

further information concerning the chemical identification of pyrexin.

The foregoing biochemical units present in exudates help in explaining, in part at least, some of the major sequences in the development of inflammation. The

altered chemistry of the injured cell liberates various common denominators, such as described above, into the exudate. It is these biochemical units, in turn, that account quite adequately for the fundamentally stereotyped reaction of inflammation.

## SCIENTIFIC EVENTS

### AN "AIR AGE" MAP OF THE WORLD

THE aeronautical correspondent of *The Times*, London, calls attention to the fact that the British Overseas Airways Corporation has issued a new type of world map, designed to "re-teach" geography in a form more suited to the coming "Air Age."

It points out that because the earth is a sphere and maps of the world are flat, every type of map gives a distorted picture. On a Mercator projection, now commonly used for world maps, the distortion increases according to the distance from the equator. For instance, Greenland is shown as being about the same size as South America, whereas its area is only about one tenth of that continent. Distances between widely separated places also become exaggerated, particularly in high latitudes.

At present, maps drawn on the Mercator projection are used for both sea and air navigation, but whereas ships must follow tracks which may involve long detours to avoid land masses, the aeroplane can follow the shortest route—a straight line over the earth's surface. Now that airliners are being designed to fly non-stop over long distances, a new type of map is needed which will enable the intending passenger to read accurately the distance he has to cover.

To indicate the distance from London of places all over the world which will be served by British air services, the British Overseas Airways Corporation has prepared what is known as an azimuthal equidistant projection map centered on London. Straight lines drawn from London to any other point on the earth's surface will show accurately the distances separating them, though not necessarily the route which will be followed.

On the azimuthal equidistant map a straight line indicates a Great Circle course, but such a direct route is not likely to be followed by air services in the years immediately after the war unless it happens to serve big centers of population or important business areas. Such routes, in general, will not be used for air services until there have been further developments in the speed, range and economics of long-distance flying.

The British Overseas Airways Corporation's object in producing an "Air Age" map now is to encourage the teaching of this new conception of geography in schools, so that boys and girls will grow up to be air-minded.

### PILOT TEACHING COURSES IN CANCER

THE need for the immediate establishment of "pilot teaching courses" in cancer for third and fourth year medical students was unanimously agreed upon by the National Advisory Cancer Council, which met on April 7 at the National Cancer Institute of the U. S. Public Health Service.

The council, headed by Surgeon General Thomas Parran, stated that definite emphasis should be placed on the early diagnosis of cancer which is now the second cause of death in the country. It was pointed out that the general practitioner is the "first line of defense" in cancer control and the courses should be "slanted" toward making graduating medical students "cancer conscious."

It is planned to stimulate the setting up of "pilot courses" with the working curricular committees of leading medical schools throughout the country. This will be done by the council joining hands with other foundations interested in cancer control and research.

Long-range postwar planning of cancer research programs was also considered and it was agreed that support for research programs should be guaranteed for periods ranging from five to ten years, instead of one year at a time, as has been done in the past.

In order to meet increasing demands for cancer specialists Dr. Parran explained that the Army has offered full cooperation in channeling news of Public Health Service fellowships in cancer to physicians in the armed forces possessing cancer experience. Dr. Parran said, "Of course, these men will be entitled to additional training under the GI Bill of Rights and when this is exhausted they can avail themselves of our fellowships."

Another topic discussed was the possibility of developing cancer specialists within each state to serve as consultants to physicians in rural and urban areas.

Three grants-in-aid for cancer research were approved at the meeting. They were made for one year to the School of Medicine of Washington University, St. Louis, for photometric histochemical study of tumors—\$5,000; Barnard Free Skin and Cancer Hospital, St. Louis, for one year—\$5,000 for the study of the integration of changes in experimental carcinogenesis; an additional grant of \$5,000 was made for two years to the Barnard Free Skin and Cancer Hospital for the measurement of carcinogenicity of residue oils.



Dr. R. R. Spencer, chief of the National Cancer Institute, presented a report on the work of the institute since the last council meeting. Two new council members, Dr. Frank E. Adair, president of the American Cancer Society, Inc., and a staff member of the Memorial Hospital for the Treatment of Cancer and Allied Diseases, and Dr. A. C. Ivy, professor of physiology at the Medical School of Northwestern University, were present for the first time in their official capacities.

