Sec'y Richardson to Present Departmental Awards to 5 NIH Scientists on April 15

At the DHEW Annual Honor Awards Ceremony next Thursday (April 15), Secretary Elliot L. Richardson will present Departmental honor awards to five NIH scientists: Drs. Dorland J. Davis, Herbert G. Stoennner, Robert M. Chanock, John E. Holman, Jr., and Donald S. Fredrickson, the Distinguished Service Medal.

Secretary Richardson will also recognize two other NIH employees who received high awards during the past year, Drs. Robert J. Huebner and George J. Todaro.

Sergeant Harry L. Thompson will be honored for completing 50 years of Federal service.

Dr. Robert J. Huebner received the Distinguished Service Medal for "his extraordinary skill and leadership as Director of the Rocky Mountain Laboratory and for his unusual accomplishments in the field of lipoprotein disorders leading to heart disease."

Contributions Cited

Dr. Fredrickson, Director of Intramural Research, NALD, will be honored for "his exceptional skill and leadership as the administration of the National Heart and Lung Institute and for his research in infectious diseases."

Dr. Stoennner, NALD, will be recognized for "his outstanding contributions to scientific knowledge in infectious diseases."

Dr. Chanock, Chief of the Laboratory of Infectious Diseases, NALD, will be honored for "his outstanding contributions to knowledge of the etiology and epidemiology of human respiratory infections due to viruses and mycoplasma and for his effective and enthusiastic leadership in efforts to prevent or alleviate acute respiratory disease."

Drs. Huebner and Todaro had been nominated through the Department for the awards they received earlier.

Huebner Honored

Dr. Huebner, Chief of the Viral Carcinogenesis Branch, National Cancer Institute, was selected as one of the five recipients of the 1970 Rockefeller Public Service Awards for his distinguished service as one of this country's foremost researchers in the fight against cancer.

Distinguished Service Award

Dr. John F. Sherman
Dr. Donald S. Fredrickson

Distinguished Service Medal

Dr. Dorland J. Davis
Dr. Herbert G. Stoennner
Dr. Robert M. Chanock
Hanna Y. Kwiatkowska to Attend Panel Discussion at Columbia U.

Hanna Yaxa Kwiatkowska, National Institute of Mental Health, will take part in a panel discussion on the "Psychology of Creativity" at Columbia University. Mrs. Kwiatkowska heads the Art Therapy Unit of the Adult Psychiatry Branch.

Meetings of the 2nd Congress of American Scientists and Scholars of Polish Descent, on April 23, 24, and 25. Mrs. Kwiatkowska was invited to participate by the Polish Institute of Arts and Sciences in America.
**Blue Cross-Blue Shield Benefits Are Revised**

Effective March 1, the basic surgical-medical benefits and supplemental benefits under the Government-wide Service Benefit (Blue Cross-Blue Shield) Plan of the Federal Employees Health Benefits Program have been revised.

Under the high option, the Blue Shield Plan now pays the full cost of covered services given by Blue Shield participating physicians regardless of income.

Previously, if family income was $10,000 or higher for self-and-family enrollment, or if individual income was $6,500 or higher for self-only enrollment, the physician could make an additional charge over the amount allowed in the fee schedule.

The additional amount could be claimed under supplemental benefits.

Under both high and low options, non-participating physicians may make additional charges for covered services; these amounts must be paid by the enrollee. Eligibility for supplemental benefits has also been revised.

All changes are described on page 2 of the revised benefits folder which was recently distributed to NIH employees enrolled in the Plan.

Enrollees should carefully review the folder and keep it with their copy of the Plan brochure, BRI 41-25. These two documents constitute an up-to-date contract and statement of benefits.

Additional copies of the folder and information on other Federal health benefits plans are available in B/1/D personnel offices.

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**MEDLARS Data Tapes Available to Subscribers**

In mid-April the National Library of Medicine will make available on subscription, magnetic tapes containing data from the Library's computer-based Medical Literature Analysis and Retrieval System (MEDLARS).

