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NATIONAL INSTITUTES OF HEALTH  
PUBLIC HEALTH SERVICE

## Omata, Lazarus Win Promotions In Japan, Brazil

The Office of International Research has announced the promotion of two staff members—one to its Pacific Office in Tokyo and the other in the Latin-American Office in Rio de Janeiro.

Dr. Robert Omata, Assistant



Dr. Lazarus



Dr. Omata

Head of the Foreign Grants and Awards Section since September 1963, has been appointed Assistant Chief of the Tokyo Office, filling out its complement of personnel. He will depart with his family for

(See PROMOTIONS, Page 4)

## NIMH Booklet Describes Mental Center Program, Called New Era by Felix

Comprehensive mental health centers—to enable the mentally ill to stay at home, be treated at home and to become well at home—are discussed in a new booklet, "The Comprehensive Community Mental Health Center," recently published by the National Institute of Mental Health.

Federal grants-in-aid to finance up to two-thirds of the cost of construction of such local mental health treatment centers were authorized last year by the Congress under the Community Mental Health Centers Act (Public Law 88-164).

### Dr. Felix Comments

In announcing the new publication, Dr. Robert H. Felix, Institute Director, said, "Not since the creation of the National Institute of Mental Health in 1949 has such specific impetus been provided by the Federal Government for the opening of a new era in dealing

(See NEW ERA, Page 4)

## Kennedy Library Day Gives All of NIH Opportunity to Contribute to Memorial

Tomorrow (Wed.) will be John F. Kennedy Library Day at NIH.

It has been so designated by Dr. James A. Shannon, NIH Director, as the one day on which NIH employees may contribute to the campaign for funds to build the Library as a fitting memorial to the late President.



Fabian Bachrach Photo.

Donation Day tomorrow marks the culmination of a carefully planned 2-week drive here to stimulate interest and participation.

With the cooperation of all Institute and Division Information Officers an organization of branch chairmen and keymen was established throughout all NIH buildings, both on and off the reservation, to make the act of contribution tomorrow—in envelopes provided for that purpose—a simple matter.

### President Chooses Site

Elsewhere throughout the Federal Government the campaign extends from May 15 to June 15.

Conceived as a memorial to the 35th President, the Kennedy National Library will be built on the banks of the Charles River in Boston, on a site selected by President Kennedy eight weeks before his death.

The building will overlook Harvard University's Winthrop House, where the young John F. Kennedy lived as an undergraduate.

The Kennedy Library will be much more than a monument to the late President. It will house a complete record of his life and

(See KENNEDY, Page 6)

## Library Science Majors From Gallaudet Learn Much on Soundless Tour of NLM

Not one laugh or word disturbed the quiet of the National Library of Medicine recently as 25 bouncy college students were taken on a tour of every section and stack.

The students—all majors in Library Science—were from Gallaudet College, and their animated comments were in sign language. Most of the young people, age 19 to 24, have been deaf from infancy, some from birth. As a result, their ability to express themselves vocally varies from complete speechlessness to near-normal.

### Course Is Popular

Two teachers in library science, the most popular course at Gallaudet, accompanied the students. They were Arthur Fryer, who teaches referencing, and Mrs. Adele Krug, who instructs in cataloguing.

Both of them used the spoken word and sign language as they translated the descriptions of Pat Galagan, Information Specialist,

(See GALLAUDET, Page 5)



Lily Wilmarth, a Gallaudet student, recounts in sign language an anecdote told her by one of the NLM librarians.—Photo by Lou Cook.

## Dr. Braunwald Selected State 'Woman of Year'

Dr. Nina Braunwald, staff member of the National Heart Institute's Surgery Branch, has been named "Woman of the Year" for the State of Maryland. She won the preliminary Silver Spring competition after being nominated by the Silver Spring Business and Professional Women's Club. In the State-wide selection she won out over Mrs. Eunice Shriver and the late Rachel Carson.

Dr. Braunwald received an engraved plaque and was cited for her success in her profession as evidenced by achievements and character, as well as sense of responsibility for civic affairs and public service.

