Savings Bond Campaign Report Reveals 2 Units Soared 'Over the Top'

Two NIH components have gone "over the top" in attaining the NIH U.S. Savings Bond campaign goal.

The Division of Research Resources leads in signing up new bond buyers and increased allotments with 118%. The National Institute of Neurological and Communicative Disorders and Stroke is third with 89% toward reaching its goal.

June 3 Figures Reported

As of June 3, approximately 400 NIH employees signed to become new bond buyers or have increased their allotments since commencement of the drive on May 3. This represents only 35% of the overall NIH goal set.

Although the campaign is officially over today (June 15), NIH employees may still sign up for U.S. Savings Bonds or increase their allotments through their (See SAVINGS BONDS, Page 8)

Dr. Saunders to Discuss British Hospice Tonight

Dr. Cicely Saunders of the St. Christopher's Hospice, London, England, will give an illustrated lecture on the continuing care and treatment of potentially terminal cancer patients.

Her talk, entitled Home, Hospital, or Hospice, is scheduled for 7 p.m. this evening—June 15—in the Masur Auditorium.

Recombinant DNA Office Is Established; Research Guidelines to Be Issued Soon

On June 2, Dr. Fredrickson (c) and Dr. Joseph G. Perpich (I), NIH Associate Director for Program Planning and Evaluation, discussed problems concerning the potential applicability of the forthcoming recombinant DNA research guidelines to industry and other institutions and Government agencies. Dr. Richard Donovick (r), Director of the American Type Culture Collection, was among the agency representatives participating in the discussion.

Effective May 5, the Director of NIH established an Office of Recombinant DNA Activities, reporting to the Director of the National Institute of General Medical Sciences. Dr. William Gartland will head the new Office, while retaining his position as scientist administrator etc.), and will prepare regular reports.

On June 2, Dr. Donald S. Fredrickson, NIH Director, met with representatives of drug companies, chemical companies, and manufacturers associations to discuss forthcoming guidelines for recombinant DNA research.

Applicability Noted

The guidelines, to be published during the week of June 21, will apply to scientists in Government agencies and to investigators supported by Government funds; for instance, NIH grantees in university laboratories.

Dr. Fredrickson pointed out that scientists and organizations in many other countries are awaiting publication of the NIH guidelines before drawing up similar or modified guidelines.

NIH HONOR AWARDS CEREMONY

Director's Award, Commendation Medals

Other Honors to Be Presented June 28

At the Eighth Annual NIH Honor Awards Ceremony on Monday, June 28, at 2:15 p.m., in the Masur Auditorium, 50 Civil Service staff members will receive the newly-established NIH Director's Award, and 22 Commissioned Officers will be awarded the Commendation Medal. The NIH-EEO Achievement Award of the Year will be presented, and one employee will receive a 40-year Length-of-Service Award.

Dr. Donald S. Fredrickson, NIH Director, will present the awards, and Edward E. Nicholas, Jr., Director of the Division of Personnel Management, will serve as master of ceremonies and read the citations.

Dr. John F. Sherman, vice president of the Association of American Medical Colleges, will deliver the keynote address. A former NIH'er, he held various positions—position that of Deputy Director of NIH and Acting NIH Director—during the 17 years he was here.

Employees Invited

All NIH employees are invited to attend the ceremony which will last approximately 1 hour and 10 minutes. The NIH Stage Band, under the direction of Anthony J. D'Angelo, will perform during the ceremony.

Recipients of the NIH Director's Award are:

DR. PHILIP S. CHEN, Jr., assistant director for Intramural Affairs, Office of the NIH Deputy Director for Science, Office of the Director, "For unusual skill and tact in solving the numerous and diverse problems arising in the management of NIH research programs."

DR. GEORGE N. EAVES, staff member, President's Biomedical Research Panel, "For diligence, scholarship, imagination and leadership which resulted in significant contributions to the efforts of the President's Biomedical Research Panel."

SAMUEL W. GEORGE, chief, (Continued on Page I)

before drawing up similar or modified guidelines.

