Clifford Johnson Named ORI Chief

By Dr. Shannon

Dr. James A. Shannon, NIH Director, has announced the appointment of Clifford F. Johnson as Chief of the Office of Research Information.

Mr. Johnson succeeds Leon E. Martin, recently appointed by the Director of the National Heart Institute as Staff Assistant for Scientific and Public Information. (See the Record of Dec. 22, 1960.)

In his new position Mr. Johnson will be Dr. Shannon’s principal assistant for information activities and public relations.

The NIH Director, in making the announcement, cited Mr. Johnson’s extensive experience in health and medical public information.

“I am confident,” he said, “that Mr. Johnson will be able to make a valuable contribution to Public Health Service programs in his new assignment.”

Prior to his transfer to NIH in April 1957, Mr. Johnson served for 16 years in the nursing service of the Veterans Administration Hospital in New York City.

Annual Meeting of CU Scheduled for Thursday

The 1961 annual meeting of the NIH Federal Credit Union will be held Thursday, January 19, at 12 o’clock noon in the NIH auditorium.

The agenda will include the annual report of Credit Union activities and the election of the new Board of Directors and Credit Committee members.

To be eligible to vote, members must present their pass books at the meeting.

The present Board of Directors has declared a 4½% dividend for the second half of 1960. It was credited to members’ accounts on January 5.

Health Service Begins Seven Day Schedule, Closes Robin Unit

The NIH Employee Health Service, located in Suite B2A-06 of the Clinical Center, will be open seven days per week beginning Saturday, February 4, the Service has announced.

The Saturday, Sunday, and holiday hours will be 8 a.m. to 4:30 p.m. The Monday to Friday hours will be 8 a.m. to 5 p.m., as at present.

Waiting Time Cut

At the same time EHS announces the closing on Friday, January 27, of its Auxiliary Health Unit in the Robin Building, Silver Spring, where a nurse is presently on duty weekly, from 8:30 to 10:30 a.m. This nurse will be added to the EHS staff in Building 10 on a full time basis.

As a result, the Service said, it will be able to cut down on patients’ waiting time and provide more efficient service.

Medical Officer Available

During weekends and holidays, only one nurse will be on duty, but additional service will be provided, when necessary, by the Medical Officer of the Day.

Employees located in off-the-reservation buildings are urged to avail themselves of the extended service here. During the night hours, when the EHS offices are closed, employees are asked to report to the Clinical Center Nursing supervisor, as at present. The Medical Officer of the Day is also available during those hours.

Information Committee on Cancer Established

A Joint Committee on Cancer Information has been established by the National Cancer Institute and the Cancer Control Branch, Bureau of State Services, to coordinate the planning, production, and distribution of public and professional information materials relating to cancer research and control.

The committee will help implement a directive from the Surgeon General instructing the two agencies to work closely together in this area.

By Elsie Fahrenthold

Many things at NIH are unique, and the Clinical Center is a case in point. Unlike most hospitals, it has twice as much laboratory space as patient area. Each patient is carefully selected for a specific research project and must be referred to the CC by a physician familiar with the individual’s medical history and current condition.

Selection is not influenced by race, creed, or geographic location. Referrals are made from all over the United States, and some come from abroad. Nursing and medical care are provided without charge to the patients, but they must arrange their own transportation to and from Bethesda.

Normal Reactions Important

An important phase of medical care is to find out what takes place in normal, healthy people in order to determine how and to what degree various parts and processes of the body are affected by disease, drugs, or procedures. Consequently, the CC has a normal volunteer program in which perfectly healthy “patients” make such observations possible.

As in all good hospitals, the welfare of the patients at the CC, including normal volunteers, is paramount. CC physicians have the same professional and moral obligation as have family doctors to the patients.

By Dr. Shannon

It’s a Model Hospital but—

Admission to Clinical Center

Is Based on Research Needs

Mrs. Johnson served for 16 years in the nursing service of the Veterans Administration Hospital in New York City.

Mr. Johnson succeeds Leon E. Martin, recently appointed by the Director of the National Heart Institute as Staff Assistant for Scientific and Public Information. (See the Record of Dec. 22, 1960.)

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James F. Kiesley, NCI Information Officer, and Dr. Lewis C. Robbins, Chief of the Cancer Control Branch, are co-chairmen of the committee.