A resident of Bethesda, Dr. Braunwald is the first woman certified by the American Board of Thoracic Surgery. She is married to Dr. Eugene Braunwald, who is Chief of the NHI's Cardiology Branch.

She has been accorded many honors in the past two years, all reported in the NIH Record.



Pretty Jean Sassaman, graphic artist of the Medical Arts and Photography Branch, who assisted in producing the campaign posters, helps post one in Building 1.—Photo by Bob Pumphrey.

# the NIH Record

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The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policy of the paper and the Department of Health, Education, and Welfare.

## NEWS from PERSONNEL

### REPORT WRITING COURSE

A 15-hour professional and administrative report-writing course was conducted recently at the NIH under the sponsorship of the Employee Development Section, utilizing instructors of the General Services Administration.

Designed to help participants write well organized and more readable reports, the course was attended by 91 NIH employees representing most of the Institutes and Divisions and the National Library of Medicine.

At such future time as the need for additional sessions is indicated, supervisors will be requested to nominate additional employees who may be expected to benefit from such a course.

### HEALTH BENEFITS PROGRAM

There are just 28 days remaining in which eligible employees may take advantage of the "Limited Enrollment and Change of Enrollment" period under the Federal Employees Health Benefits Program. The final date is June 30.

The April 7 issue of the *Record* pointed out features of the amended Health Benefits Law.

All I/D Personnel Offices have the necessary brochures and registration forms.

### QUALITY INCREASES

Since implementation of the Quality Increase Program at the NIH, 88 employees have been granted additional step increases for sustained high quality performance. As a measure of recognition of their contributions to the Federal Service, the names of these employees are listed here, with Office, Institute or Division identification at the time the increases

## List of Latest Arrivals Of Visiting Scientists

5/5—Dr. Jacob Gabbay, Israel, Study in the Laboratory of Physical Biology. Sponsor: Dr. Karl Sollner, NIAMD, Bldg. 2, Rm. 312.

5/11—Dr. Giovanna N. Muzii, Italy, Study in the Laboratory of Biophysical Chemistry. Sponsor: Dr. Harry A. Saroff, NIAMD, Bldg. 4, Rm. B32.

5/11—Dr. Gopal A. Krishna, India, Study in the Laboratory of Chemical Pharmacology. Sponsor: Dr. Bernard B. Brodie, NHI, Bldg. 10, Rm. 7N117.

5/18—Dr. Alexander G. Ogston, Australia, Research in the Laboratory of Viral Oncology. Sponsor: Dr. Peter T. Mora, NCI, Bldg. 10, Rm. 3B16.

were granted, March 15 through May 10.

OFFICE OF THE DIRECTOR, NIH—Herbert H. Rosenberg, Dorothy B. Burns, Phyllis J. Hansen.

NATIONAL CANCER INSTITUTE—Lillian M. Axtell, Margaret C. Butler, Emily A. Dawson, Maurice Johnson, Walter H. Magruder, Adrian Perrault, Arwana Schoemer, Sandra J. Thompson.

NATIONAL HEART INSTITUTE—Helen E. Balaguer, Margaret L. DeVore, Joan Fuller, Mary C. Gall, Mildred F. Gettings, William E. Glennon, Barbara J. Holmberg, William Stringfellow, Jr., Ruth Townsend.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES—Alberta E. Blair, Vivian B. Bower, Howard F. Brubach, Merle R. Cross, Pearl E. Goldhagen, Lucie K. Hauck, Florence J. Hooker, Patricia L. Merriman, Lillian M. Perry, Barbara J. Smith, Alice Staats, Betty J. Verham, Charles H. Williams.

NATIONAL INSTITUTE OF MENTAL HEALTH—George A. Van Staden.

## PLAY AREA OPENS



Children patients from the Clinical Center board an NIH fire truck at the spring opening of the CC outdoor recreation area. Lt. Vincent B. Napoli of the NIH Fire Department explains to Jan Ellis and Joseph Allen Humphrey how things work. Nurse Joan Babchak smiles approval. The day's activities were planned and directed by Arnold Sperling, Chief of the CC Patient Activities Section.—Photo by Jerry Hecht.