Dr. John G. Adams of the Pharmaceutical Manufacturers Association said that industry representatives may meet soon to draft guidelines appropriate for industry.
Majority of Upward Mobility Graduates Win Honors

Upward Mobility College graduates gathered with their families, friends, and supervisors for ceremonies held June 4 in the Masur Auditorium.

Graduation certificates were presented recently to 37 students of the NIH-FCC Upward Mobility Satellite College by Edward E. Nicholas, Jr., Director of the Division of Personnel Management, Richard Jackson, central project officer of UMC at NIH, and George Slate, director, NIH Upward Mobility College.

Speakers at the graduation exercises included Dr. Donald S. Frederickson, NIH Director, Raymond J. Sumser, Deputy Assistant Secretary of HEW for Personnel and Training, and Arthur Reid, student spokesman.

Graduates Named

Summer 1975 graduates with honors were: Guy Johnson, AA, and Raymond Smith, BBA. Anna Gatling received a BBA degree.

Summer 1976 graduates with honors were: Charles Brown, BBA, Phyllis Brown, BA, Julia Chandler, AS, Rodney Dale, AA, Richard Field, AA, Frances Gallegos, BA, Kathryn Hancock, BBA, George Hemphill, BBA, William Hill, BBA, Susan LaRocche, BA, Marcelline Lee, BS, Louise B. Miller, BA, Mary K. Nicholas, AA, Lynn R. Odell, BA, Marilyn Ruis, BS, Dorothy Bierdewald, BA, Naomi Beach, BA, Dorothy Waters, BA, and David Winter, BA.


F.E.W. Dinner Features Awards, Guest Speaker

The Suburban Maryland Chapter of Federally Employed Women, Inc. will present its annual awards to those who have made outstanding contributions to the promotion of equal job opportunities for women at an Awards Dinner, on Wednesday, June 23, at 6:30 p.m. at the Naval Officer's Club in Bethesda.

In addition to the awards, the program will feature guest speaker, Dorothy P. Rice, Director of the National Center for Health Statistics, who will discuss The Role of Women in the Federal Bureaucracy.

New Booklet Tells 'How To Cope With Arthritis,' Gives Up-to-Date Data

How to Cope with Arthritis, the latest book published by the National Institute of Arthritis, Metabolism, and Digestive Diseases, contains up-to-date information on research into man's oldest known chronic illness.

It discusses modern approaches to treatment, rehabilitation, and problems of everyday living for the arthritic person.

Arthritis refers to the types of disabling disease which attack the joints; but, in fact, inflamed joints may be only one manifestation of the more than 90 different diseases that are included under the designation of "arthritis."

The three most common of these diseases are rheumatoid arthritis, osteoarthritis, and gout. Each is a distinct disease with different causes and different prospects for recovery, requiring different methods of treatment.

Patients Can Be Aided

Rheumatoid arthritis is the most crippling of the rheumatic diseases. Although it is not possible today to cure rheumatoid arthritis, it is possible for patients to cope successfully with their affliction with the help of their physicians and other specialists.

The booklet contains discussions of such topics as physical therapy, exercise, diet, mental health, and the problem of quack remedies.

In addition, the new publication provides information on other forms of arthritis and rheumatism.

For reservations, call Karen Turnbull-Shangraw, 443-3104, or send $7 to Ms. Turnbull-Shangraw, in Room 9C-8, Parklawn Bldg., payable to Suburban Maryland Chapter, F.E.W. Inc.

Everyone is welcome on this special occasion.

Silver Spurs to Dance At CC on June 24; R&W Sponsors Benefit

Western style square dances, as well as folk dances from many countries, will be performed by the Silver Spurs. Proceeds from the R&W-sponsored program will benefit the Patient Emergency Fund.

On Thursday, June 24, at 8 p.m. in the Masur Auditorium, the NIH R&W Association will sponsor a 2-hour dance show by the Silver Spurs—two dozen teenagers from Spokane, Wash.

Organized by physical education consultant "Red" Henderson in 1947, the group continues to attract outstanding, enthusiastic student-participants from Spokane area schools. The Silver Spurs tour the U.S. annually, and made European tours in 1972 and 1975. They previously appeared at NIH in 1971.