The tapes contain citations to the biomedical journal articles which are indexed to provide the data base for NLM publication and information services.

Tapes will be available in only the following format: 1/2" IBM 7094, 800 BPI, seven-track.

Individuals or organizations may subscribe for $20,000 per year under conditions established by NLM.

The National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Va. 22151, will sell and distribute the tapes.

For further information contact Dr. Joseph Leiter, associate director for Library Operations, NLM, 8600 Rockville Pike, Bethesda, Md. 20014.

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**Two Employees Come up From the Ranks To Become Full-Fledged NIH Librarians**

One of the less kind dictionary definitions of the word "bureaucracy" is "excessive governmental red tape and routine."

That good book is certainly not describing what happened when someone high up in the Civil Service Commission called NIH Personnel with the news that two NIH Library employees who started there as clerk typists had passed the stiff CSC Library test.

The red tape was cut and the routine routed—before the official notification date!

NIH Personnel was equally eager to carry the good news to the employees who accomplished this feat. They called Seymour Taine, chief of the Library Branch, which is in the Division of Research Services, who immediately informed the two employees, Patricia Barnes and Gladys T. Nelson.

Without a day of formal schooling in graduate library training, both passed the test.

And both look back in gratitude to the entire library staff who helped them prepare for the test, and rejoiced with them when they received passing grades.

Mr. Taine explained what made the staff single out Miss Barnes and Mrs. Nelson.

"We recognized that the library had two employees who were essentially performing professional duties," he said, "but were not given the recognition and salary to go with it."

And Mr. Taine did something about that. In May 1970, a pilot project to train employees in lesser echelon jobs to become full-fledged librarians, was started. It has proved so successful it may very well continue.

He explained that in addition to Miss Barnes' and Mrs. Nelson's regular duties some portion of each day was spent in library training. The extended lectures on the history of libraries, boned up on classifications, and visited university and public libraries.

It was a concentrated dose of one year of graduate work. They survived the arduous indoctrination—in fact, thrived on it, because of the cooperation of the librarians and the rest of the staff.

"It was a great day for the library when the news came through. We had a victory lunch to celebrate," said Mr. Taine.

Anna E. Dougherty, assistant chief of the NIH Library, further described that stand-out day:

"We had a couple of emotional situations, they (the staff) were crying back there," Miss Dougherty said.

Possibilities Considered

"We tried to prepare the girls for every possibility," she continued. "We prepared them for one failing and one passing, or both failing."

"We told them they could take the test again in 6 months, but we didn't prepare them for both passing."

Miss Dougherty said that Miss Barnes and Mrs. Nelson took the test one month ahead of time; they decided to "chance it" rather than wait.

Both employees started in the NIH Library as clerk-typists, and came up from the ranks as clerk-stenographers, library assistants, and library technicians.

Mrs. Nelson came to the Library Reference Unit in 1957. She has an Associate in Arts degree from what was then Carver College, and is now Montgomery College.

**Sailing Ass'n Is Offering Classes for Beginners Who Register by May 1**

NIH Sailing Association classes for beginners will be scheduled in May for those who register before May 1.

Each class will meet for two evening sessions at NIH before the week of sailing classes. These sailing classes will be held at the Back Creek Marina, Chesapeake Bay, from 4 p.m. to darkness, Monday through Friday, for one week.

**First Come, First Served**

Class assignments will be on a first come, first served basis.

To register NIHSA members must pay a $40 course fee for boat rental, instruction, and instructional materials.

No previous sailing experience is needed. Family members 18 years of age or older are eligible.

Those who complete the course will qualify for NIHSA crew member status, and may accumulate credits for skipper status. Skippers may charter NIHSA boats.

Registration forms may be obtained from the R & W Office in Bldg. 31, Rm. 1A18, Ext. 60601.

"We rode downtown together," said Mrs. Nelson, "we laughed all the way down there."

