Cancer Incidence Report Notes Some Significant Rate Changes in U.S.

A preliminary report on cancer incidence in 1969 covering eight major metropolitan areas and one entire state indicates some significant changes of rates in the United States since the last study was conducted in 1947.

In the report issued by the National Cancer Institute’s Biometry Branch, statisticians caution that the population and geographic areas included in the two studies are somewhat different.

However, certain important trends are evident:
- The overall incidence of cancer in men is increasing, a trend particularly marked among blacks, while in women it is decreasing.
- The incidence of lung cancer has doubled in both men and women of both races.
- The incidence of cancer in blacks is substantially higher than in whites.

(See CANCER REPORT, Page 6)

Dr. David K. Johnson Heads DRS Experimental Surgery Section in Lab Aids Branch

Dr. David K. Johnson has been named chief of the Experimental Surgery and Clinical Medicine Section, Laboratory Aids Branch, Division of Research Services. This section provides experimental surgery facilities and staff assistance, special operative procedures, and radiographic facilities for NIH investigators.

Dog, cat, and primate long-term holding facilities are available, along with physiological sampling and collection of specimens. The section is also responsible for primate breeding activities.

Prior to his appointment as a PHS Commissioned Officer, Dr. Johnson held the rank of captain in the U.S. Air Force.

He was assigned to the School of Aerospace Medicine, Brooks Air Force Base, Tex., as chief of the Clinical Laboratory Branch

HEW Sickle Cell Committee Recommends Allocation of Funds to Expand Program

A program for expanding Federal activities directed against sickle cell disease, in which both community-service aspects and research will receive emphasis, has been recommended by the HEW Sickle Cell Disease Advisory Committee in their second report to Secretary Elliot L. Richardson.

Sickle cell disease, a painful and life-shortening inherited disorder found almost exclusively among black people, is a major health problem here and abroad.

The committee, named by Mr. Richardson to advise on Program objectives and priorities which will involve NIH, HSMHA, and other Federal agencies, met here for the second time Oct. 7-8.

Mrs. Aikens is Chairman

The recommendations of the committee, which is chaired by Ruth L. Aikens, associate director for Health, National Urban League, N.Y.C., are concerned with goals and functional components of the program and allocation of the additional $5 million recently targeted by President Nixon for sickle cell disease.

The committee recommended:
- That $2.5 million be allocated for the establishment of up to five comprehensive research and community service centers.
- Each center would be organized around ongoing programs in sickle cell disease, and would bridge the gap between fundamental research, clinical application, and community service.
- That $1 million be allocated for the establishment of up to 20 model Screening and Education Clinics in various regions of the country.
- That these clinics would be for the purposes of 1) screening, 2) definitive diagnosis of SCD, 3) education of the population at risk and of health personnel, 4) referral of patients with SCD to community service centers.

(See SICKLE CELL, Page 7)

Dr. McCrumb Appointed FIC Special Assistant

Dr. Fred R. McCrumb, Jr., was recently appointed special assistant to the Director of the Fogarty International Center, Dr. Milo D. Leavitt.

Dr. McCrumb’s primary assignment will be to develop a program of workshops and conferences concerned with the preventive aspects of major human health problems.

Dr. McCrumb has specialized in infectious diseases and tropical medicine.

Conducted Plague Studies

During service with the armed forces overseas, he carried out field research on plague at the Institut Pasteur de Tananarive, Madagascar.

Also, as Commanding Officer of the U.S. Army Medical Research Unit, Institute for Medical Research, Kuala Lumpur, Federation of Malaya, he conducted studies on diseases of military importance in Southeast Asia.

Between 1962 and 1967, Dr. McCrumb was professor of International Medicine.

(See DR. McCRUMB, Page 6)
Open Season for Fed'1 Employees Health Benefits Program to Start November 15

An "Open Season" for the Federal Employees Health Benefits Program will start next Monday, Nov. 15, and terminate on Dec. 31, instead of the previously announced closing date of Nov. 30.

During this period, eligible employees may enroll, and employees already enrolled may change their plan, option, type of enrollment, or any combination of these.