The program will include Western style square dancing, Mexican and Indian dances, English and Continental dance styles—and perhaps some audience participation.

Speakmen parents and boosters contribute their time and talents to the group as costumers, sound technicians, lighting consultants, and also help finance the group's tours.

Tickets may be purchased for $3 each at the R&W Activities Desk in Bldg. 91 or in the CC or Westwood R&W Shops.
Dr. Burton Is Chairman Of German Symposium On Dialysis Technology

At the invitation of the University of Ulm, Germany, Dr. Benjamin T. Burton organized and chaired a German-language symposium on kidney dialysis in Wiesbaden on May 29.

Dr. Burton, who is associate director of the National Institute of Arthritis, Metabolism, and Digestive Diseases, is also chief of NIAMD's Artificial Kidney-Chronic Uremia Program.

He assembled speakers on dialysis from all over the world—including contractors of the Institute-supported AK-CU group.

The symposium on New Technologies of Blood Purification in Uremia outlined for 300 German physicians the newest methodologies for treatment of uremia, the toxic condition produced by urinary contaminants in the blood.

In 1974 Dr. Burton addressed the first annual meeting of the European Dialysis and Transplant Association in German. The success of that presentation spurred the recent invitation to demonstrate NIH's role in furthering technology in the field of nephrology, artificial kidney, and uremia.


Tennis Finals Slated June 27

Everyone is invited to watch the annual spring tournament finals of the NIH Tennis Club, on Sunday, June 27, beginning at 9 a.m., on the NIH tennis courts adjacent to Bldg. 41.

Women's singles 12:30 p.m.
Men's singles 1:30 p.m.
Women's doubles 2:30 p.m.
Men's doubles 3:30 p.m.
Mixed doubles 4:30 p.m.

The rain date will be July 11.

Dr. Burton

Savings Bonds

(Continued from Page 1)

B/I/D coordinators until June 18.

The campaign will culminate on Friday, June 25, at 1 p.m. with a prize drawing for new bond buyers and allotment-increase buyers at the Masur Auditorium.

Three prizes will be donated by the NIH Recreation & Welfare Association. The first prize will be a $25 Savings Bond; second and third prizes will be $15 and $10 R&W Gift Shop certificates.

Purposes Cited

Three major purposes indicated by the new bond buyers at DRE were 43% for retirement, 28.5% for children's education expenses, and 25.5% for accumulated savings.

Interest on bonds is exempt from state or local income and personal property taxes. Interest is reportable on Federal tax returns when the bonds are cashed.

However, there are some interesting methods of handling interest earned from Series E Bonds which astute NIH employees should consider in viewing their personal Federal tax picture.

Tax Regulations Explained

Under current U.S. Treasury regulations, Series E Bonds purchased now can be held for 15 years without declaring interest earned on Federal tax returns. At the end of this period, the bonds can be exchanged (must be valued at $500 or more) for H Bonds. The H Bonds yield up to 6%, payable semiannually by Treasury check.

Thus, the retirement bond buyer could hold the H Bonds until age 65 at which time he or she would be in a lower tax bracket with a double exemption for Federal income tax purposes.

When bonds are bought in a child's name (with parents as beneficiaries) no income tax returns for interest earned need be made until the bonds are cashed for college expenses. As long as the accrued interest on bonds cashed each year, plus other income, does not exceed the exemption, no tax will be due.

SAVINGS BONDS

In 1961, Dr. Bonica established a multidisciplinary pain clinic at the University of Washington, where patients with stubborn, chronic pain, referred by physicians, are examined by experts including neurologists and psychiatrists.

Dr. John Bonica, professor and chairman of the department of anesthesia at the University of Washington, Seattle, will present a Mini-Symposium on Cancer Pain at 9 a.m. on June 28, in Conference Room 4 of Bldg. 31, as part of the NCI Cancer Control Grant Review Committee meetings.

Dr. Bonica will explain methods, other than narcotics, to relieve the pain of inoperable or recurrent cancer.