The other members are Norma Golumbic, Head, Research and Program Reports Section; and Robert B. Callahan, Head, Information and Education Section, both of NCI; and Dr. G. Howard Gowan, Special Assistant on Medical Education; William Herman, Information Assistant; and Daniel I. Zwick, Program Management Officer, all of the Cancer Control Branch.
Dr. Shapiro Is President-Elect of BIO; Murtaugh Delivers Keynote Address

Dr. Norman Z. Shapiro, Chief, Computation and Data Processing Branch, DRS, is president-elect of the Biomedical Information-Processing Organization, a new professional society he helped organize last September. The initials of the new organization appropriately spell BIO.

Dr. Shapiro will take office in January 1962. He was elected at the first national meeting of BIO, held in New York December 30 in conjunction with the annual meeting of the American Association for the Advancement of Science.

Joseph S. Murtaugh, Chief, Office of Program Planning, OD, delivered the keynote address. He spoke on new developments in medical research of significance to the computer field. The speech is reproduced on page 3.

BIO's first president is Dr. Max Woodbury, research professor of mathematics, who also heads the Computing Center, Research Division, New York University College of Engineering. Dr. Charles Ronch, of the System Development Corporation, is secretary-treasurer, and Dr. Robert S. Ledley, of the National Biomedical Research Foundation, is past president.

Dr. John Z. Hearon, Chief, Office of Mathematical Research, NIAID, is serving as a member of the Executive Council, and so is Dr. Lee D. Cady, formerly associated with NIH.

BIO was formed in recognition of the tremendous importance and potential of computer technology in biomedical research and medicine, and of the interdisciplinary nature of this new field. Its goals are to encourage and expedite greater exchange of information concerning the use of digital computers in biology and medicine, to create an awareness of the potentialities of digital computer technology, and to stimulate the use of digital computers and related technology in biomedical research and medicine.

Scope Is Broad

The new organization has no local or regional chapters. Members include representatives from all parts of the United States and from government, universities, and private industry.

BIO's constitution provides for affiliation with "surrogate" organizations, or specifically with any group whose goals overlap those of BIO and who wish to work closely with the new organization. The idea of surrogate organizations was developed in order to minimize the harmful effects of forming still another professional organization.

Individual memberships in BIO are open to all biomedical research investigators at NIH and others over the country who now use or plan to use computers as an integral part of their research. Additional information may be obtained from Dr. Shapiro's office, Ext. 2892, Rm. G-729, Bldg. 12.
Data Processing Expansion Parallels Rapid Rise in Biomedical Research

Excerpts from talk delivered by Joseph S. Murthaugh, Chief, Office of Program Planning, National Institutes of Health, at first national meeting of the Biomedical Information-Processing Organization held in conjunction with the Annual Assembly of the American Association for the Advancement of Science in New York, December 30, 1960.

Development and expansion of the field of digital computer technology and application has been unbelievably rapid. In the brief span of five years a major field of human endeavor—the processing and manipulation of information—has a new order of machines with great capabilities in both procedural and conceptual terms have come into widespread use. A new professional and technical manpower skilled in communication and directing this apparatus has come into being. The dimensions within which these problems can be formulated into hypotheses have been enormously extended by the new communication in such a field is of extraordinary importance.

Research Expenditures Increase

There has also been a dramatic increase in the magnitude of the national effort in the field of medical and related biological research. Total national expenditures for medical research have increased eightfold since 1947, trebled since 1955:

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<th>Year</th>
<th>(In Millions)</th>
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<td>1955</td>
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Today, with the exception of institute-type arrangements like Los Alamos and Argonne, nearly 45% of all research, in all fields, in all the universities of the Nation is in the life sciences in which the medical sciences are the predominant component. Medical and biological research involves the observation, measurement, and manipulation of data relating to multitudinous, involved and often obscure or incomplete phenomena. Means for more effective handling of such data is an obvious need.

Challenge Presented

These are a set of circumstances which presents a challenge of the highest order for the adaptation of computer theory and capability. And they are, indeed, auspicious circumstances in which to launch an organization whose major purpose is to bring together the streams of development in two important fields of scientific endeavor.

It is desirable to consider what the prospects are for further growth in the extent of national investment in medical research. We have already noted the dramatic increase in medical research expenditures since the immediate postwar period. There are some people who view this rapid expansion with considerable apprehension, and who feel that any further growth is beyond the bounds of practicability as well as scientific propriety. There is, however, no indication that the rate of growth in national medical research expenditures is slowing down. A col: and careful assessment of the national scene seems necessary to lead to the conclusion that there be—and must be—further growth, perhaps more rapid than has been experienced to date. These are the conditioning factors:

1. The problems still confronting the diminishment of disease and disability in and the achievement of human well-being are formidable. They will be greatly exacerbated in the future by increasing environmental hazards, the pace and tension of urbanized society, the aging of our population.