Three general plans are available: Government-wide Service Benefit Plan (Blue Cross-Blue Shield), Government-wide Indemnity Benefit Plan (Aetna Life Insurance Company), and Group Health Association Plan of Washington, D.C.

Other Plans Available

In addition, the following five plans are available to all Federal employees who are members or who become members of the sponsoring organizations:

- American Federation of Government Employees Health Benefit Plan; Alliance Health Benefit Plan; American Postal Workers Union Plan; Government Employees Hospital Association Benefit Plan, and Mail Handlers Benefit Plan.

- For eligible employees residing within the prescribed geographical area, enrollment is available in group practice prepayment plan, Columbia Medical Plan of Columbia, Md.

- For the contract year which begins this January, premiums for all plans will be the same as in the current 1971 plan brochure. Premiums for many plans will be increased January 1972.

- Because of President Nixon's Economic Stabilization Program an information pamphlet, under preparation at the Civil Service Commission, will be delayed until later this month. A desk to desk distribution will be made as soon as the pamphlet becomes available.

- Registration procedures will also be announced, and assistants will answer questions and help employees complete forms. Personnel offices will carry additional forms and brochures.

The "Open Season" also applies to annuitants enrolled in the program. The CSC will mail information directly to them.

Charles E. Leasure, Jr., has been appointed administrative officer for the Chemotherapy Program, National Cancer Institute. He came to NIH in 1965, joining the Personnel Management Branch, and transferred to NCI in 1966.
Dr. Paul Dudley White, Exercise Advocate, Speaks Nov. 18 About His Visit to China

Dr. Paul Dudley White, noted heart specialist, will discuss his recent visit to the Chinese mainland on Thursday, Nov. 18, at 7:30 p.m. in the Jack Masur Auditorium, Clinical Center.

His talk will coincide with the National Advisory Heart and Lung Council meetings at NIH.

This past September, Dr. White, and other doctors from the United States, were guests of the Chinese Medical Association during their 12-day visit.

Dr. White, a medical pioneer whose career has spanned an historic era in cardiology, has been active for over 60 years in research, teaching, clinical medicine and public service.

His scientific writings include more than 700 papers and nine books, and many of them are considered classics in the cardiovascular field. Recently, his autobiography, My Life and Medicine, was published.

Dr. White has helped plan and direct Federal heart programs from the time that the National Heart and Lung Institute was first conceived.

He was Chief Medical Advisor to the National Heart Institute from its inception in 1948 through 1955.

When asked to serve in 1948 as Executive of the newly formed National Advisory Heart Council, Dr. White accepted quite reluctantly, admitting that he was “like most New Englanders, suspicious of Government activity in civilian fields.

“To my surprise,” he states in his new autobiography, “I was quickly convinced that it was a duty and an opportunity, a really wonderful opportunity, in which I should become involved. . . .”

“Thus I became Executive Director of the National Advisory Heart Council for the next four years, and at the end of that period served for another two, and

NIADD’s Extramural Programs scored a touchdown in its Combined Federal Campaign. Conducting the CFC program with its own posters, the Westwood office has already reached its 100 percent participation goal. A $25 Savings Bond—donated for a drawing—was won by Jo Anne Steeney, an EP program analyst.

R&W Women’s Golf Ass’n Awards Prizes at Banquet

The R&W Women’s Golf Association at NIH recently met for their annual banquet and presentation of prizes—merchandise certificates—to the golfers winning the highest percentage of games in their group.

The winners were Jean Russell, Shirley Everts, and Jeanne Wain-ton.

Registration for the Association usually begins in late winter. During the spring, once their handicap is established, each golfer is assigned to a group and must play a minimum of four matches to qualify for a prize.

Matches are played at the Falls Road Golf Course in Potomac, Md.
Electronic Schiotz tonography is performed by nurse-technician Lessie McCain. This continuous measurement of the ease with which fluid leaves the eye is an important procedure in the diagnosis of glaucoma.

Renovated and equipped Eye Clinic For Vision Research

The completely renovated and newly equipped Eye Clinic of the National Eye Institute is the foundation for the Institute’s expanded clinical vision research program.