CLINICAL CENTER—Eloise M. Adams, Vivian K. Arnold, James H. M. Austin, Dorothy L. Bolling, Miriam B. Bowman, Kenneth Braxton, Eva Burns, Calvin A. Bussey, June L. Carroll, Keith D. Collett, Edith M. Cowan, Mary Edwina Cummings, Bernadette DeWitt, Alma B. Doyle, Doris J. Dunich, Delbert E. Evans, Franklyn D. Gray, Robert H. Grimes, Margaret M. Haller, Ophelia E. Harding, Ruth Hill, H. D. Hochstein, Clyde M. Hollomon, Virginia A. Humphrey.

Also Naomi A. Ide, Teresa W. Kean, Sallie M. Keys, Thomas H. Keys, Bertha F. Kidd, Kathryn R. Knight, Elizabeth C. Koepenick, John F. Kuster, Winifred L. McDonald, Mary H. McGinniss, Helen L. B. Moe, Edith P. Moore, Joseph W. Moss, Ada Murphy, Helen Murphy, Lucy Lee Riley, Edward H. Saunders, Ida A. Spangler, Alfred G. Stringer, Dolores T. Stroble, Armenia B. Stup, Lillian D. Summers, Robert E. Taylor, Jr., Louise G. Towles, Ruth B. Vreeland, Elsie W. Yanchulis, Charles H. Zierdt, Cynthia H. Zealy.

DIVISION OF RESEARCH GRANTS—Errett C. Albritton.

DIVISION OF RESEARCH SERVICES—Adele J. Van Devanter.

As other employees are so recognized, their names will be reported in the *Record*.

## 20-Bed General Clinical Research Center Grant Awarded Univ. of Utah

An initial grant of \$421,749 for a 20-bed general clinical research center at the University of Utah College of Medicine, Salt Lake City, was announced recently by Surgeon General Luther L. Terry of the Public Health Service.

The center, to be a separate unit in the new wing being added to the University Hospital, will enable biomedical scientists at the Medical College to begin research projects that until now have been deferred because of lack of clinical research facilities. Dr. Frank H. Tyler, Associate Professor of Medicine, will be the center Director.

This award raises to 73 the number of general clinical research centers supported by the PHS and administered by the Division of Research Facilities and Resources.

### Serves 6-State Area

As the only medical school in the 6-state area of Idaho, Montana, Utah, Nevada, Arizona, and Wyoming, the University of Utah College of Medicine draws most of its students from that region.

The new general clinical research center will not only contribute to new medical knowledge, but will also aid in the training of advanced medical students in a clinical research setting with its emphasis on critical evaluation of data concerning each patient.

The center grant provides funds for special laboratories, a diet kitchen, a nursing station, and the patient area, as well as salaries of the center director, special research nursing staff, and laboratory technicians. The unit's core laboratories will include a chemical laboratory and facilities for steroid and isotope determinations.

## Senators Will Play Twins June 14 in Benefit Games

The Washington Senators will play the Minnesota Twins in a double-header for the benefit of Children's Hospital on Sunday, June 14, at D.C. Stadium. The starting time is 1 p.m.

Tickets are selling at regular prices: general admission, \$1.50; reserved grandstand, \$2.50; box tickets, \$3; mezzanine box tickets, \$3.50. Tickets may be obtained by check, made payable to Children's Hospital, sent with ticket applications to the Hospital at 2125 13th St., N.W., Washington, D.C. 20009.

Further information may be obtained by calling DU 7-4220, Ext. 40, 41, or 42.

## Dr. Pai, Indian Biologist, Aids in Understanding of Factors in Liver Cancer

Dr. Shamala R. Pai, a biologist from Bombay, India, recently returned home after two years of research at the National Cancer Institute where she made a very significant contribution to understanding the complex factors involved in liver cancer.



Dr. Pai

On leave of absence from the Indian Cancer Research Centre in Bombay, Dr. Pai had worked as a Visiting Associate in the Carcinogen Screening Section of NCI's Carcinogenesis Studies Branch since July 1962.

Collaborating with Dr. Richard S. Yamamoto and Dr. John H. Weisburger, Section Chief, Dr. Pai conducted studies on hormonal factors in rats treated with a chemical carcinogen causing liver tumors.