2. Progress in medicine through research and the scientific approach has made possible outstanding achievements in health; the prospect of further victories will compel even greater and broader effort. The area of fruitful scientific inquiry into the problems of well-being and the nature of basic biological and social phenomena related to health is limitless.

3. There is clear evidence, reflected by the recent actions of the Congress, of the willingness of the Nation to devote an increasing amount of its resources to research in medicine and the related basic sciences.

4. This action has been accompanied by substantial investment in the training of research manpower and in the construction of research facilities. In this process national action has shifted from its earlier supportive function to a leading positive force aimed at the development of national, and resources in trained manpower necessary for further enlargement of the national medical research effort.

Looking to the future, with this pattern of past growth and the effect of the powerful influences just enumerated in mind, estimates of national medical research expenditures in 1970, 10 years from now, range from $2.3 billion to $8.8 billion. For planning purposes we have utilized a figure of $8.0 billion as the measure of national medical research effort in 1970. This represents a quadrupling of present expenditures.

Issues Outlined

A figure of $8.0 billion for medical research in 1970 has the obvious limitations of all such projections. It is better viewed as a measure of the opportunity considered to exist and the extent needed. Its attainment depends on the kinds of actions which are taken now. These actions relate to: (1) expanding the supply of trained manpower in fields related to medical research; (2) the development of the complex physical facilities essential for medical research in an age of rapid scientific change; and (3) means to sustain the vigor, autonomy and capability of our basic research and educational institutions. These issues will be in the forefront of national consideration and discussion during the next few years.

Apart from the general meaning of this prospective growth in national expenditures for medical research, to the field of computers, the specific implications can be seen in the nature of the changes taking place in the substance and conduct of medical research. It is likely that these shifts in emphasis and direction will continue for the foreseeable future.

Post-War Research Broadens

In the post-war years, medical research broadened extensively in terms of the sciences and disciplines included within the scope of scientific attack upon disease and ill health. The direction of inquiry to progressively more fundamental levels has brought investigation into the basic sciences, considerably apart from the traditional medical sciences, to bear upon problems of health and disease. On the one hand, these have led into the behavioral and social sciences and on the other into the physical and biological sciences.

Today there is a considerable diversity in the scientific fields and kinds of investigations involved in medical and health-related research. One or two figures may help to convey the nature of this change:

This four-page section, devoted chiefly to summaries of research findings that have been reported by scientists of the National Institutes of Health, is prepared with the cooperation of the Information Offices of the Institutes and Divisions of the National Institutes of Health.

Evidence Shows ASH Produced By Kidneys

Aldosterone, a hormone from the adrenal cortex, plays an important role in the regulation of salt excretion by the kidney, and thus secondarily in the maintenance of blood volume. Released in response to sodium depletion or acute blood loss, and in certain clinical states with edema, aldosterone promotes salt and water retention by the kidney, sweat glands, and certain other tissues.

Although ACTH from the pituitary gland plays a supporting role in the synthesis and release of aldosterone, the immediate stimulus to its production appears to be still another hormone designated aslterone stimulating hormone (ASH).

Source Indicated

The chemical nature of ASH, the site of its production, and the mechanism or mechanisms governing its release have been the subject of much research and much conflicting evidence. Recent National Heart Institute studies indicate that ASH is produced by the kidney, and not by the liver, pituitary, brain, or any intracranial structure previously suspected of being the source of this hormone.

The studies were by Drs. James O. Davis, C. J. Carpenter, C. R. Ayers, and J. E. Holman, of the Laboratory of Kidney and Electrolyte Metabolism, and by Dr. Robert C. Bahn, of the Mayo Clinic, Rochester, Minnesota. Their findings have been accepted for publication in the Journal of Clinical Investigation.

Secretion Rates Determined

Rates of aldosterone secretion before and subsequent to bleeding were determined in normal dogs for comparison with the findings in other experimental groups. In these groups, the scientists investigated a number of organs previously proposed as possible sites of ASH production: the kidneys, liver, brain, pituitary, and other intracranial structures such as the pineal gland. This was done by systematically removing these organs, singly and in combination, and then determining the effect of bleeding on the rate of aldosterone secretion.