The Clinic permits thorough diagnostic evaluation of NEI patients, as well as those referred for consultation by other Institutes ranging from simple tests of visual acuity to sophisticated measurements of retinal function and ocular blood flow.

The Eye Clinic has been entirely redesigned to handle a greater number of pa-
Newly Equipped
ms Foundation
earch Program

Using the electroretinograph, Mary J. Hoff views an oscilloscope presentation of the electrical response of a patient's eye to a blinking light.

In electroretinography, a specially designed contact lens with implanted electrodes picks up electrical impulses from the light-stimulated retina.

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In electroretinography, a specially designed contact lens with implanted electrodes picks up electrical impulses from the light-stimulated retina.

A special technique to measure pressure in the episcleral veins, developed by NEI Director Carl Kupfer, is shedding light on the normal and diseased mechanisms of intraocular flow, an important facet of glaucoma research.

Dr. Donald Bergsma measures visual acuity while occluding the patient's left eye.

Dr. Marquardt uses the indirect ophthalmoscope to obtain a brilliantly illuminated stereoscopic image of the entire back of the eye, which is useful in the diagnosis of various conditions such as retinal detachment.

ntients for studies of glaucoma, uveitis, genetic disorders of the eye, cataract, corneal disease, vascular conditions, and eye tumors.

Because of the close relationship between the Eye Clinic staff and those of the other research Institutes, an informal Open House will be held at the Clinic (Bldg. 10, Room 1D-04) tomorrow, Nov. 10, between 2 and 5 p.m.

All NIH clinical research personnel are invited along with other interested NIH employees. Refreshments will be served.
Dr. William Raub Serves On WHO's Committee Of Computer Experts

Dr. Raub recently served on a WHO committee which stressed the importance of medical computing as vital in dealing with world health problems.

When the World Health Organization recently held its 1971 Consultation on Medical Computing in Geneva, Switzerland, Dr. William F. Raub was the only American invited to serve on its Advisers Committee.

Other medical computer experts on the WHO committee were from France, Sweden, West Germany, and England.

Dr. Raub is chief of the Biotechnology Resources Branch, Division of Research Resources.

The committee on which he served recommended the establishment of a Medical Computer Information Center through the resources of WHO.

"Of late, countries all over the world have been requesting up-to-date information and data on medical computer systems," Dr. Raub reported.

F-T. Raub said: "We have the broadest base of experience in biomedical computing of any country," he asserted.

"Our systems for statistical applications, hospital information, research support, signal processing and graphic display are at the forefront of the advanced state-of-the-art."

DR. MCCRUMB

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national Medicine and Director of the University of Maryland's Institute of International Medicine and the Pakistan Medical Research Center in Lahore.

Since 1967, he was professor of International Medicine, University of Maryland School of Medicine, engaged in studies on immunity in smallpox.

Dr. McCrumb served as consultant to DBS from 1960 to 1963, and as a member of the Virology and Rickettsiology Study Section, NIAID, from 1963 to 1965.

Radiation, Chemotherapy and Statistics Discussed at Hodgkin's Disease Meeting

National Cancer Institute researchers were among the speakers at a symposium for practicing physicians on diagnosing and treating Hodgkin's disease.

The meeting, held in St. Louis recently, was sponsored by the Cancer Clinical Investigation Review Committee and the Clinical Investigations Branch. Members of the CIRC also spoke.

The current status of radiotherapy, chemotherapy, and combination therapy and their application to disease stage and clinical condition of the patient were discussed, as well as immunologic considerations.

At a chemotherapy session chaired by Dr. Paul Carbone, chief of the NCI Medicine Branch, Dr. George P. Canellos, NCI Solid Tumor Service, reported that four times the rate of complete remission (disappearance of all evidence of cancer) usually achieved in advanced Hodgkin's disease has occurred in a group of 43 patients treated with a four-drug combination at the Clinical Center between 1964 and 1967.

Drugs Listed

The drugs are vincristine, procarbazine, prednisone, and an alkylating agent—either nitrogen mustard or cyclophosphamide. Eighty-one percent of the group responded with a complete remission; 58 percent of the patients are still alive with no apparent sign of the disease.