Several series of experiments showed that (1) the untreated rats had normal livers; (2) most of the animals fed a diet containing a carcinogen developed precancerous lesions; (3) almost all the rats fed carcinogen and implanted with a functional pituitary tumor (as a source of pituitary hormones) developed carcinoma of the liver; and (4) those subjects only implanted with the tumor developed liver hypertrophy.

### Hormones Involved

These studies demonstrated the direct effect of pituitary hormones in liver carcinogenesis. Previous research in the field had suggested that hormonal factors were involved, but evidence was inconclusive. "This success has opened up an entire field of investigation which will be pursued in the coming years," Dr. Weisburger said.

An application of these studies is the testing of other carcinogens which are time-consuming to detect with presently available techniques because of their low potency.

Two research papers have been written on the studies. One appeared in *Nature*, September 28, 1963 and the other in the April 1964 *Journal of the National Cancer Institute*. Additional papers are being written on recent work dealing with the mechanisms involved in these observations.

Dr. Pai received a M.Sc. degree in 1955 and Ph.D. in 1961 from Bombay University. In 1961 she married a physician, Dr. Rajnikant R. Pai, Assistant Chief of the Bombay Port Trust Hospital, who came to this country in the fall of 1963 on a fellowship.

## THE NIH SPOTLIGHT

# Dr. Dyer Recalls Light Side Of Research 50 Years Ago

By Bonnie Gregory

"Sic transit gloria mundi."

A thought about the transitory nature of earthly fame may have passed through the mind of Dr. Rolla E. Dyer, Director of NIH from 1942-50, as he and his wife attempted to park their car in front of Building 31 recently, only to be informed that the parking spaces were reserved.

Undaunted, Dr. Dyer, in town for the annual Dyer Lecture, a lectureship established in his honor, calmly drove to the rear of the building where parking spaces are not reserved, and came in to reminisce about the days when the yearly medical research budget was a magnificent \$275,000.

Not one to speak longingly of the "good old days," although he joined the Public Health Service Commissioned Corps nearly 50 years ago, Dr. Dyer admired what he termed "the amazing technical advantages of modern research."

### Inefficiencies Eliminated

"At the old Hygienic Laboratory," he said, "research had a certain personal quality about it that perhaps has been lessened by the enormous size of NIH today, but it also had hazards and inefficiencies that have been virtually eliminated by modern methods."

To illustrate his point, Dr. Dyer recalled that "In our attempts to isolate *Murine typhus*, one of the organisms responsible for typhus fever, there was only one way to keep the carriers of typhus body-lice alive—feed them human blood. We took turns wearing a colony of lice strapped to our legs and most of us contracted typhus fever."

Dr. Dyer remembers that outbreaks of typhus, Q-fever, silicosis and other diseases were quite common occurrences among medical researchers of the 1920s. Today these hazards have been virtually wiped out by improved isolation tech-



Cartoon by Marie Andros

niques and special laboratories equipped with air filtration systems.

On the lighter side, Dr. Dyer recalled many amusing incidents involving research animals.

During prohibition days, when NIH was still the Hygienic Laboratory at 25th and E Streets, N. W., monkeys often escaped from the building. Recapturing them from the upper floors of the deserted brewery next door, or flushing them out of the trees of the old Naval Hospital grounds with firehoses, was not uncommon. Dr. Dyer also remembered the escape of a goat that invaded a car parked along Constitution Avenue in the days when cows grazed on the Mall.

"Such happenings added spice to life," said Dr. Dyer, "but they did not exactly speed the progress of research."

Asked about the future areas of medical research, Dr. Dyer, many times honored for his research in rickettsial diseases, noted that most

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## Better Dental Materials Sought in New Program Under 5-yr. NIDR Grant

A comprehensive research program on materials that may be used as implants in the teeth or for other parts of the body will be undertaken at the University of Virginia under a grant from the National Institute of Dental Research.

"If teeth did not have to chew and if people were never tempted to eat ice cream while drinking hot coffee, the materials used in filling teeth would present little problem," said Dr. Heinz G. F. Wilsdorf, Professor and Chairman of Materials Science at the university, who will head the project.