"We talked about other things," added Miss Barnes. "We were nervous, that's why we talked about anything but the test."

Following the difficult 2-hour exam they returned to NIH in a much more relaxed frame of mind and "looked up some of the answers."

After their intensive coaching on how other libraries operate, they both say they very much enjoy working in the selective field of a medical science library.

And both agree that "scientists are easy to work with, they're kind and understanding."
Scientists at NIH Invited To Cardiac Symposium

The Montgomery County Heart Association will hold its 1971 Cardiac Symposium on Wednesday, May 26, 5:30 a.m. to 4 p.m. at the Holiday Inn, 8120 Wisconsin Avenue, Bethesda.

Dr. Joseph A. Romeo is chairman of the symposium.

NIH scientific staff members and fellows are invited to attend free of charge, but are requested to register in advance, if possible, with the Association, 857-8878.

For others wishing to attend, there is a $6.50 registration fee.

Mr. Lynk, who will earn his M.D. degree this June, plans to intern at a PHS Hospital, take a residency in ophthalmology, and earn an M.A. degree in Public Health, emphasizing community medicine.

According to NEI Director, Dr. Carl Kupfer, there are few, if any, physicians who have extensive training in both public health and ophthalmology.

Most comprehensive health care programs do not include the care of vision because there is a lack of qualified individuals to administer and provide the service.

The pilot project provides both Mr. Lynk and NEI with an opportunity to develop this important area of medicine.

Mr. Lynk became interested in the PHS Pilot Program when he learned of it from a fellow medical student last spring. The opportunity to receive additional training in community medicine convinced him to apply.

His life-long interest in science and medicine was influenced by his father who has taught college chemistry and is now an administrator at the University of Maryland (Eastern Shore).

Mr. Lynk's brother holds a Ph.D. in Physics from Yale University and teaches at Southern University in Louisiana.

(Continued from Page 1)
Injected Iron Particles, Held by Magnets, Successful in Healing Brain Aneurysms

Injected iron particles, held in place with a magnet, have been found successful in healing brain aneurysms. These weakened and balloon-out sections of the artery wall are life-threatening because they occasionally burst, causing brain hemorrhage.

This novel technique, developed by grantees of the National Institute of Neurological Diseases and Stroke, has been tried clinically over a 5-year period.

First, a magnetic probe, which is pushed through a burrhole in the skull, is moved into a position abutting the aneurysm. Then iron particles, delivered to their proper position by a needle passed through the magnetic probe, are held in position for 3 to 5 days. During this time, a clot forms around them, thus creating a plug. Eventually the clot and the aneurysm are replaced with scar tissue.

Experience with this technique has varied, depending upon the condition of the patient and the location of his aneurysm.

Results Encouraging

In one group of patients, who were conscious and had no neurological deficit at the time of surgery, results were considered “very encouraging.” That is, according to the investigators, 10 patients out of 15 were able to return to work.

Aneurysms treated in this group of patients were all on the anterior communicating artery.

In 12 patients who had aneurysms on the internal carotid artery, results were not as good: only 4 of 8 survivors returned to work, the others being disabled by emboli caused by escaping iron.

Poor results with this group of patients were attributed to larger size of the aneurysms, and larger necks, which allowed portions of the developing clot to be washed out into the circulation.

Aneurysms Risky

Good results in treating aneurysms of the anterior-cerebral-anterior communicating region are still considered noteworthy because these aneurysms carry a high risk when treated with conventional methods.

Morbidity and mortality rates which accompany the iron technique, according to the investigators, can be reduced through several refinements. These include better X-ray monitoring which will allow the iron injection to be stopped before any thrombus extends into the feeding artery and better design of the magnetic probe to reduce the possibility of dislodgement.

The current work, by Dr. John F. Alksne, Division of Neurological Surgery, Medical College of Virginia, is reported in the New England Journal of Medicine.

