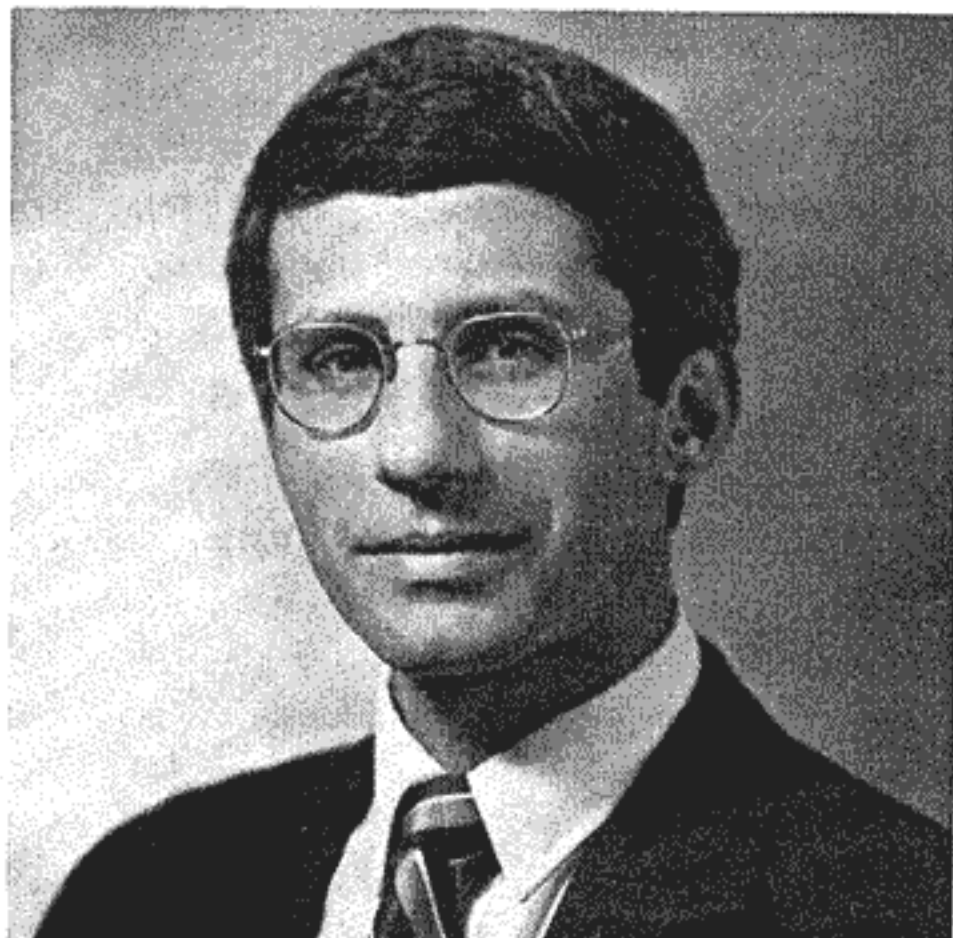


The NIH Record

Dr. Anthony Fauci Named NIH AIDS Coordinator



Dr. Anthony S. Fauci, Director of the National Institute of Allergy and Infectious Diseases, has been named AIDS Coordinator for NIH. In announcing Dr. Fauci's appointment, Dr. James B. Wyngaarden, NIH Director, stressed the need for broader coordination of the increasing research on AIDS (Acquired Immunodeficiency Syndrome) at NIH.

(See AIDS COORDINATOR, Page 11)

New Cancer Treatment Yields Exciting Results But Only First Step: Needs More Study

National Cancer Institute scientists have developed a new approach to cancer treatment that successfully activates the immune system to destroy cancer cells in patients whose cancers are so far advanced that they no longer respond to chemotherapy or radiation.

This research team led by Dr. Steven A. Rosenberg, chief of the Surgery Branch in the NCI's Division of Cancer Treatment, reported its findings in the Dec. 5 *New England Journal of Medicine*.

The scientists use specialized machines to remove circulating white blood cells known as lymphocytes from the patients. The critical part of this technique, developed by Dr. Rosenberg and his coworkers in 1980, is the treatment of these lymphocytes with an immune system activator, or lymphokine, called interleukin-2 (IL-2). This converts the lymphocytes into lymphokine-activated killer (LAK) cells that destroy cancer cells but not normal cells.

The scientists infuse these LAK cells—along with IL-2—back into the patient. The IL-2 induces the LAK cells to multiply for a short time in the body, thus enhancing their ability to destroy cancer cells.