### Better Materials Needed

Because of the need for better dental restorative materials to cope with the stresses and strains of chewing and temperature variation, the university will apply the principles of solid state physics to the study of metals, ceramics and plastics in a broad dental materials research program.

Grant funds of \$104,743 have been allocated for the first year of the proposed 5-year study.

"Although much practical knowledge of dental materials has been developed," Dr. Wilsdorf said, "there is real need for a fundamental study and purposeful search for special materials which can perform under unusual conditions. Such fundamental studies have been highly successful in developing special materials for space applications."

Announcement of the award was made by Dr. Luther L. Terry, Surgeon General of the PHS.

Associated with Dr. Wilsdorf will be Dr. Avery Catlin, Associate Professor of Materials Science, who will be in charge of an investigation of the effects of materials on blood coagulation.

### Problem Is Critical

Dr. Catlin hopes to determine which electrical properties of materials can prevent the formation of blood clots. This is a critical problem in such devices as artificial heart valves, where formation of a blood clot often leads to early failure of the valve and results in the death of the patient.

The character and properties of surfaces will be studied by Associate Professor of Materials Science, Dr. Kenneth R. Lawless, specialist in the surface chemistry of crystals.

Failure of a material in the human body often occurs due to corrosion. His research objective will be to determine the influence of body fluids on corrosion fatigue or stress corrosion cracking of materials implanted in the body.

## Dr. Hasselmeyer Named to Training Committee

The National Institute of Child Health and Human Development has announced the appointment of Eileen Hasselmeyer, R.N., Ph.D. to a 4-year term of the 8-member Nurse Scientist Graduate Training Committee of the Public Health Service, starting July 1.

The committee considers applications from universities for nurse scientist graduate training grants under which qualified nurses may receive fellowship awards.

Dr. Hasselmeyer, Special Assistant for Prematurity, Perinatal Biology Program, NICHD, was previously director of a research project

to evaluate the need of the prematurely born for extra body support. The project was a joint study of PHS and Bellevue Hospital Center, Division of Nursing, New York City.

Dr. Hasselmeyer is a graduate of the Bellevue School of Nursing and of New York University, from which she holds B.S., M.A., and Ph.D. degrees in parent and child health.

She is the author of "Behavior Patterns of Premature Infants: A Study of the Relationships Between a Specific Nursing Procedure and General Well-being of the Prematurely Born Infant."

## NEW ERA

(Continued from Page 1)

with the problems of mental illness.

"These comprehensive mental health centers to treat the mentally ill in the community and by the community will be the nucleus of a national mental health program in which the Public Health Service will assist States and communities to achieve their objectives."

The new booklet points out that better mental health care actually costs less. The dollar savings of community over public mental hospital care of mental illness is great, because the period of treatment in the community hospital is shorter.

### Reasons Cited

There are a number of reasons for this, including: treatment usually begins earlier in the illness, when it is more effective, is more intensive, avoids the trauma of separation from family and the stigma of commitment to a State hospital, and offers the support of community resources following treatment.

In presenting the facts, the booklet notes that the idea of comprehensive treatment—provided in the community for all who need it—is a new concept and a new challenge.

In outlining the concept, the booklet lists services to be provided by community mental health centers as emergency services around the clock, short-term hospitalization, outpatient services, partial hospitalization in day or night treatment programs, after-care and consultation and education services for community agencies.

### Examples Presented

Examples of community mental health facilities and programs currently providing the basic services of the comprehensive treatment concept also are presented as guidelines to communities preparing plans for similar centers.

Federal construction grant funds will become available in Fiscal 1965 to sponsors of community mental health centers that meet the terms of the Community Mental Health Centers Act.

Single copies of the booklet, PHS Publication No. 1137, are available without charge from the Public Inquiries Branch, Office of Information and Publications, Public Health Service, Washington, D. C. 20201, or the Publications and Reports Section, National Institute of Mental Health, Bethesda, Md. 20014. They are also available at quantity rates from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

## EXPLORING NIH

### Autoimmune Study in Myasthenia Gravis Shows Thymus Linked to Muscle Tissue

Recent studies by Dr. Hugo van der Geld, currently a Guest Scientist in the Laboratory of Immunology of the National Institute of Allergy and Infectious Diseases, point to a probable functional autoimmune relationship between the thymus gland and skeletal muscle in the neuromuscular disease, myasthenia gravis.