Of the complete responders, 69 percent are still living without evidence of cancer, suggesting that complete response to initial combination drug therapy may forecast long-term survival.

In reporting the results of a 7-year study of 164 patients with Hodgkin's disease at the CC, Dr. Ralph Johnson, chief, NCI Radiation Branch, stated that after prophylactic radiation treatment over 50 percent of a group of patients whose disease was diagnosed at an early stage have survived for at least 5 years.

The study demonstrated that best survival and cure rates resulted only when radiation therapy was given both to detectably diseased lymph nodes and to all other major regions of potential (although undetectable) involvement.

Lillian M. Axtell, NCI Biometry Branch, explained that statistical methods applied to factors affect his chance of surviving if he received appropriate treatment, Dr. Robert C. Young, NCI Solid Tumor Service, reported.

Data Analyzed

In a study of approximately 100 previously untreated patients representing all four stages of Hodgkin's disease, long-term data were analyzed by him and his colleagues.

The data refute the results of previous short-term studies which indicated a correlation between the length of survival and a patient's response to immunologic tests that measure reactions to foreign substances.

Dr. Stephen K. Carter, chief, Cancer Therapy Evaluation Branch, gave a review of "Single Agent Therapy of Hodgkin's Disease," and Dr. Carbone reported on "Considerations Relating to Management of Patients with Non-Hodgkin's Lymphoma."

Kalberer, Cavanaugh Visit Five European Countries

During a month-long tour of cancer facilities in five countries, Drs. John T. Kalberer, Jr. and Patrick Cavanaugh, will meet with Ministers of Health in Romania, Yugoslavia, Hungary, Czechoslovakia, and Poland.

Dr. Kalberer is special assistant to the associate director for Extramural Activities, National Cancer Institute, and Dr.

CANCER REPORT

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in whites, a difference particularly large between black and white men.

New cancers diagnosed totaled 61,400 in this specific population during 1969.

When adjusted to the age distribution in the U.S., the incidence rate is 300 new cancers per 100,000 persons.

Generalized for the entire population, this rate indicates that 610,000 new cancers currently are diagnosed each year.

Male Rate Increases

The general rate among men increased from 280 in 1947 to 304 per 100,000 persons in 1969, while the rate among women decreased from 294 to 256 cancers.

The increase among men is due largely to the increase in cancers of the prostate and lung and a lesser increase in cancer of the colon.

The overall decrease in women is due to a drop in cancer of the uterine cervix, stomach, and rectum.

Lung cancer in women increased from 6 to 12 cancers per 100,000 persons between 1947 and 1969.

Planned for completion during 1973, the Third National Cancer Survey will analyze statistics for a 3-year period, 1969 through 1971, in eight cities, two states, and Puerto Rico.

Copies of the short preliminary report for 1969 will be available for distribution in the near future.

Eighteen Scientific Counselors and Attaches from 15 countries visited NIH Oct. 20. Following a luncheon at the Fogarty International Center's Stone House, they were welcomed by Dr. Robert Q. Marston, NIH Director, and Dr. Milo D. Leavitt, FIC Director. Later, they toured the Biomedical Engineering and Instrumentation Branch, DRS, and the Division of Computer Research and Technology.
Clot Stabilizing Enzyme Is Topic of Conference In New York, Nov. 18-19

Drs. Koloman Laki and J. W. Hampton will chair a New York Academy of Sciences Conference on the Biological Role of the Clot Stabilizing Enzyme (Transglutaminase, Factor XIII) in New York City on Nov. 18-19.

Dr. Laki is chief of the Laboratory of Biophysical Chemistry, National Institute of Arthritis and Metabolic Diseases; Dr. Hampton is on the staff of the Harvard Medical Research Foundation, Oklahoma City.

The conference is supported in part by the Division of Research Grants.

The clot stabilizing enzyme is an important, fairly recent discovery, and is involved in hemostasis, wound healing, and atherosclerosis.

Other NIH investigators on the program are: Judith A. Farrell and Dr. Jules A. Glader, NIAMD; Dr. John S. Finlayson, DBS; Sidney T. Yaney, Jr., NCI; and Dr. Harry H. Cohen, Dr. John E. Folk, NIDR; Dr. Yumiko Nagai, Marjorie P. Peyton, and Dr. John J. Pisano, NNIH.