As expected, aldosterone secretion fell in animals whose pituitaries had been removed, since...
Cholera Research Laboratory Is Dedicated in Pakistan

Protected by a gaily colored awning from a sun which was brilliant even at the 8:30 a.m. start of the ceremonies, more than 500 scientists, government officials and wires, medical students, and nurses gathered on the lawn beside the Institute of Hygiene in Dacca, E. Pakistan, for the dedication of the Pakistan SEATO Cholera Research Laboratory.

The Laboratory is a "true symbol" of the joint efforts being made by the SEATO nations in meeting the problems of Southeast Asia on all fronts, Brig. Gen. M. N. Sharif, Director-General for Health for the Government of Pakistan, declared.

Lab Importance Emphasized

The importance of the Laboratory as part of the SEATO cooperation in a non-military sphere was also emphasized by SEATO Deputy Secretary-General William Worth. He added that it is particularly appropriate that SEATO undertake the eradication of cholera, since it is a disease endemic to Southeast Asia, attracting world attention only during periods of epidemic.

The Institute of Hygiene in which the Laboratory is housed is a large white, flat-roofed, four-story building located about four miles from the center of Dacca. This location by itself from other parts of the city, bears a slight resemblance to the location of the first buildings at NIH which 20 or 30 years ago seemed quite far from Washington. Physically, there is no resemblance, since the terrain is flat, trees few in comparison with Bethesda, and only one narrow road leads to the building. The Institute of Hygiene itself is not a hospital, and is concerned with production of cholera and other vaccines and with public health activities in general.

The new Laboratory occupies one wing of the building. On the ground floor are two- and four-bed wards for cholera patients. No patients had been admitted at the time of the dedication. The traditional bright red blankets of Pakistan hospitals and the colorful cotton of the pillows showing through the white slips looked cheerful.

Unlike hospitals and institutions in northern climates, the wards and laboratory rooms and offices all open off corridors running along the outside of the building. Since these have large unglazed openings along their length, they are more like verandas than building corridors.

NIH Supplies Equipment

On the upper three floors all the laboratory equipment—autoclaves, ovens, refrigerators, etc.—purchased and shipped by NIH last spring was installed and functioning. Laboratory benches, stools and other such furniture was furnished and installed by the Government of Pakistan. Many an NIH'er would be envious of the ample space, although when fully staffed, this Laboratory may become as crowded as are some in Bethesda.

Since cholera is always present in E. Pakistan, material from patients and from klongs (ponds surrounding each home or cluster of homes and used for all water supplies and sewage) had already been obtained and was being studied.

Conference Opened

Following the dedication and inspection of the Laboratory, scientists and official guests proceeded to the Assembly in Dacca for the opening of the first Conference on Cholera sponsored by SEATO and the National Institutes of Health. The Assembly is a red brick building formerly used for legislative meetings. The hall used for the meetings has seats (with desks and microphones) arranged semi-circularly and rising in tiers. It accommodates about 500 persons. In addition to this hall are a number of rooms for offices and one large room suitable for exhibits.

Greetings and good wishes from

Brigadier M. Sharif, Director General, Health, Government of Pakistan, convenes the 4-day SEATO Cholera Conference in Dacca on December 3. The conference was attended by delegates from eight SEATO countries and observers from Japan.

Brigadier M. Sharif (second from left) escorts delegates through the Pakistan-SEATO Cholera Research Laboratory following the dedication of the building.

Brigadier M. Sharif, Director General, Health, Government of Pakistan, convenes the 4-day SEATO Cholera Conference in Dacca on December 3. The conference was attended by delegates from eight SEATO countries and observers from Japan.

Abdus Salek Mian, a technical assistant at the Pakistan-SEATO Cholera Research Laboratory, operates an autoclave which treats chemical solutions at critical temperatures. Laboratory equipment was donated by the U. S. Government.

Brigadier M. Sharif inspects a new microscope donated by the U. S. Government to the Pakistan-SEATO Cholera Research Laboratory. Following the dedication of the laboratory, delegates toured the new facilities.
**CHOLERA**

*(Continued from Page 4)*

Surgeon General Leroy E. Burney, Public Health Service, were read to the Conference by Dr. John D. Porterfield, Deputy Surgeon General.

Sessions Continue

Scientific sessions started in the afternoon with reports on the management of clinical cholera by health and medical officials of Bangkok and Darca, and continued for the remainder of four days with research reports on the physiology, pathology and pathogenesis of the disease, its epidemiology, the status of immunization, and laboratory identification of the organism.

**Texts To Be Published**

The Proceedings of the Conference on Cholera when published will contain full texts of all scientific papers and discussions.