Using a fluorescent-antibody technique, Dr. van der Geld and collaborators at the Central Laboratory of the Netherlands Red Cross Blood Transfusion Service in Amsterdam have established the presence, in the gamma globulin portion of myasthenic blood serum, of an antibody which is cross-reactive with thymus and skeletal muscle.



Dr. Hugo van der Geld (left) and his sponsor, Dr. Arthur J. L. Strauss of NIAID's Laboratory of Immunology, review photomicrographs demonstrating findings in their collaborative research on myasthenia gravis.—Photo by Sam Silverman.

ele. Their findings were reported in the March issue of the Proceedings of the Society for Experimental Biology and Medicine.

The cause of myasthenia gravis is unknown, though a defect in neuromuscular transmission has been inferred from drug responsiveness and electromyographic studies in patients with the disease. Unexplained has been the cause of the association between the classical symptoms of the disease (abnormally rapid exhaustion and loss of strength in voluntary muscles) and the frequent occurrence of abnormalities in the thymus gland.

### Describes Reactivity

In 1960, Dr. Arthur J. L. Strauss, then an NCI post-doctoral fellow at the College of Physicians and Surgeons, Columbia University, and presently Dr. van der Geld's host in the Laboratory of Immunology, NIAID, described with the aid of fluorescent-antibody techniques the reactivity of myasthenic serum immune globulins for alternate striations of skeletal muscle. These findings were subsequently confirmed by other investigators.

Using other techniques in more recent studies, Dr. van der Geld and his Dutch colleagues have in-

dicated the presence, in sera of patients with myasthenia gravis, of antibodies to thymus as well as to skeletal muscle.

Furthermore, the investigators demonstrated that, if the test sera had been previously incubated with either skeletal muscle or thymic tissue, myasthenic sera lost all reactivity with skeletal muscle and thymus tissue. These data indicated the existence of an antigen common to both tissues.

### Sera Reactive

With the aid of immunofluorescence technique, by which sections of skeletal muscle and thymus were successively treated with myasthenic sera and fluorescent-antibody human gamma globulin, Dr. van der Geld and collaborators then demonstrated that myasthenic sera were concurrently reactive for alternate skeletal muscle striations and for the cytoplasm of thymic epithelial cells. Moreover, these reactivities were removed from sera by absorption with either skeletal muscle or thymic tissue.

Dr. van der Geld, supported initially by the Netherlands Organization for Advancement of Pure Research (ZWO) and subsequently by grants from the Myasthenia Gravis Foundation and Hoffmann-La Roche, Inc., joined Dr. Strauss in June 1963 in a collaborative study to determine the incidence and specificity of anti-skeletal muscle and anti-thymus activities for myasthenic sera.

### Reactivity Varies

Drs. Strauss and van der Geld observed in sera from 99 of 336 myasthenic patients (30 percent) concurrent reactivity for muscle striations and thymic epithelial-cell cytoplasm. Sera from 19 of 20 patients with myasthenia gravis who had associated thymomas (tumors of the thymus) were reactive (95 percent). Sera from 129 normal individuals and from 674 individuals with a wide variety of systemic diseases were nonreactive in the immunofluorescence study.

The data lead the investigators to believe that this serum reactivity for skeletal muscle and thymus is highly specific for myasthenia gravis and that it does not occur in healthy individuals or in other disease states.

These findings on specificity were presented at the Conference on Autoimmunity, sponsored by the New York Academy of Sciences in February, and at the 48th Annual

## PROMOTIONS

(Continued from Page 1)

Tokyo about July 1.

Dr. Alfred A. Lazarus, newly appointed Chief of the Rio Office, has been Scientific Representative of the Pacific Office in New Delhi since 1962. He is now on duty there. Dr. Lazarus replaces Dr. Dieter Koch-Weser, who has completed a 2-year assignment and is leaving NIH.