Methods Detailed

These methods include nerve blocks, or the injection of a chemical agent to deaden pain-carrying nerves, alcohol injections that destroy nerves, surgery, hormone treatments, hypnosis and biofeedback—a psychological technique that involves teaching the patient how to minimize pain.

The very popular hunting for "fathers" of every branch of medicine and every treatment is rather foolish; it is unfair not only to the mothers and ancestors but also to the obstetricians and midwives.—Henry E. Sigerist.

All in the family.

Take stock in America.
Buy U.S. Savings Bonds.
NIH HONOR AWARDS CEREMONY WILL BE HELD JUNE 28 IN MASUR AUDITORIUM

Operations Accounting Branch, Division of Financial Management, OD, “For superior leadership abilities in the design and development of an integrated NIH system for processing, paying and accounting for goods and services.”

JAMES G. HAWKES, Space Management officer, Division of Administrative Services, GSM, OD, “For contributions to the NIH Research Programs through his technical competence, guidance and leadership in developing a highly effective Space Management Program.”

DR. ANN A. KAUFMAN, Research Grants officer, Office of Extramural Research and Training, OD, “For significant contributions affecting the quality of scientific management practices in the NIH Extramural Programs.”

DR. CHARLES R. McCARTHY, chief, Legislative Development Branch, Office of Program Planning and Evaluation, OD, “For significant contributions to the resolution of difficult policy problems, particularly in the areas of Freedom of Information, the Privacy Act, and Biomedical Ethics.”

STANLEY JABLONSKI, head, Index Section, Bibliographic Services Division, National Library of Medicine, “For leadership in maintaining a high standard of quality in the indexing for Index Medicus, and for his independently authored, highly regarded specialized medical lexicons.”

Dr. Borsos Honored

DR. TIBOR BORSOS, associate chief, Biology Branch, and head, Immunohistology Section, Division of Cancer Cause and Prevention, National Cancer Institute, “For fundamental studies showing that animals with cancer can be cured by a combination of Chemotherapy and Immunotherapy.”

Dr. HAY EDWARDS, chief, Clinical Manpower Branch, Division of Cancer Research Resources Centers, NCI, “For national leadership in activities designed to enhance educational programs in cancer for health professionals.”

DR. PIETRO M. GULLINO, chief, Laboratory of Pathophysiology, Division of Cancer Biology and Diagnosis, NCI, “For research accomplishments, particularly work on the pathophysiology of cancer, and contributions to the Breast Cancer Task Force.”

DR. IRVIN C. PLOUGH, associate director for Program Planning, Division of Cancer Biology and Diagnosis, NCI, “For role in effecting the orderly expansion of the research programs of the Division of Cancer Biology and Diagnosis, NCI, during a period of unprecedented growth.”

DR. MALVINA SCHWEIZER, special assistant, National Heart and Lung Institute, “For exceptional contributions to the National Heart and Lung Institute extramural programs in general and the program project and lung programs in particular.”

Accomplishments Recognized

DR. FREDERICK J. DE SERRES, chief, Environmental Mutagenesis Branch, National Institute of Environmental Health Sciences, “For outstanding accomplishments in development of the Environmental Mutagenesis Program and world-wide leadership in calling attention to the need for scientific research in environmental mutagenesis.”

DR. PHILLIP J. BAKER, acting head, Microbiology and Immunology Section, Laboratory of Microbial Immunity, National Institute of Allergy and Infectious Diseases, “For the co-discovery of suppressor T lymphocytes and for major contributions to scientific

(See AWARDS, Page 5)
Monograph Considers Research on Spinal Manipulative Therapy

A monograph on the research status of spinal manipulative therapy, including chiropractic, osteopathic, and medical approaches, has been issued by the National Institute of Neurological and Communicative Disorders and Stroke. The monograph is the result of a research workshop on this subject held at NIH Feb. 2-4, 1975. Participating in the workshop were 58 scientists and clinicians from 9 countries.

Sixteen participants were Doctors of Chiropractic; 24 were Doctors of Medicine; 7 were Doctors of Osteopathic Medicine, and 11 were basic scientists.