Louise Anderson, CC Nursing Department chief (l), attended the ceremony at which staff members received certificates for completing advanced training as practical nurses. From left are: Mrs. Anderson, Robert Grimes, Mattie Davis, Nellie Hyland, Savannah Smith, Janet Parks, Earline Vasquez, Fannie Gaither, and Rosa Calisto.

Arthur Moore Appointed MAPB Branch Chief

Mr. Moore has written, directed, and produced scientific movies. He is HEW’s representative on the Interdepartmental Committee on Visual and Auditory Material for Distribution Abroad.

Arthur F. Moore has been named chief of the Medical Arts and Photography Branch, Division of Research Services.

He will be responsible for planning and directing the multi-media activities and services of MAPB, such as still and motion picture photography, medical illustrating, model making, graphic arts services, and exhibits design.

Mr. Moore has been chief of the MAPB Motion Picture Section since 1967. Films produced by this section have received international awards for their excellence.

Before coming to MAPB, Mr. Moore had, for over 25 years, written, produced, and directed multi-media programs for advertising agencies and radio and TV networks.

From 1965 to 1967, while under contract to NIH, Mr. Moore wrote, directed, and produced scientific motion pictures.

Mr. Moore is HEW’s representative on the Interdepartmental Committee on Visual and Auditory Material for Distribution Abroad and a member of the American Science Film Association.

Latest Participants in NIH Visiting Scientists Program Listed Here

3/1—Dr. Indira D. Morris, India, Laboratory of Molecular Aging, NICHD, Gerontology Research Center, Baltimore, Md.
3/17—Dr. Raphael Sharon, Israel, Laboratory of Immunology, Sponsor: Dr. William E. Paul, NIAID, Bldg. 10, Rm. 11N306.
3/30—Dr. Taik Koo Yun, Korea, Laboratory of Pathology, Sponsor: Dr. Louis B. Thomas, NCI, Bldg. 37, Rm. 6D25.
4/1—Dr. Tadashi Hirata, Japan, Drug Development Branch. Sponsor: Dr. Alfred R. Stanley, NCI, Bldg. 57, Rm. 6D25.
Primate Center Studies
Develop New Knowledge
Of Human Depression

Over 15 million people in the United States suffer from mental disorders in which depression plays a significant role.

Scientists at the Wisconsin Primate Research Center, in Madison, produced various degrees of such depression in rhesus monkeys by separating them from their mothers at various ages and under a variety of circumstances.

Variables Affect Severity
Dr. William T. McKinney, psychiatrist at the University of Wisconsin Medical Center, along with Prof. Harry F. Harlow, Primate Center director, and graduate student, Stephen J. Zucchi, reported that the severity of this depressive reaction to separation depends on a number of variables.

These include age at time of separation, social environment from which the animal is removed, and the situation during the separation period.

The need to identify and study these variables before connections between separation and depression can be clearly understood was stressed.

"By using the monkey," said Dr. McKinney, "we have the ability to precisely control the variables considered important in separation, and hopefully these studies will contribute to an understanding of the effects of separation on personality development in humans."

Like human children, infant monkeys go through distinct stages when separated from mothers and peers.

The first few days are characterized by intense protest at separation. The infant then "gives up" and enters a despair stage which includes huddling, self-mouthing, and self-clasping behaviors. When reunited, there is increased clinging to another animal.

On the other hand, 9-year-old animals show increases in locomotion and environmental exploration throughout the separation period and no signs of despair.

Reunion Restores Normalcy
After reunion the animals' behavior returns to normal levels, only to revert upon further separations.

When separation is combined with a period of isolation, a younger animal becomes withdrawn and remains this way even after return to the original environment.

By contrast, the older animal seeks immediate contact with others, and there are increases in clinging behavior as opposed to self-directed actions of younger animals.

These studies, supported in part by the Animal Resources Branch of the Division of Research Resources, confirm clinical observations which indicate that age and prior experiences are important variables in determining one's response to separation.