Prior to becoming Assistant Head of the Foreign Grants and Awards Section, Dr. Omata held the position of Executive Secretary in the Career Development Review Branch of the Division of Research Grants, beginning in 1960.

From 1949 to 1953 he was a Fellow of the American Dental Association, working at the National Institute of Dental Research. Throughout 1953-60, he was associated with NIDR's Laboratory of Microbiology.

### NIH Fellowship

Dr. Omata, a member of the PHS Commissioned Corps since 1953, received his B.A. degree from the University of California at Berkeley, and his M.S. and Ph.D. degrees from the University of Minnesota. While doing pre-doctoral work there, he had an NIH Research Fellowship, 1947-48.

A Scientist Director in the PHS Commissioned Corps, Dr. Lazarus was detailed from the Office of the Surgeon General to the Department of State in 1954, where he served in its Foreign Aid Program in Peru, Korea and El Salvador. In Korea and El Salvador he was Chief of the Public Health Division of the Foreign Aid Mission.

From 1946 to 1954 Dr. Lazarus was Professor of Public Health and Preventive Medicine at the University of Washington School of Medicine in Seattle.

A Naval veteran of World War II, Dr. Lazarus received his A.B., M.A., and Ph.D. degrees from the University of California.

Meeting of the American Association of Immunologists in Chicago.

Drs. van der Geld and Strauss postulate that disturbed tolerance, infection, somatic mutation, or neoplastic proliferation may produce in the thymic epithelial cells antigenic changes which in turn initiate an autoimmune process in the thymus.

In addition they suggest that, owing to antigenic determinants common to skeletal muscle and thymus, muscle becomes secondarily involved by reaction with antibodies initially evoked by a derangement in the thymus. The investigators stress the hypothetical nature of this formulation and emphasize the need for additional elucidating studies.

## GALLAUDET

(Continued from Page 1)

and Howard Drew, Reference Librarian.

The young people were most impressed with the rare medical book section, which includes a special exhibit of a few works on medicine written at the time of Will Shakespeare. Oldest book in the collection is in Arabic, written in 1094 on gastro-intestinal diseases.

Miss Marjorie Scuff, an NLM Librarian, pointed out that at the site of this rare collection there are hidden holes in the ceiling which, at the threat of fire, can emit carbon dioxide to put out flames so that the books will not be damaged by water.

### Covers Medical Field

The Library, located in the southeast section of the NIH reservation, tries to have one copy of everything published in the field of medicine. This is a large order, requiring personnel to search out the material, others to order it, and still others to make records of it once it arrives. Thus the 1,066,068 items in the Library when it moved here two years ago (See *NIH Record*, April 10, 1962) have swelled to over 1,200,000.

As the tour progressed, the students were given a detailed description of MEDLARS (Medical Literature Analysis and Retrieval System) and the cataloguing system that is kept in working order by a staff with a command of 30 languages.

The guides made it clear that the Library doesn't lend books or magazines to individuals, but only to other libraries. However, photocopies of any material on file are available on request, and currently 130,000 requests totaling more than three million pages of photo duplicated articles, are filled annually. The various machines that perform copy work were especially designed for NLM.

### Deafness Termed Advantage

Several of the young people were interested in library photo work but most were planning to go into cataloguing, a type of activity that doesn't require the use of the telephone.

They asked Mrs. Krug to make it clear that they would be apt to be better at this type of work than average library students because of the greater concentration that deafness forces upon them.

Mrs. Krug was proud of the fact that one of her girls has been placed as Assistant Librarian at Culver Military Academy in Culver, Ind., next fall, where she had done her practice work the year before. Several others are already placed in the library at Catholic University and in the District of Columbia city library system.



Mrs. Adele Krug, Library Science teacher at Gallaudet College (right), translates for her students the guided tour lecture on the National Library of Medicine given by Pat Galagan, Information Specialist (far right, half hidden), as they stand in the central reading room. Overhead can be seen the ceramic tile abstract mural by Frans Wildenhain that ornaments the four sides of the room.—Photo by Lou Cook.

## Tranquilizers Improve Apathetic Patient More Than the Agitated, Report Shows

"Tranquilizing" drugs are misnamed and show broader effects than previously suspected, according to a recent report by scientists at the National Institute of Mental Health.