While the workshop did not address specific questions relating to the validity of chiropractic practices, it did provide a framework on which to proceed toward a definitive scientific evaluation of the whole field of spinal manipulative therapy, according to Dr. Murray Goldstein, conference chairman and director of Extramural Activities, NINCDS.

"The available scientific data do not demonstrate that spinal manipulation provides relief from pain, and sometimes a cure, or that it does not. But the scientific community now has the means to test these hypotheses. The workshop was an essential first step," Dr. Goldstein said.

The meeting was held in response to a directive from the Senate Appropriations Subcommittee (for the Departments of Labor and HEW) which noted that . . . "this would be an opportune time for an 'independent, unbiased' study of the fundamentals of the chiropractic profession."

Copies of the proceedings, entitled The Research Status of Spinal Manipulative Therapy, are available from NINCDS.
Commendation Medals

(Continued from Page 5)

Commendation medals will be presented to:

DR. HARMAR D. BRERETON, head, Radiation Medicine Section, Radiation Oncology Branch, NCI, "For organization of an outstanding training program which integrates radiation oncology, medical oncology, surgical pathology and other related disciplines."

DR. BRUCE A. CHABNER, assistant chief, Laboratory of Chemical Pharmacology, and head, Biochemical Pharmacology Section, Laboratory of Chemical Pharmacology, and senior investigator, Medicine Branch, NCI, "For outstanding performance of clinical and laboratory investigations of the pharmacology of several anti-tumor agents."

JEAN PAUL DAVIGNON, head, Clinical Drug Distribution Section, Division of Cancer Treatment, NCI, "For outstanding leadership in developing experimental drug formulations for clinical studies, and management of the clinical drug distribution activities of the Division of Cancer Treatment."

DR. ROBERT H. DEPUE, JR., assistant to the director, Division of Cancer Cause and Prevention, NCI, "For excellence in the development and review of research projects generated by the Division of Cancer Cause and Prevention, and the development of operating policy to achieve the overall Division objectives."

DR. JAMES E. HAMNER III, associate director for Intervention Programs, Division of Cancer Control and Rehabilitation, NCI, "For dedication and scientific capabilities in directing the activities of the Intervention Programs in the Division of Cancer Control and Rehabilitation."

DR. RONALD B. HERBERMAN, chief, Laboratory of Immunodiagnosis, Division of Cancer Biology and Diagnosis, NCI, "For research accomplishments in the field of tumor immunology and contributions to the NCI's collaborative research programs."

Innovative Studies Praised

DR. ROBERT N. HOOVER, head, Environmental Studies Section, Division of Cancer Cause and Prevention, NCI, "In recognition of innovative studies of high-risk communities in the U.S. which have provided new leads and opportunities for identifying previously unrecognized causes of cancer."

JOSEPH SCOTTO, biostatistician, Demography Section, Division of Cancer Cause and Prevention, NCI, "For distinctive contributions to the measurement of cancer incidence and dedication to studies of the economic and social impact of cancer."

DR. WILLIAM T. FRIEDEWALD, chief, Clinical Trials Branch, Division of Heart and Vascular Diseases, NHLI, "For effective organization of major clinical trials and initiation of the Aspirin Myocardial Infarction Study to determine effectiveness of aspirin in reducing total mortality in patients with myocardial infarction."

DR. PETER L. FROMMER, associate director for Cardiology Program, Division of Heart and Vascular Diseases, NHLI, "For coordination and direction of the Institute's diverse programs in cardiology."

DR. LEO H. VON EULER, deputy director, National Institute of General Medical Sciences, "In recognition of a continuing distinguished career in research administration and for demonstrating a remarkable degree of creativity, perceptiveness, balance, and integrity as Deputy Director and Acting Director, NIGMS."

DR. ROBERT K. GEROFF, microbiologist, Rocky Mountain Laboratory, NIAID, "For scientific achievements in devising sensitive tests for antibodies to various organisms and for leadership in developing an outstanding laboratory safety program."

DR. ALLEN P. KAPLAN, head, Allergic Diseases Section, Laboratory of Clinical Investigations, NIAID, "For organizing and directing NIAID's center for the study of allergic diseases and for outstanding research on the biochemical mechanisms of inflammation."