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**New Evidence Supports Filtration Theory**

Evidence supporting the filtration theory of atherosclerosis has been obtained from studies on experimental atherosclerosis conducted by Dr. Leroy Duncan, Mrs. Katherine Buck, and Mr. Almorris Lynch, of the National Heart Institute’s Laboratory of General Medicine and Experimental Therapeutics.

The filtration theory assigns the chief role in the development of atherosclerosis to lipoproteins, fat-protein complexes which serve as the major vehicles of lipid transport in the body. According to this theory, intact lipoproteins carrying cholesterol pass from the plasma into the inner layer of the arterial wall. Here, because of the structure of the wall, they are trapped and give rise to atherosomatous lesions.

**Previous Studies Used**

The studies on experimental atherosclerosis were based on information gained in previous studies on the movement of plasma albumin into arterial walls. These studies had disclosed that the rate of albumin penetration of the aortic wall is not homogeneous throughout the length of the vessel, entering most rapidly in the upper aorta and progressively more slowly down its length.

The investigators reasoned that plasma albumin and plasma lipoprotein might enter the aortic wall by similar mechanisms and thus show the same distribution of entry rates. When combined with the filtration theory, this reasoning led to the prediction that there should be a systematic variation in the deposition of cholesterol along the length of the artery early in the development of experimental atherosclerosis.

Subsequent determinations of the cholesterol concentrations along the length of aortas in dogs confirmed the prediction. Early in the course of experimental atherosclerosis there is a striking longitudinal gradient in cholesterol deposition, which corresponds to the distribution in the rates of albumin entry into the aortic wall. The experimental demonstration of this consequence of the filtration theory offers strong support for that theory. The scientists found that the gradient disappears later in the development of experimental atherosclerosis, and that the cholesterol concentrations eventually become higher in the lower portions of the aorta.

The sequence of events suggests that the fact that the most severe atheromatous lesions tend to localize eventually in the lower aorta may be related to an extremely slow rate of removal of cholesterol from that segment.

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**Thermal Dilution Curves Found Useful In Clinical Diagnosis of Cardiac Shunts**

Thermal dilution curves have been used successfully by scientists of the National Heart Institute’s Laboratory of General Medicine and Experimental Therapeutics.

The technique is a substantial improvement over standard dye dilution methods because, while retaining the accuracy of these methods, it eliminates the necessity of withdrawing large blood samples and alleviates the problems of skin discoloration and allergic reaction that occasionally follow multiple dye injections.

**Studies Reported in Journal**

These studies are reported in the *American Journal of Cardiology* by Drs. Theodore Cooper, Eugene Braunwald, and Andrew W. Morrow, of the NHI Surgery Branch, and G. C. Riggles, of the Division of Research Services.

Dye dilution curves are widely used to identify, localize, and estimate the magnitude of cardiac shunts, the flow of blood through abnormal holes in the partitions that separate the two sides of the heart.

This technique dye is injected into the appropriate side of the heart and its concentration subsequently measured in blood withdrawn from a vessel located downstream from the injection site. As the blood is withdrawn at a constant rate into a special syringe, its dye concentration is continuously measured by a densitometer.

If no shunt is present, the dye concentration plots as a curve with a sharp upstroke followed by a smooth, gradual downslope. However, a shunt causes a break in the curve or a second peak resulting from the appearance of dye desorbed by the shunt.

Though accurate and safe, this method requires the withdrawal of large blood samples, and frequently necessitates blood transfusions, especially in young children. Multiple determinations, frequently needed for precise diagnosis, are also limited with this technique because of decreasing accuracy and increasing danger of allergic responses.

The new technique uses cold saline as the indicator and estimates its concentration as a function of blood temperature in a vessel downstream from the point of injection by means of a heat-sensing element called a thermistor.

Since the procedure can be introduced directly into the vessel with a special needle or short catheter, no blood samples need be withdrawn. The comparison by the NHI scientists of the new technique with standard dye dilution methods showed that the thermal dilution curves are strictly analogous to dye dilution curves and appear to be as sensitive and accurate for the diagnostic evaluation of shunts.

Repeated determinations can be made with this technique without any decrease in accuracy and without any danger of toxicity, features which make possible the more precise diagnosis of shunts as well as immediate evaluation of surgical measures to correct them.

**ASH**

*(Continued from Page 4)*

ACTH from this gland promotes aldosterone production. However, ACTH was not essential, because aldosterone production increased following bleeding in hypophysectomized dogs and even in decapitated animals.