Other members present were Dr. James B. Murphy, of the Rockefeller Institute for Medical Research, New York; Dr. George M. Smith, of the School of Medicine of Yale University, and Dr. Sherwood Moore, director of the Mallinckrodt Institute of Radiology at St. Louis.

### THE SUGAR RESEARCH FOUNDATION

THE following grants are announced by the Sugar Research Foundation, an association of growers and processors of cane and beet sugar, which is sponsoring research into new industrial and nutritional uses for sugar. Dr. Robert C. Hockett is the scientific director. The awards amount to \$45,400, bringing to the sum of more than \$300,000 the funds that the foundation has made available to science for this purpose. Those to whom the grants are made are:

Dr. Pauline B. Mack and associates of the Ellen H. Richards Institute, Pennsylvania State College, \$20,000 for one year, to measure the effect of high and low sugar-containing diets upon the health, growth and physical condition of children.

Dr. Rachmiel Levine, director of metabolic and endocrine research at the Michael Reese Hospital, Chicago, \$7,500 for one year, to study the physiological behavior of levulose, a sugar produced by the inversion of ordinary sugar.

Professor I. L. Chaikoff, associate professor of physiology at the University of California, \$7,400 for two years, to study the protective action of sugar against cirrhosis of the liver.

The Natural Resources Research Institute of the University of Wyoming, \$4,000 for one year, to investigate utilization of pectin from the pulp of sugar beets and to study derivatives of beet pectin.

Dr. Dora Stern, literature consultant, \$4,000 for one year, to devise a system for classifying sugar derivatives, and to compile a list of new derivatives discovered since 1930.

Dr. I. M. Rabinowitch, of the Medical School of McGill University, Montreal, \$2,500 for one year, to study further the body's relative rate of absorption of sucrose, dextrose and levulose.

Members of the foundation include growers and processors of beet and cane sugar from the continental United States, Hawaii, Puerto Rico, Cuba, Canada and Haiti. Joseph F. Abbott, of New York, is president.

### THE EIGHTH ANNUAL AMERICAN DESIGN AWARDS LUNCHEON

AT the eighth annual American Design Awards luncheon on April 19, tribute was paid to the thousands of civilian scientific men who were mobilized for war and without whose achievements the war could not have been waged. An award of \$25,000 was presented by Walter Hoving, president of Lord and Taylor, to the National Academy of Sciences. Dr. Frank B. Jewett, president of the academy, accepted the award.

Six distinguished men of science were honored individually for the great contributions they and the organizations under their leadership have made to the war effort. It was at the request of these men that the entire sum of \$25,000 was presented to the academy as the body which represents all scientific endeavor in America. They are:

Dr. Vannevar Bush, director of the Office of Scientific Research and Development.

Dr. James B. Conant, chairman of the National Defense Research Committee.

Dr. Karl T. Compton, chief of the field service for the National Defense Committee.

Dr. A. Newton Richards, chairman of the Committee for Medical Research.

Dr. Jerome C. Hunsaker, chairman of the National Advisory Committee for Aeronautics.

Dr. Ross G. Harrison, chairman of the National Research Council.

Tribute was also paid to Major General William F. Tompkins, director of the Special Planning Division of the War Department, and Rear Admiral Julius A. Furer, co-ordinator of research and development of the Navy Department, who insured the unbroken flow of the materials of war from the laboratories to the front lines.

Speakers at the luncheon included Undersecretary of War Robert P. Patterson, who expressed the deep-felt gratitude of the armed forces to the civilian scientists who aided in the prosecution of the war; and Dr. Karl T. Compton, president of the Massachusetts Institute of Technology and chairman of the Research Board for National Security, who asserted that scientific research into new weapons of warfare must continue after the war in order that American liberty shall remain secure.

Guests of honor at the luncheon included Brigadier General Georges F. Doriot, Vice Admiral Leary, Gerard Swope, Mrs. Lytle Hull, the former Nobel prize winner, Dr. Clinton J. Davisson, Harvey N. Davis, Robert J. McKim, Mrs. George B. St. George, Mrs. George F. Baker, Lieutenant General George Grunert, Mrs. Winthrop Aldrich, Thomas J. Watson, Miss Anne Morgan and William Church Osborn.