education. Now it has done the same for under-