"We do not believe that experiences during certain critical developmental stages necessarily have specific, inevitable, and irreversible consequences," Dr. McKinney said.

"However," he added, "many basic behavior patterns are determined early in life and with sufficiently rich social experiences, more stress is required to produce psychopathology."

The researchers reported their findings at a recent symposium on "Clinical and Research Aspects of Separation and Depression" during the American Association for the Advancement of Science's annual convention.

Junior Volunteers to Work Year-Round;
They're Called 'A Blessing to CC Nurses'

It's feeding time for Mrs. Chase. Margaret Musgrove, CC nurse, and her volunteer students observe Paula McAdams offering liquid refreshment to the docile patient in the prescribed manner.

Junior Red Cross Hospital Volunteers assigned to nursing units at the Clinical Center will now be available on a year-round basis rather than during the summers only.

This past winter, approximately 29 new volunteers trained for evening and weekend assignments to nursing units in the Clinical Center. Junior volunteers are a blessing to busy nurses. These capable young people make beds, accompany ambulatory patients to their appointments play with the children, organize parties, deliver specimens, and pick up blood supplies at the Blood Bank.

Their assistance enables the nurses to really concentrate on patient care.

The young helpers are carefully screened for the volunteer program, which is coordinated by the CC Normal Volunteer Patient Section.

Junior Red Cross Hospital Volunteers must be at least 14 years old, but those chosen for CC assignments must be at least 16. Many have had prior experience in nursing homes or children's centers.

Before their training here, the volunteers attend orientation at the American Red Cross Chapter House in Silver Spring.

Lectures and panel discussions with more experienced volunteers acquaint them with do's and don'ts regarding their duties, relationships with staff and patients, uniforms, and administrative procedures.

Practice on Mannequins

Here at the CC the volunteers attend 4-day sessions conducted by the Nursing Department's Education and Training division. They practice on Mr. and Mrs. Chase, mannequins who live in the training laboratory.

The volunteers learn the proper procedures for a host of duties which must be done precisely and efficiently — right down to the washing of their hands and emptying water pitchers.

Following training they are assigned to one of the eight CC nursing units. At the end of each assignment, the volunteers are rated on job attitude, quality of work, behavior, grooming, and attendance.

Because of their success as volunteers in the program, many are invited to return, and many do.

NIGMS Report Details
Resistance of Bacteria
To Antibiotic Drugs

A report on the resistance of bacteria and other microorganisms to antibiotic drugs was issued by the National Institute of General Medical Sciences.

The 32-page pamphlet, Antibiotic Resistance, prepared by the NIGMS Microbiology Training Committee, focuses on the biochemical mechanisms which are reducing the ability of many once-heralded antibiotic "wonder drugs" to kill bacteria and cure disease.

Action Explained

For example, quick exchange of genetic information among bacterial cells may pass on resistance to as many as seven antibiotic drugs in a single step.

The report points out that some bacterial cells—especially staphylococcus—can secrete an enzyme which converts penicillin to an inactive form and that penicillin now available may actually induce the bacteria to destroy the effectiveness of these drugs.

The publication also deals with the problem of determining whether and to what extent antibiotic food additives may favorably influence bacterial resistance.

Single copies of the report may be obtained from the Information Office, NIGMS, Room 4A-46, Bldg. 31, NIH, Bethesda, Md. 20014.

The researchers reported their findings at a recent symposium on "Clinical and Research Aspects of Separation and Depression" during the American Association for the Advancement of Science's annual convention.
Utilization of Telephone Receiver Allows Regular Checking of Heart Pacemaker

For more than 40 patients in the New York City area, the telephone has become as vital to life as the heart itself. Twice a week these patients make telephone calls to the Montefiore Hospital to check the strength of the batteries in their heart pacemakers.

A patient calling the hospital tells the chief nurse in the pacemaker program how he feels and then places his telephone receiver in a cradle—a transducer.