DR. JAMES D. MAC LOWRY, chief, Microbiology Service, CC, "For outstanding leadership in the Clinical Pathology Department and for exceptional capabilities in the field of antimicrobial agents and antibiotic sensitivity testing."

BARBARA A. MURPHY, chief, Social Work Department, CC, "For professional excellence and for the creation of a climate that encourages members of Social Work Department to develop innovative and flexible approaches to the CC social work programs."

LAMONT B. SMITH, assistant chief, Physical Therapy Service, CC, "For consistent and exceptionally high level of performance in the dual roles of education and delivery of care to Clinical Center patients."

Competence Outstanding

DR. FLOYD O. ATCHLEY, executive secretary, Cardiovascular and Renal Study Section, Division of Research Grants, "For outstanding competence, dedication and leadership in directing the review and scientific development activities of the Cardiovascular and Renal Study Section."

DR. PAUL D. FRAZIER, chief, Soft Tissue Stomatology and Nutrition Branch, NIDR, "For continued excellence and significant (See MEDALS, Page 7)
Dr. V. T. DeVita Receives Langer Award in Chicago

On June 6, Dr. Vincent T. De Vita, Jr., director of NCI's Division of Cancer Treatment, received the 1976 Esther Langer award, presented by the Ann Langer Cancer Research Foundation, a volunteer group affiliated with the University of Chicago Cancer Research Foundation.

The monetary award is presented annually to a distinguished cancer research scientist. Dr. DeVita frequently has been cited for his accomplishments in the therapy of Hodgkin's disease and non-Hodgkin's lymphomas. His laboratory research has concentrated on the effectiveness of anticancer drugs on growth rates of human cancer cells.

MEDALS

(Continued from Page 6)

Dr. Samuel Kakehashi, chief, Periodontal Diseases Program Branch, NIDR, "For continued excellence and valuable contributions in administering the Periodontal Diseases Program Branch."

Dr. Emil L. Bigg, special assistant for Dental Research Institutes and Centers, NIDR, "For continued superior performance and outstanding contributions in administering the Dental Research Institutes and Centers Program."

Dr. David A. Fuccillo (retired), formerly assistant chief, Infectious Diseases Branch, NIAID, "For unique contributions to clinical medical research and clinical medicine through innovative development of new serological diagnostic tests."

Dr. Robert A. Whitney, Jr., chief, Veterinary Resources Branch, Division of Research Services, "In recognition of outstanding leadership as chief, Veterinary Resources Branch, Division of Research Services, and keen awareness of quality animal care and support service needs throughout the NIH community."

The NIH Equal Employment Opportunity Achievement award of the year was presented to ELMER A. DYSON, Environmental Health Technician, Environmental Health Services Branch, Division of Research Services, "For outstanding efforts and contributions in improving human relations in the Division of Research Services and the NIH community."

An NIH Length-of-Service Award for 40 years was given to MARY D. BERTHA, chief, Labor Management Branch, DPM.

Cleveland's Singing Angels To Appear Here June 18

The Singing Angels, a 250-member youth chorus from Cleveland, will perform in the Masur Auditorium on Friday, June 18 at 8 p.m.

The Clinical Center Patient Activity Section is presenting the chorus. The bicentennial theme for the performance will be "Sing America." CC patients, their families, NIH employees, and guests are welcome.

Yale Scientists Recommend Two Tests For Diagnosing Infectious Mononucleosis

A 4-year study of a class of West Point cadets before, during, and after development of clinical and subclinical infectious mononucleosis has permitted critical evaluation of research on this disease.

Conducted by scientists from the WHO Serum Reference Bank of Yale University School of Medicine's department of epidemiology and public health, the study was partly supported by NIAID and NCI grants.

Infectious mononucleosis is characterized by intense formation of several types of antibody developing at different stages of the infection and persisting for weeks to years.

Antibody detection, necessary to diagnose and study the disease, requires blood sample collection over an extended period and the use of the test best suited for each evaluation.

Detect EBV Antibodies

In underdeveloped tropical countries, most children develop Epstein-Barr virus antibodies before the age of 10, and clinical symptoms of infectious mononucleosis are almost unknown.