Only one of the extirpation procedures used was found to prevent any rise in aldosterone production subsequent to bleeding: the combined removal of the pituitary and both kidneys. This indirect evidence that the kidney is the source of ASH was greatly strengthened by the finding that the injection of kidney extracts into these previously unresponsive animals resulted in increased aldosterone secretion.

Although these studies provide strong evidence that ASH exists and that the kidney is the site of its production, the nature of the hormone and the mechanism which triggers its release are still unknown.
Bacterial Infection Studied In Patients With Leukemia

Two studies of the relationship between bacterial infection and immune mechanisms in leukemia patients have been reported by National Cancer Institute scientists in collaboration with colleagues of National Institute of Allergy and Infectious Diseases and Division of Biologies Standards.

The first study is a preliminary report of a study on infection in 42 patients with chronic lymphocytic leukemia admitted to the Clinical Center from July 1954 to June 1959. A total of 256 bacterial infections occurred in 22 of these patients.

Twenty-three patients of 36 tested were found to have low concentrations of serum gamma globulin, the antibody-containing component of serum. A fair correlation was observed between the frequency of bacterial infections and the low concentration of serum gamma globulin.

**Correlation Found**

A group of 24 patients challenged with four antigens (typhoid, mumps, influenza, and diphtheria vaccines) displayed significantly less ability to produce circulating antibodies than did 13 control subjects. Eleven of the 24 patients developed bacterial infections within 12 months after antigen challenge, a good correlation was found between bacterial infections and the impaired ability to produce circulating antibodies.

The investigators concluded from these data that, in chronic lymphocytic leukemia, the ability to produce circulating antibodies (antibody response to antigenic stimulation) provides a better measure of susceptibility of these patients to bacterial infections than the antibody level (gamma globulin concentration). Reduced ability to produce circulating antibodies appears to be a major factor in the increased susceptibility of these patients to bacterial infections.

**Inferences**

The gamma globulin concentration is useful to the clinician in two ways. A finding of hypogammaglobulinemia in an adult should suggest the possibility of the presence of a lymphoma. The administration of large doses of gamma globulin may be beneficial in preventing and controlling bacterial infections in patients with chronic lymphocytic leukemia.

This report appears in a recent issue of Archives of Internal Medicine. The authors are Dr. Richard K. Shaw (now with the University of Washington Medical School, Seattle), Dr. Dane R. Boggs (now with the University of Utah Medical School, Salt Lake City), Dr. John L. Fahey, and Dr. Emil Frei, III (all of the National Institutes of Health). Drs. H. J. Utz, Clarence Szwed, and Dr. John P. Utz, of the National Institute of Allergy and Infectious Diseases; and Eleanor Morrison, of the Division of Biologies Standards.

**Second Report Made**

The second report presented results of a study of infection in 10 acute leukemia patients. A total of 17 bacterial infections occurred in seven patients.

Comparative study of the antibody response to five antigens (typhoid-paratyphoid, influenza, and mumps vaccines, and diphtheria and tetanus toxoids) showed that the antibody response of the patients to any one antigen did not differ significantly from that of normal control subjects. However, the patients showed a significantly poorer over-all antibody response to all the antigens than did the controls. There was no significant correlation between the degree of antibody response and the initial level of, or subsequent change in, serum gamma globulin concentration.

In contrast to findings in patients with chronic lymphocytic leukemia, no such correlation was observed in acute leukemia patients between the frequency of bacterial infection in the individual patient and the degree of antibody response to the antigens employed.

This report, which is published in a recent issue of the Journal of Laboratory and Clinical Medicine was written by Dr. Richard T. Silverman, National Institute of Allergy and Infectious Diseases, and Drs. Utz, Fahey, and Frei.
Dr. Kety Will Repeat NIH Lecture at GU

Dr. Seymour S. Kety, Chief of the Laboratory of Clinical Science, NIH, has accepted an invitation to repeat his lecture, "The Biologist Examines the Mind and Behavior," at Georgetown University on Friday, February 3.

The lecture, originally delivered here on May 18, has been scheduled for the fifth in the NIH Lecture series, will be presented in the University's Gorman Auditorium at 4:30 p.m.

Sponsored by the Beta Xi chapter of Phi Delta Epsilon fraternity, it will be the annual Aaron Brown Lecture series.

The NIH Lecture at GU

Under the title, "The True Nature of a Book, an Allegory," a large portion of the lecture was published in the Science Section of the July 6, 1960, issue of the NIH Record.