On the first day of the conference, the NIH color motion picture, “To Seek, To Teach, To Heal,” will be shown.

**SICKLE CELL**

(Continued from Page 1)

appropriate sources of therapy and followup care, and 5) acquisition of detailed data on methodological matters.

- That $1.5 million be allocated for basic and applied biomedical research into the nature and treatment of sickle cell disease.
- The committee further recommended:

**Information Needed**

- That educational and informational materials be prepared, tested, and made available through a centralized clearing house for sickle cell disease information.
- That training of black physicians, scientists, and allied health personnel in all aspects of sickle cell disease be encouraged.
- That the Department of Defense screen all black recruits for sickle cell disease.
- That a survey of Federal programs be conducted for the purpose of identifying those that offer potential for assisting the Sickle Cell Disease Program in achieving its goals.

In his February health message to Congress, President Nixon identified sickle cell anemia as a high-priority target and called for a $5 million increase in Federal expenditures on the disease during the current fiscal year.

Dr. John Sherman (c), NIH Deputy Director, explains the role of the scientist administrator at a recent seminar designed to give an in-depth profile and understanding of NIH, Dr. Ronald Lament-Hovers (R), NIH Associate Director for Research and Training, and Dr. Anthony Bruno, NCI assistant director, sponsor the Staff Training-Extramural Programs monthly workshops.

**Dr. Graykowski Named Chief of Oral Medicine, Surgery Branch, NIDR**

Dr. Edward A. Graykowski has been appointed chief of the Oral Medicine and Surgery Branch of the National Institute of Dental Research.

He succeeds Dr. George E. Garrington, the Dental Institute’s deputy director for Intramural Research (Clinical Investigations), who has been acting chief of the Branch.

Dr. Graykowski, an oral surgeon whose clinical research has focused on the etiology and treatment of aphthous stomatitis, has served for the past 5 years as Medical Director of the NIDR Unit at the PHS Hospital, San Francisco.

After earning his D.D.S. and M.D. degrees from Marquette University, Dr. Graykowski held several positions as an oral surgeon with the Air Force.

In 1961 he joined the staff of NIDR.

The National Heart and Lung Institute was assigned responsibility for coordinating the joint efforts of government agencies, and Dr. Robert L. Ringer, deputy director, NHLI, was designated coordinator of the SCD Program.

The NHLI appropriation contains the FY 1972 funds earmarked for this special program, but some of these funds may be made available to other agencies to carry out part of the program.

The Sickle Cell Disease Advisory Committee is composed of 11 distinguished professional and lay leaders especially knowledgeable about the problems of sickle cell disease or active in black community programs.

The disease, the most common inherited disorder in the U. S., is believed to be present in more than 2 million black U.S. citizens.

Current methods of treatment are aimed primarily at alleviating the pain.

However, new forms of treatment may make possible reversal of the sickling process, thereby shortening or even preventing the sickle cell crises and the resultant tissue damage. These must undergo further development.

**Dr. H.S. Posner Discusses Prenatal Development**

"Protection of Prenatal Development," was discussed by Dr. Herbert S. Posner at the recent Ninth National Junior Science and Humanities Symposium held at the U.S. Military Academy, West Point, N.Y.

Dr. Posner is a pharmacologist in the Cell Biology Branch, National Institute of Environmental Health Sciences, Research Triangle Park, N.C.

The symposium, sponsored by the Army Research Office in Durham, N.C., is held at West Point and Research Triangle Park on alternate years.

Dr. Posner explained that approximately 2.5 to 3 percent of infants have a malformation at birth.

The incidence may be as high as 8 percent if special tests and minor anomalies are included.

Problems now related to genetic and environmental factors or genetic predisposition made manifest by an environmental influence.

Aims of current studies are:

- Safety testing — attempt to identify problem areas before they arise.
- Diagnosis — suggest either abortion under specific circumstances or allow therapeutic intervention where possible, and
- Prevention intervention — control of interacting factors to prevent abnormal development under a variety of conditions.