Where socioeconomic conditions are higher, infection is often delayed, and symptoms, when they appear, are more severe.

The prime susceptible population for the disease in the U.S. is the 15-25 year age group, the victims often being college students.

Three heterophile antibody tests —the beef hemolysin test, the horse red blood cell test, and the sheep red blood cell test—plus a test specific for IgM antibody to the EBV (herpes-like virus believed to be the cause of infectious mononucleosis) were evaluated for specificity, sensitivity, and persistence of the antibody.

West Point Cadets Tested

Of the 1,401 cadets who entered West Point in 1969 and left in 1973, 964 arrived with EBV antibody, indicating prior clinical or subclinical infection. Of the 437 who had no EBV antibody, 53 subsequently developed the disease and another 129 developed EBV antibody without recognized mononucleosis.

Specificity, indicated by absence of EBV antibody before illness, was greatest with the beef hemolysin test. The EBV-specific IgM antibody test ranked next, the horse red blood cell test third, and the sheep red cell test a poor fourth.

In sensitivity and persistence studies of fully confirmed mononucleosis, the horse red blood cell test yielded 96 percent positive results, attained the highest geometric mean titer (1:1,906), and the antibody persisted for at least a year in 75 percent of the tested area.

The EBV-specific IgM antibody test was also highly sensitive, with 96.7 percent positive results, but titers were lower (1:14), the antibody disappeared rapidly, and the test is very difficult to perform.

The beef hemolysin test yielded only 85 percent positive results, the titer was 1:152, and antibody persisted about 3 months, but this test, under slightly different standards would probably show better results, the scientists said.

The sheep red blood cell test performed least satisfactorily, with only 80 percent diagnostic titers, a mean titer of 1:254, and very short persistence.

The scientists recommended its replacement by the horse red blood cell test for sensitivity and persistence, and the beef hemolysin test for specificity.

Dr. Alfred S. Evans, Dr. James C. Niederman, Linda C. Cenabre, Bernice West, and Virginia A. Richards reported their findings in the November 1975 Journal of Infectious Diseases.
Chlorinated hydrocarbon, caused a cancer response, according to whereas rats tested with the same form of liver cancer in mice, but the extent of human exposure to it. Trichloroethylene, also called trichloroethene, is one of a series of chlorinated hydrocarbons selected for carcinogenicity bioassay. The extent of possible human exposure to it is also a concern. Female mice given doses of TCE developed liver cancer in 23 percent (11 of 47) of the animals. Eight percent of low dose female mice developed the cancer. Only one hepatocellular carcinoma occurred among 80 female control mice.

### Rat Strain Differences

The lack of cancer response in rats may be attributed in part to the strain of rat used in the tests, according to the NCI scientists said. This strain, the Osborne-Mendel, is resistant to cancer induction by some chemicals, as was shown in a simultaneous test with carbon tetrachloride, a recognized animal carcinogen. Despite this species difference in cancer response, the NCI Report concluded that the TCE test clearly showed the compound induced hepatocellular carcinoma in mice.

The findings are considered definitive for animal studies and serve as a warning of possible carcinogenicity in humans. However, the extent of possible human risk cannot be predicted reliably on the basis of these studies alone. The NCI statement is concerned about substitution of chemicals U.S. GOVERNMENT PRINTING OFFICE: 1976 749-903/12


**Additional panel topics included**Early Warning by Dr. Farley Fisher of EPA, Epidemiological Data by Dr. Marvin A. Schneiderman of NCI, and Manpower Resources by Dr. Paul B. Hammond, University of Cincinnati Medical Center.

The final panel, “Will the problems of the past and the present help predict solutions for the information needs of 1976-1977?” included Mr. Knox, NTIS, Davis B. McCann, NLM, Dr. Warren Muir, Council on Environmental Quality, and Dr. Rose Gudry, Food and Drug Administration. The Proceedings of this Symposium will be made available to all registrants in approximately 6 months. Others wishing to obtain the published Proceedings may contact Dr. Cosmides at NLM.