Third Concert Features Instrumental Quartet

A program of baroque and contemporary music will be presented at the third concert of the R&W sponsored 1960-61 concert series at NIH. The performance will be held at 8:30 p.m., January 30, in the CC auditorium.

George Stein, violin; E. Earnest Harrison, cello; Walter Maciejewicz, bassoon, and Evelyn Swarthout, harpsichord, will play in quartet and in various combinations of instruments. All are musicians from this area.

Admission to the concert is free, and no tickets are required.

Young Jimmy's Baseball Is in International Class

Jimmy Nadel, 10-year-old son of Dr. Eli M. Nadel, Assistant Director of NCI, spent his Christmas vacation playing in an international baseball league and eating fried bananas in Puerto Rico.

As a member of the Little Giants, one of the teams in the International Wee Men's Association, Jimmy played a total of five games in as many days and as many towns in Puerto Rico. The Little Giants won two games in the early part of the series.

The trip was partially financed by the Puerto Rican Government. He will make a comprehensive appraisal of the present status of schistosomiasis (schistosomiasis) in that country.

Treatment of this widely disseminated parasitic disease, estimated to affect more than 150,000 people in tropical and subtropical climates, is difficult, expensive, and relatively ineffective. Control is more successfully approached at the present time through education of exposed populations and through efforts to control the number of snails that are host to the blood fluke that transmits the disease. Newer mollusicides have been used in some areas (in Egypt, for example) with encouraging results.

Base in Bombay

Enroute to India, Dr. Olivier will visit the London School of Tropical Medicine for several days and will stop in Geneva for a day or two.

At his destination he will confer with officials at the WHO Regional Office in New Delhi.

His base of operations will be Bombay where he will work in collaboration with Dr. R. K. Gadgil of the Grant Medical College.

He hopes to complete the survey in approximately 40 days, returning to the United States the middle of March.

Mary E. Chisholm Dies

Mary E. Chisholm, 58, a former NIH employee, died suddenly on December 13, at her home in Washington.

At the time of her retirement in 1952, after 33 years of Federal service, Miss Chisholm was Placement Officer in the then Personnel Branch of NIH. She first served with the Public Health Service when it was a bureau of the Treasury Department.

When NIH moved to Bethesda she was in charge of its budget, fiscal, and personnel sections, and became Placement Officer in 1948.

Miss Chisholm is survived by a sister, Jennie, of the home address, 5420 Connecticut Ave., N.W., and a brother, Robert Alvin, of Tupelo, Miss.

Electrician Bridgman Doubles As Minister of the Gospel

In a dual vocational sense, James G. Bridgman might be termed a "circuit" preacher.

He's not only a first-rate ordained minister of the Gospel.

In his early youth he lived in Logan, W. Va., and like many a young man there became a worker in the coal mines. But he had other interests and aspirations.

While working in the mines by day, he enrolled in a correspondence course and began studying at night to qualify as an electrician. Upon successful completion of the course he landed a job in the coal company's electrical repair shop.

By means of a second correspondence course, he then began studying for the ministry. And it was during this time of study that he further prepared himself by serving as an associate minister for congregations of his denomination.

Mr. Bridgman and his wife, Lola Faye, live in Rockville with their 13-year-old daughter, Joyce Lou, and their 10-year-old son, James.

The minister and his family also provide musical accompaniment for the congregation's singing. Mr. Bridgman plays the trombone, his wife, the piano and organ, his daughter, the clarinet, and his son, the trumpet.

Mr. Bridgman served for 15 months in the Navy during and after World War II, and with his family moved here in 1953.

The United Pentecostal Church formally ordained him in 1954.

Mr. Bridgman also makes sure that the electrical system of his church is kept in good condition.

The Calvary Apostolic Church in Gaithersburg, Md., built by the Rev. James G. Bridgman and the members of his congregation, was dedicated on Veterans Day, November 11. Standing in front of the pulpit is the happy Bridgman family, holding some of the musical instruments they play during church services. They are son James, 10; Mr. Bridgman, who plays the trombone; his wife, Lola Faye; and daughter Joyce Lou, 13. — Photo by Bob Pumphrey.

Dr. Olivier to Appraise Schistosomiasis Status For WHO, Indian Gov't

Dr. Louis J. Olivier, Acting Chief of the NIAID Laboratory of Parasitic Diseases, is en route to India at the request of the World Health Organization and the Indian Government. He will make a comprehensive appraisal of the present status of schistosomiasis (schistosomiasis) in that country.