Dr. Rosenberg

The development of a genetically engineered, or recombinant, form of IL-2 in 1984 made available to the scientists the large amounts of this substance required for treating patients. In that year, Dr. Rosenberg and his coworkers were the first to report on the large-scale availability and action of recombinant IL-2 in the journal *Science*.

Among 25 patients with advanced cancers treated with this new immunotherapy approach, the researchers found that 11 patients (44 percent) had measurable tumor reductions (at least 50 percent reduction in tumor size). These responses occurred in patients with melanoma, colorectal, kidney, and lung cancers.

(See CANCER TREATMENT, Page 10)

Nobel Laureates—Both Longtime NIH Grantees— Win Lasker Medical Research Award as Well

1985 Nobel prize winners Dr. Joseph L. Goldstein and Dr. Michael S. Brown, Paul J. Thomas Professors of Genetics and Medicine of the University of Texas Health Science Center in Dallas, were the winners of the 1985 \$15,000 Albert Lasker Basic Medical Research Award for their discovery of the basic mechanism controlling cholesterol metabolism.

Both men are longtime recipients of NIH funding for their research into genetic factors involved in human cholesterol and related medical conditions.

Announcement of the winners was made Nov. 20 by Mrs. Albert D. (Mary) Lasker, President of the Albert and Mary Lasker Foundation. Winners were chosen by an international jury of scientists chaired by Dr. Michael E. DeBakey, Chancellor of Baylor College of Medicine.

The two physician-scientists share the award for their discovery of the cell surface receptor which binds low-density lipoprotein (LDL) and removes cholesterol from the bloodstream.



Dr. Goldstein

(See LASKER AWARD, Page 11)

(See Other Awards, Pages 10, 12)



**Merry Christmas
Happy Hanukkah
and
A Joyous New Year**

LASKER AWARD

(Continued from Page 1)

They delineated at the molecular level the way cholesterol is taken up by cells in a process they named receptor-mediated endocytosis. Their historic observations have opened a new era in the treatment of atherosclerosis and cardiovascular disease.

Their pioneering work was conducted on familial hypercholesterolemia (FH), a disease characterized by abnormal accumulations of cholesterol in the bloodstream. One in 500 people are estimated to have this condition.

Drs. Brown and Goldstein discovered that patients with the disease were unable to bind and internalize circulating cholesterol because they lacked or were deficient in receptors for low-density lipoprotein (LDL), a carrier of cholesterol in the blood. They identified and eventually isolated and purified the gene responsible for the absence or deficiency of these receptors.

The scientists then went on to delineate the way cholesterol is taken up by cells in a process they named receptor-mediated endocytosis. These original observations explained the way cholesterol is metabolized but also provided a new model for understanding how other large molecules such as insulin are taken up by cells.

This discovery of the LDL receptor and the process of receptor-mediated endocytosis has been a landmark contribution to atherosclerosis research and to the larger fields of medical genetics and cell biology. Their work has led to development of experimental drugs which are now being tested in patients. Preliminary indications suggest that some of these drugs stimulate production of LDL receptors and therefore lower cholesterol levels.



Dr. Brown

The citation for Drs. Brown and Goldstein reads in part: "For their extraordinary work in elucidating cholesterol metabolism, for delineating the process of receptor-mediated endocytosis, and for opening new approaches to the treatment of atherosclerosis."

Formal presentation of the Lasker Awards was made to the winners at the annual luncheon given in New York City on Nov. 22. The Honorable Mario M. Cuomo, Governor of New York, was the keynote speaker. Dr. Lewis Thomas, president-emeritus of Memorial Sloan-Kettering Cancer Center, who wrote a historical review of the Albert Lasker Awards in honor of their 40th anniversary, commented on their impact in biomedical research in his essay: "The Lasker Awards: Four Decades of Scientific Medical Progress." □

Alcoholism Prevention Committee Slates Two 3-Day Seminars

The National Committee for Prevention of Alcoholism will hold two 3-day seminars a month apart in early 1986.

The seminars on the theme "Prevention—The Key to a Healthy Future for Home, School and Community," will be held as follows:

Feb. 17-19, Orlando, Fla.; Mar. 17-19, Palm Springs, Calif.

For more information, contact: National Committee for the Prevention of Alcoholism and Drug Dependency, Rt. 1, Box 635, Appomattox, VA 24522. Phone: (304) 352-8100. □



Alice Fordyce, executive vice president of the Albert and Mary Lasker Foundation, visited NLM in October. The Foundation has donated the archives of the Albert Lasker Medical Research Awards to the Library. Mrs. Fordyce is shown here with Dr. Donald A. B. Lindberg, NLM Director.

