

New Drug for Leukemia

West Berlin researchers reported use of a new drug, also used at the National Institutes of Health, Bethesda, Md., and in Hungary for treatment of humans suffering from leukemia. The drug is vincalukoblastine, an alkaloid obtained from an extract of *vinca rosea* linn.

Antitumor Power

Dr. E. M. Vermel of the Institute of Medicinal Plants, Moscow, told about 500 plant species that had been studied with the result that some of them are believed to possess antitumor power.

The theory of the treatment is that tumor growth is related to food, which for animals consists primarily of plant products. Growth-stimulating substances called auxins, as well as substances that retard growth (anti-auxins), play an important part in the life of plants.

Cancer Control Discussed

Cancer control was discussed by Dr. Murray Copeland of the University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, who told of the need for a uniform standard of cancer appraisal. Dr. M. V. Danilenko and his co-workers in Vinnitsa, USSR, said seminars to increase the knowledge of all medical staff concerning cancer are attended by 250 doctors and 1,000 workers with secondary medical education annually. One of the leading aims in the USSR is to achieve annual surveys and check-ups for cancer.

New treatment for cancer and long-term results of treatment by surgery, radiation and drugs showed improved survival rates almost universally. Occupational cancers and other environmental causes were discussed, and Dr. W. C. Hueper of the National Cancer Institute, Bethesda, Md., recommended an international clearing-house within the framework of the World Health Organization.

The International Union Against Cancer, which sponsors the cancer congresses, is composed of 87 organizations in 62 countries and collaborates with the World Health Organization. It is non-governmental but receives its largest support from the National Institutes of Health of the United States.

The new president inaugurated at the close of the conference is Dr. Alexander Haddow of the Chester Beatty Institute for Cancer Research, London, England.

• Science News Letter, 82:67 August 4, 1962

AUTOMATION

Electronic Automation For Cancer Drug Tested

► ELECTRONIC automation is increasing the accuracy and speed of analyzing cancer-combating drugs at the University of Colorado, Boulder. Crystal analysis diffraction equipment is hitched to punched tape that can be fed into a computer for processing.

• Science News Letter, 82:68 August 4, 1962

MEDICINE

Older Persons Suffer More From Heart Disease

► MORE older men and women are hospitalized for heart disease than for any other nonsurgical condition, the statisticians of Metropolitan Life Insurance Company report.

A study of the company's retired personnel shows also that the hospital admission rate for heart disease rises with advance in age. In 1959-60, the rate for retired men increased from 18 per 1,000 under age 65 to 36 per 1,000 at ages 75 and over. The relative frequency of the disease was considerably greater for the men than for the retired women at every age group. Coronary artery disease accounted for about half of all the heart disease cases among both men and women.

Diseases of the digestive system ranked second as a cause of hospitalization for non-surgical conditions among the retired personnel in both sexes. Other relatively common illnesses were respiratory diseases and cerebral hemorrhage.

Mental disease accounted for a very small proportion of the cases in this experience but was responsible for long periods of hospitalization. Among the retired men, for example, the average hospital stay for psychoneuroses and psychoses increased from 40 days per case at ages 65-74 to 130 days at ages 75 and over.

• Science News Letter, 82:68 August 4, 1962

MEDICINE

More Premature Births Among Smoking Mothers

► PREMATURE BIRTHS—an important cause of brain damage and death—occur more frequently among mothers who smoke than among non-smokers, a study by the Public Health Service has confirmed.

Birth weight is reduced with increased smoking, the nationwide study of 23,000 expectant mothers and their babies showed.

The study also showed that prematurity, stillbirths and brain damage are linked with some previously unsuspected events of pregnancy, such as Asian flu and vaginal infection. More than 40% of a group of study infants diagnosed as abnormal at the eight-month psychological examination had suffered breathing difficulties at or soon after birth.

When a mother has Asian flu early in pregnancy, the infection may affect the unborn child. No flu symptoms were present in 40% of the cases and diagnosis could be made by blood test only.

High rates of prematurity and infant death were found to be associated with diagnosis suggesting inflammation of the placenta, fetal membranes, and umbilical cord.

The findings are the first results of a long-range project, according to Dr. Richard L. Masland, director of the National Institute of Neurological Diseases and Blindness.

• Science News Letter, 82:68 August 4, 1962

Do You Know?

Current findings tend to challenge a long held assumption that there are basic and absolute differences in the vital *chemistry* of normal and tumor cells.

Trachoma is one of the most widespread infections in the world today affecting an estimated 15% of the population of the earth, and is a major cause of blindness in Asia, the Middle East and Africa.

Euclid's "*Elements*," written in 300 B.C., was used as a textbook in essentially its original form until about 75 or 100 years ago.

• Science News Letter, 82:68 August 4, 1962

SCIENCE NEWS LETTER

VOL. 82 AUGUST 4, 1962 NO. 5

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage. Change of address: Three weeks notice is required. Please state exactly how magazine is addressed. Include postal zone number.

Copyright © 1962 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also produces and distributes THINGS of science (monthly), produces and publishes books, and conducts the National Science Youth Program.

Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U.S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member of Audit Bureau of Circulation.



SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: William W. Rubey, University of California at Los Angeles; Wallace R. Brode, Washington, D. C. (Treasurer); Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution (President); John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Ralph B. Curry, Flint Journal. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Ludwell Denny, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio (Vice President and Chairman of Executive Committee).

Staff—Director: Watson Davis. Assistant Director: Dorothy Schriver. Writers: Ann Ewing, Lillian Levy, Faye Marley, Vincent Marteka, William E. Small, Marjorie Van de Water, Judy Viorst. Science Youth Division: Joseph H. Kraus, Leslie Watkins. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Conferences: Jane Marye. Librarian: Margit Friedrich. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562, Washington, D. C.