The treatment of this widely disseminated parasitic disease, estimated to affect more than 150,000 people in tropical and subtropical regions, is difficult, expensive, and relatively ineffective. Control is more successfully approached at the present time through education of exposed populations and through efforts to control the number of snails that are host to the blood fluke that transmits the disease. Newer mollusicides have been used in some areas (in Egypt, for example) with encouraging results.

Base in Bombay

Enroute to India, Dr. Olivier will visit the London School of Tropical Medicine for several days and will stop in Geneva for a day or two.

At his destination he will confer with officials at the WHO Regional Office in New Delhi.

His base of operations will be Bombay where he will work in collaboration with Dr. R. K. Gadgil of the Grant Medical College.

He hopes to complete the survey in approximately 40 days, returning to the United States the middle of March.
do everything possible to benefit their patients.

CC physicians are most concerned with the more common serious diseases which affect the greatest number of people, such as cancer, heart disease, and mental illness. Patients with rare and unusual diseases or those with conditions which doctors have been unable to diagnose are rarely admitted. The Clinical Center is not a diagnostic clinic and its research facilities are not used for this purpose.

Contrary to popular notions, "medical miracles" are not the order of the day. Because the long-term conditions, for which no specific treatment has been found, are of principal interest here, fantastic cures should not be expected.

Many Tests Given

CC patients receive a greater number and variety of examinations and tests than are usually given, and followup examinations are often required for several months or even years.

No tests or treatments are ever given which cause unnecessary hazard to the patient. However, some of the tests may cause discomfort and certain patients may be asked not to eat special diets which they may not like, or to take tiring exercise, which may be needed in order to obtain new medical knowledge.

The complex organization and the research mission of NIH require that the clinical program be organized somewhat differently from that usually found in a university or other large general hospital.

Services Are Varied

For example, instead of one there are several separate services for endocrinology, metabolic studies, childhood diseases, etc. Similarly, a given diagnosis may be of potential interest to investigators in two or even three Institutes.

When a referring physician is not certain which Institute or individual investigator is likely to be interested in his patient, he should address his communication to the Office of the Director of the Clinical Center for circulation among the potentially interested research groups.

If he is certain where the interest is likely to be, his communication should be directed to the Office of the Director, CC, marked for the attention of the appropriate person or Institute. Telephone calls should be directed to the Preadmissions Office Ext. 4891.

There are certain considerations for eligibility in addition to the first requirement that the patient's specific disease or other condition rarely develop breast tumors to a high-incidence strain by foster-nursing them with milk containing the Bittner agent. This strain, maintained for almost 20 years, is used throughout the world in extensive studies of the agent.

Dr. Andervont demonstrated the transmission of the mammary tumor agent through the seminal fluid of mice, showed that the agent is prevalent in low concentration in wild mice, and demonstrated passive immunity to the agent in mice.

Studies Cancer Causes

The chemical causation of cancer has another of Dr. Andervont's major research interests. He has carried on systematic investigations of tumors induced by chemical carcinogens in different inbred mouse strains, the inheritance of cancer susceptibility to various agents, and the possible correlation of the incidence of spontaneous and induced tumors.

Dr. Andervont's reports of experiments have appeared in more than 130 scientific publications. He has often been called on to summarize and evaluate the proceedings of scientific conferences.

Dr. Andervont received the B.S. degree in 1923 from Mount Union College, Alliance, Ohio, and the D.Sc. degree from Johns Hopkins University in 1926. After graduate study at Johns Hopkins and Carnegie Institution of Washington, he was appointed instructor of epidemiology at Harvard University.

The first cancer research group was organized within the Public Health Service in 1930 and established at Harvard. Dr. Andervont was selected biologist of the team. As one of the first permanent members of the newly created National Cancer Institute, he became staff biologist in 1939, and in 1948 was appointed Chief of the Laboratory of Biology, now one of the largest laboratories at NIH.

Dr. Heston's major area of interest has been the genetic aspect of cancer. He has sought to identify and locate specific genes influencing the occurrence of the various kinds of tumors in mice. In a recent study, he confirmed that one or more of several genes control the propagation of the mammary tumor agent in crosses between high and low mammary tumor strains of mice.

Dr. Heston earned his Ph.D. in genetics from Michigan State College in 1935. He was appointed an NCI Research Fellow in 1938. He was named Head of the Genetic Unit of the Biology Section, NCI, in 1946, and Head of the General Biology Branch, NCI, in 1952. He is currently the former scientific editor of the Journal of the National Cancer Institute.