Patient Grasps Terminals

Connected to the transducer are two terminals, each about the size of the cap on a spray can—big enough so that the patient can grasp one comfortably in each hand.

To produce an accurate count of his pacemaker's beat, he must also use a magnet to cancel out his own heart's effect on the pacemaker rate. One of the terminals encloses such a magnet. This enables the patient to place the magnet on his chest over his pacemaker while grasping that terminal.

At Montefiore, the chief nurse also places her telephone receiver in a transducer. Impulses produced by the pacemaker are then received and mechanically counted.

The readings are recorded on graph paper. If the graph line were to show a drop of one-half beat per minute, it would be a warning of a weak battery.

Graphs Reviewed Daily

If it were to drop three to four beats per minute, it would mean the patient's pacemaker battery was in a sharp decline. A physician would be alerted immediately. Ordinarily, doctors review the graphs each morning.

Members of the Montefiore research team include thoracic surgeons, Dr. Seymour Furman; Dr. Doris J. W. Eshcher, who with Dr. Furman is co-director of the hospital's pacemaker program, and Bryan Parker, an electronic engineer who heads Montefiore's medical electronics laboratory.

The two physicians are also on the teaching staff at Albert Einstein College of Medicine, New York City. This research was supported by the National Heart and Lung Institute.

Pacemakers regulate the heartbeat by sending impulses to electrodes attached to the heart. Batteries ordinarily last 1½ to 2 years, but the time may be longer or shorter.

Complete Coverage Possible

Until now, doctors have been unable to follow all pacemaker patients adequately, and methods for measuring the pacemaker rate have been accurate only to within a couple of beats a minute.

To guard against unexpected failure, pacemaker manufacturers recommend a pre-set time for operating on the patient and changing his battery.

This means, Dr. Furman explained, that some still-good batteries have been thrown out and some patients have been operated on prematurely, though prudently.

The research team learned through experience that the pacemaker rate is a good guide to the remaining battery strength.

Dr. Furman said, "You might have a straight graph line for 18 or 20 months—or even 3 or 4 years. Then there will be a change of 5-6-7 percent from one day to the next.

"That is the beginning of the toboggan slope. The battery may go from normal to all the way down in 2 weeks. That is why frequent testing, with reliable equipment, is important."

The Montefiore device will measure the patient's pacemaker battery rate a good guide to the remaining battery strength.

Scientists May Have Deciphered Nature Of Waxy Protein Deposits in Amyloidosis

The nature of the waxy protein deposits accumulating in human organs, such as the liver and kidney, in the puzzling disease called amyloidosis, may have been deciphered by Dr. George Glenner and co-workers at the National Institute of Arthritis and Metabolic Diseases.

Their research suggests that amyloid protein is derived from a fragment of an antibody molecule, the substance formed by the body's response to foreign infectious agents.

Dr. Glenner, an NIAMD pathologist since 1955, feels that further study of this protein should lead to a clearer picture of the role of antibody formation in the production of amyloid.

Dr. Glenner's discovery may result in a more complete understanding of this serious disorder. The disease is commonly associated with rheumatoid arthritis and tuberculosis, and other chronic infectious or inflammatory diseases, as well as with the normal aging process.

No successful treatment is available for amyloidosis, although cure of the underlying infectious or inflammatory disease. The final study determined that the sequence of the amino acids comprising the amyloid protein was indeed derived from a fragment of an antibody protein.

This fragment is believed to be one of the major sites of antigen binding—one of the steps in the body's defense mechanisms to remove foreign particles from the body.

Now, it may be possible to define more precisely the antigen-antibody (See AMYLOIDOSIS, Page 8)
AMYLOIDOSIS

(Continued from Page 7)

relation because a pure, homogeneous, and vital portion of an antibody, produced in response to a known foreign, or antigenic stimu-
us, such as tuberculosis, is available from human sources in large amounts.

A complete study of these amyloid proteins may shed new light, at the molecular level, on the body's response to infection and the manner in which antibodies combine with these infectious agents to eliminate them from the body.