**Dr. Bernardo Houssay Dies; Long-Time NIAMD Grantee Was Nobel Prize Winner**

Dr. Bernardo A. Houssay, the first South American scientist to win the Nobel Prize and a long-time grantee of the National Institute of Arthritis and Metabolic Diseases, died in Buenos Aires, Sept. 21.

In 1947 Dr. Houssay won the Nobel Prize for research on the role of pituitary hormones in sugar metabolism.

He held three different research grants from NIAMD, between 1940 and 1964, concerning the role of endocrine glands in metabolic and pathologic conditions of diabetes and hypertension.

Dr. Houssay was honorary president of Argentina’s National Council for Scientific and Technological Research, the country’s principal scientific institution, until his death.
Dr. Louis Miller Heads NIAID Malaria Program

Dr. Louis H. Miller, formerly associate professor of Tropical Medicine at Columbia University's College of Physicians and Surgeons, has been named to head a malaria research program in the Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases.

- He will conduct research on the red blood cell membrane as it is affected by malaria infections.
- He will plan and direct research in cooperation with the Federal Bureau of Prisons, Atlanta.
- He will coordinate NIAID's malaria research with that done by the Laboratory's field station in Chambly, Ga., and work done overseas.

Dr. Miller received his B.S. degree from Haverford College in 1956, his M.D. degree from Washington University School of Medicine in 1960, and his M.S. degree from Columbia University in 1964. From 1965 to 1967, he was with the U.S. Army Medical Corps at the SEATO Research Laboratory in Thailand. He became assistant professor of Tropical Medicine at the College of Physicians and Surgeons. Dr. Miller also served as assistant parasitologist for Columbia-Presbyterian Medical Center from 1968 to 1971.

Patent Branch Institutes New Programs To Stimulate Development of Inventions

Through a new program instituted by the Patent Branch, Division of Business and Administrative Law, HEW Office of General Counsel, inventors will receive a framed patent display.

The certificate includes a reproduction of part of the patent document and acknowledgment of the inventor's contribution with the Department seal attached.

"This program gives the Government employee recognition for his invention which he may not otherwise get," explained Norman J. Latker, who heads the Patent Branch.

Another new policy permits exclusive licensing of Department-owned inventions in order to create an incentive for their further development and marketing.

An exclusive license acts as a stimulus to attract risk capital for the development and marketing of inventions owned by the Department which otherwise might never reach the public.

Drugs Require Testing

This is particularly true of drugs which require extensive testing and evaluation before they can be marketed.

Previously, the Department granted only non-exclusive licenses to its patents, which permitted all licensees to make, use, and sell the inventions.

It was found that non-exclusive licenses did not always provide sufficient incentive to induce private capital to develop and market inventions.

The new licensing policy means that the Department is involved in patenting inventions for two reasons—to prevent others from profiting from Department-sponsored research, and to offer an inducement to the development of inventions to the point of practical application.

The search for world peace has been a dominant theme of Dr. White's lecture on China.

Jaycee Award of the President's Commission for the Promotion of Physical Fitness

Dr. White is one of the world's most renowned proponents of physical fitness—and one of its best examples. However, he is opposed to making a fetish of exercise.

He feels that a habit of physical exercise should be formed early in life and retained, not adopted as fad or fancy in later years.

Dr. White is a walking enthusiast whose aversion to elevators is well known to all who have attempted to keep pace with him in his rounds of the NIH campus. He is also an eloquent proponent of cycling.

The Patent Branch receives inventions which encompass all of the biomedical sciences.

Recent requests for patents include heart assist, non-thrombotic, and artificial kidney devices, as well as apparatus to improve tissue culture techniques.

Dr. Robert G. Marston, NIH Director, lends through a handy travelers' road atlas presented to him by Dr. David F. Johnson (e), president of the Credit Union Board of Directors on International Credit Union Day—Oct. 21—as Thomas M. Mannix, CU manager, looks on. NIH employees (right) lined up all day to receive coffee (77 gallons), doughnuts (200 dozen), and cups (1,500). The NIH Credit Union was established in 1940 and presently has over $16 million in assets available to its members.