

corporation, it is by no means free of business ties. It owns stock in many companies, and individual faculty members are officers or consultants for a variety of private concerns. For example, in the same department as Mark Ptashne, who played a key role in the plan for a new company and whose research was to have been the basis for the company's initial project, is Walter Gilbert, who is co-chairman of the board of directors and chairman of the scientific board of Biogen, a Geneva-based genetic engineering firm that plans to open a Cambridge laboratory. The proposed new genetic engineering company is likely to be formed, even without Harvard's direct involvement, with Ptashne and perhaps other Harvard faculty members as major participants.

Had Harvard gone into the genetic engineering business, it would not have been the first university to turn entrepreneurial. For about 20 years Cornell University ran a company that made plane and car safety devices and for a few years the University of Illinois ran a rug-making plant. Most universities that make money from their discoveries and inventions do so, however, by licensing patents to outside corporations, and some schools even have created separate foundations to administer patent affairs. □

## The 1980 Lasker awards announced

The \$15,000 Albert Lasker Basic Medical Research Award is being shared by four scientists whose pioneering recombinant DNA research has had enormous repercussions on the biomedical research world—Paul Berg, Stanley N. Cohen and Dale Kaiser of Stanford University School of Medicine and Herbert W. Boyer of the University of California at San Francisco. Berg is also a 1980 Nobel Prize winner in chemistry for his recombinant DNA investigations (SN: 10/18/80, p. 244).

The \$15,000 Albert Lasker Clinical Medical Research Award is being shared by five scientists who created a vaccine for preventing Rh disease (a disease of blood incompatibility between a pregnant mother and her unborn infant)—Vincent J. Freda, John Gorman and William Pollack of Columbia University College of Physicians and Surgeons, Cyril A. Clarke of the University of Liverpool and Ronald Finn of Royal Liverpool Hospital.

A Special Albert Lasker Public Health Award of \$15,000 has been presented to the National Heart, Lung and Blood Institute for a hypertension study that, in the opinion of the Lasker jury, "stands alone among clinical studies in its profound potential benefits to millions." The study showed that patients getting individualized treatment had far fewer fatal strokes and heart attacks than did those not getting it. □

## Balloons, enzymes for atherosclerosis

New procedures to treat two potentially fatal heart conditions, atherosclerosis (hardening of the arteries) and thrombosis (clot formation) were presented last week in Miami Beach at the meeting of the American Heart Association. Though the cause-and-effect relationship between the two conditions and heart attacks has yet to be clearly defined, both are associated with blocking blood flow to the heart muscle.

Kenneth M. Kent of the National Heart, Lung and Blood Institute announced the results of a multi-nation registry of percutaneous transluminal coronary angioplasty. PTCA has been used experimentally in the United States since April 1978 to allow freer blood flow in the coronary arteries by pushing fat-rich plaques out of the way. A tiny balloon is threaded into the heart through a long catheter inserted in the groin area. Once the balloon has reached the narrowed area it is inflated, forcing the plaque up against the arterial wall. Since few patients have died, the plaque's fate has not been determined.

Of 804 patients in the registry, about 15 percent had a noncompressible narrowing, while in 83 percent of the successful cases the patients reported a significant reduction in chest pain. About five percent of the cases resulted in abrupt artery closure, requiring immediate coronary bypass surgery. Nine patients died, some as a result of the bypass operation. Until the safety and effectiveness of PTCA is established, the procedure is being performed on patients with only one coronary artery obstructed, a condition that can cause pain but is unlikely to result in death.

## Brain space: Bird and monkey economics

Within the compact structure of an animal's brain, many complex operations appear to be competing fiercely for turf. Two quite different sets of experiments reported at the meeting in Cincinnati of the Society for Neuroscience indicate that areas of the brain devoted to specific functions are flexible and can adjust to meet the changing needs of the animal.

Song learning, a seasonal activity of male canaries, provides one example. Each spring the males pick up a new repertoire, and Fernando Nottebohm of Rockefeller University reports a corresponding seasonal variation in the male canary brain. In the spring two brain regions, the hyperstriatum vocalis and the robust nucleus, that are involved in song production (SN: 1/26/80, p. 58) are almost double the size they were in the fall. Nottebohm speculates that the extra space is filled with a proliferation of the nerve cells' long,

Blowing up a balloon within an artery concerns Thomas N. James, the outgoing American Heart Association president. "If you have a crusty tough lesion and you put in a balloon, something's going to break," he says.

Breaking the plaque might be serious, since some researchers believe that it is only when the smooth wall of the plaque is broken that blood clots form. Researchers in the United States and abroad have been working for many years on ways to remove a coronary artery-blocking clot that appears sometime during the rapid stream of events of a heart attack. Variable success rates with clot-destroying enzymes have been reported over the years, but the most impressive results have come from a technique performed only in the past six months.

William Ganz of the University of California at Los Angeles, who already has one catheter to his name, has developed an extra-long catheter that he can thread right up to the clot in a 20-minute procedure. He showed a movie of the catheter nosing right up to a clot and releasing the drug. To the gasps of the audience, the clot dislodged.

Twenty of 21 of his patients are well, he reports. The one failure occurred before he developed the new catheter. The procedure does not, he notes, treat the underlying atherosclerosis. Seven of the patients subsequently underwent coronary bypass surgery after recovering from their heart attacks. The possibility that the enzymes could hurt the heart muscle concerned some members of the audience as well as James, but Ganz reports no effect in dogs or humans. One trick will be needed if the procedure pans out: getting patients to come in as soon as they feel a heart attack beginning, instead of hoping it will go away and allowing irreversible heart damage. □