Amyloidosis, therefore, appears to be a disease caused by the deposition of a fragment of an antibody in the tissue, by mechanisms as yet to be determined. Further, the process involved in this disease may be the final common pathway of immunoglobulin breakdown in a variety of infectious or metabolic disorders.


Interstate Shipping Regulations for Blood Approved: Standards Are Proposed for Platelet Distribution

Human blood which has already supplied a factor to help victims of hemophilia can now be shipped in interstate commerce to help others who need transfusions.

Dr. Robert Q. Marston, NIH Director, announced that standards permitting this were published in the Federal Register on April 9. Dr. Marston remarked on the significant increase in the supply of such blood since 1965. In that year Dr. Judith Pool of Stanford University, using research grant funds from the National Heart and Lung Institute, developed a simple method for extracting the antihemophilic factor from whole blood.

Last fall, NIH approved that clotting factor for interstate shipment (see NIH Record, Sept. 29, 1970, page 10).

The remaining blood, Dr. Marston noted, can be quite useful for many ailments. "It is truly sophisticated medicine and it leads to a more bountiful national supply of blood—when one blood component is used for the exact condition for which it serves best, and the remainder helps others," he said.

"Bleeders' Need AHP

Dr. Marston noted that sufferers from hemophilia—so-called "bleeders"—need the antihemophilic factor from at least 5 million pints of blood a year for adequate treatment. The remaining components would help substantially in meeting the Nation's need for blood.

The new regulations permit such remaining blood, when handled according to prescribed standards, to be shipped freely in any area of the country.

Standards for the safety, purity, and potency of the modified whole blood were developed by the Division of Biologics Standards.

The standards were first prepared in preliminary form last October and as published apply to all blood banks using such blood in interstate commerce.

These regulations become effective in 90 days.

NIH took a formal step on April 9, approving for interstate shipment a blood-clotting element that is essential in the treatment of patients who have leukemia and other disorders of the blood and bone marrow.

The clotting element is composed of platelets—tiny, disc-shaped particles in the blood.

Dr. Robert Q. Marston, NIH Director, announced publication of proposed standards for safety, purity, and potency of platelet concentrate in the Federal Register April 9.

Comment Invited

Comments are invited from blood banks and other interested sources so that final standards can be drawn.

Platelets from about two million pints of blood a year are needed to treat patients, Dr. Marston noted.

Platelets must be extracted from fresh whole blood and used in a matter of hours. They have been used primarily in major medical centers.

The new standards will mean the concentrate can be moved quickly in any area of the country and therefore may be used even at the smaller medical facilities.

Leukemia patients often have low platelet levels, either as the result of the disease itself or because of drug treatment.

Patients who have other forms of cancer may also receive drugs that reduce their ability to produce platelets. Internal bleeding can result and lead to death.

Research Interests

Interests of patients from 8 pints of blood might be necessary in one day for one patient so research on treating these diseases has led to equally strong interest in preparing and using platelets.

For example, at the Blood Bank of the Clinical Center—the research hospital at NIH—platelets are transfused from 10,000 pints of blood a year.

Because platelets die fast, the remaining blood is as good as any blood that is as much as a day old, and is used to help others who need transfusions, such as heart surgery patients. Every 2 pints of blood helps three patients.

The proposed regulations, published in the Federal Register, were developed by the Division of Biologics Standards.

Among other standards, it is proposed that the time for optimal use of the platelets be extended to 24 hours, provided the concentrate is stored at room temperature. Hospitals have generally used platelets within 6 hours after accepting blood from donors.

Care of a patient with chronic mucocutaneous moniliasis—a fungal disease in which defense mechanisms are impaired—was discussed during a CC Allergy and Infectious Disease Nursing Service conference. Participants were Dr. Marion Shapiro, Marilyn Harrison, and Josephine Smith. Dr. Charles H. Kirkpatrick, NIAID, described CC studies under way.