AIDS COORDINATOR

(Continued from Page 1)

In his new capacity, Dr. Fauci has reconstituted the NIH AIDS Executive Committee and is serving as its co-chair with Dr. Wyngaarden. He also accompanies or represents Dr. Wyngaarden at PHS AIDS Executive Task Force meetings.

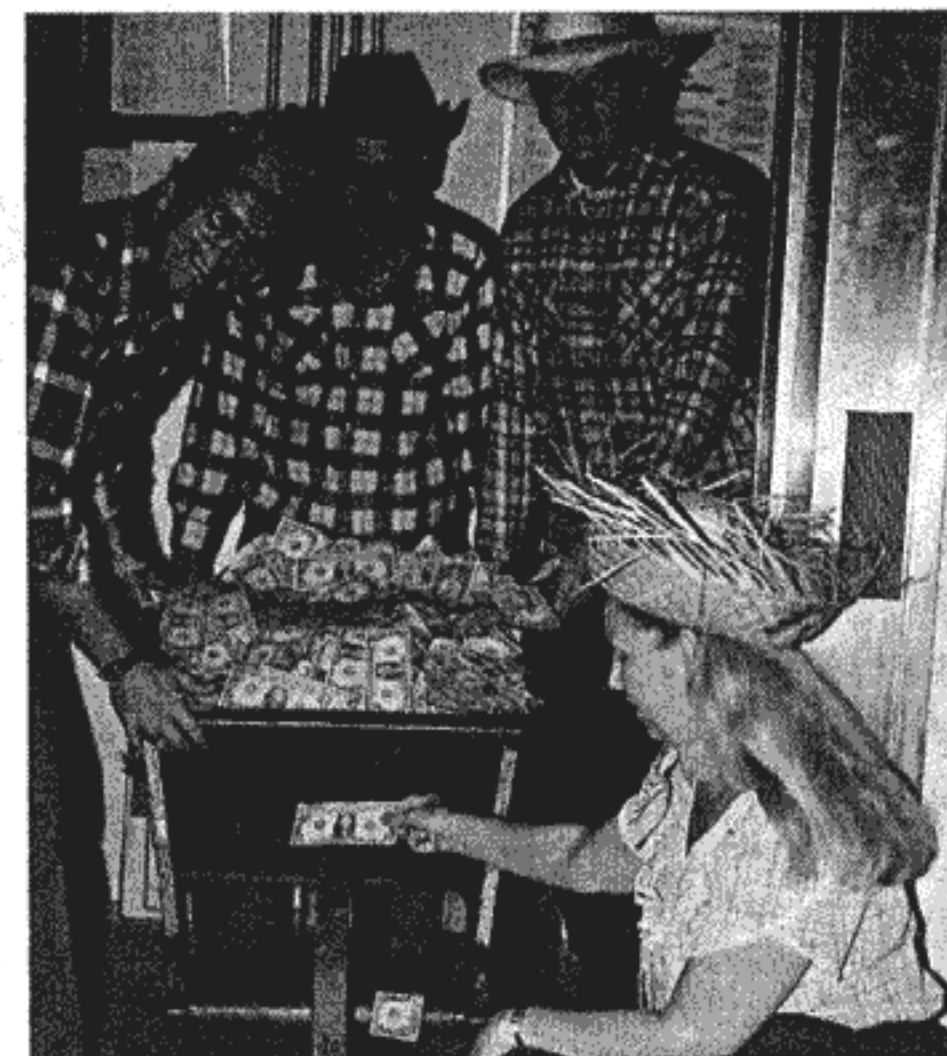
Dr. Fauci and the NIH AIDS Executive Committee are assisting Dr. Wyngaarden in formulating scientific policy and recommending allocation of resources for AIDS research at NIH. The Committee is charged with development of an overall plan that will clearly delineate roles, responsibilities and channels of communication.

The plan will provide a framework for addressing research needs and other emerging issues, and for identifying research gaps and redundancies.

The plan will also ensure a timely and consistent supply of information on AIDS and will provide for the appropriate preparation and review of all official documents concerning AIDS.

Membership of the NIH AIDS Executive Committee includes Directors of BIDs involved in AIDS research and staff members in the OD, NIH.

House-Senate conferees recently approved \$234.2 million for research and related activities to combat AIDS in fiscal 1986. A major part of this funding has been designated for NIH. □



R&W has begun its membership drive and if you join during December and January, you could win the wheelbarrow of money pictured above. Shown (l to r): Randy Schools, R&W general manager; David Brightwell, membership chairperson; Alan Moore, 1st vice president, and Agnes Richardson, president.