New evidence indicates that the phenothiazines, the most widely used of the "tranquilizers," improve the patient even more than the agitated, abusive one. The drugs' action, therefore, is broader and more versatile than is presently outlined in standard medical texts.

This finding was reported by Dr. Jonathan C. Cole, Director of the Institute's Psychopharmacology Service Center, at a Veterans Administration Psychiatric Conference held recently in Kansas City, Mo.

His conclusion was based on a 9-hospital collaborative study of 340 patients, financed and directed by the Service Center.

### Results Cited

The study showed that the following symptoms which are considered fundamental to schizophrenia are the most improved by the phenothiazines: poor social participation, poor self care, confusion, indifference to environment, and hebephrenic gestures (grimacing and giggling).

Psychiatric teams which evaluated patients with these symptoms after six weeks of drug therapy found them markedly improved. "In contrast," Dr. Cole added, "hostility, agitation, anxiety, and ideas of persecution—symptoms which are usually regarded as 'target symptoms' for tranquilizing therapy—although influenced by the drug treatment, were not affected

to as great a degree."

"During the past dozen years," he said, "the phenothiazines have been stereotyped as 'ataractics' or 'tranquilizers,' the implication being that their dominant action is to calm excited patients by relieving the patient's anxiety. . . . We have presented evidence to confirm that phenothiazines . . . have a wide variety of clinical effects beyond tranquilization."

The drugs were shown to act in two ways, according to the study's coordinator, Dr. Solomon Goldberg. They alleviated the patient's pre-treatment symptoms, and prevented the development of other schizophrenic symptoms the patient did not have before treatment.

## 'Arsenic and Old Lace' Is Next R&W Movie

The final free movie in the current series sponsored by the Recreation and Welfare Association of NIH, will be the classic comedy farce "Arsenic and Old Lace," starring Cary Grant, Josephine Hull, and the late Peter Lorre.

Screenings are scheduled for Saturday and Sunday evenings, June 13 and 14, at 8 p.m. in the Clinical Center auditorium. All NIH personnel, patients, and friends are invited to attend.

## Dr. Felix Urges Increase In Insurance Coverage Of Mental Illnesses

Delegates to the American Psychiatric Association's recent annual meeting in Los Angeles heard Dr. Robert H. Felix, Director of the National Institute of Mental Health, recommend an increase in insurance coverage of mental illnesses if patients are to afford the services to be provided through the new community-based mental health program.

The Institute, Dr. Felix told the delegates, has developed five recommendations as guides to the development of broader insurance coverage of psychiatric illness. They were developed, he said, after meetings with major health insurance carriers and labor and management groups.

### Recommendations Listed

The recommendations are:

1. In treating the mentally ill, emphasis should be placed on early referral and short-term, intensive therapy. Insurance coverage, in the category of outpatient benefits, might well be 100 percent for the first few visits, with a progressively decreasing percentage of cost coverage for subsequent visits, up to a stated limit.

2. In-hospital benefits should be increased and partial hospitalization should be included in these benefits. Allowable hospital expenses should include those incurred within day and night hospital programs, even though the patient's daily length of stay is less than 18 hours.

3. Increased recognition should be given to all professional skills essential to treatment. Coverage should include, in addition to the services of psychiatrists and other physicians, those of the clinical psychologist, psychiatric social worker, and the psychiatric nurse, when supervised by a qualified physician.

### Full Coverage Advocated

4. Insurance should not favor a particular type of treatment, since coverage of one therapy without coverage of others might encourage treatment not best suited to the needs of the patient.

5. Prescribed drugs should be covered for ambulatory as well as for hospitalized patients. Drugs are an important resource for treatment of mental illness and may be the very factor keeping some patients ambulatory instead of in the hospital.

Dr. Felix said that NIMH, at the request of the U. S. Civil Service Commission, has furnished it with specific suggestions for broadening psychiatric coverage under the Federal Employees Health Benefits Program.

## Environmental Causes of Schizophrenia Revealed in Study of Identical Twins

A unique study of identical twins at the National Institute of Mental Health has produced new clues on the environmental causes of schizophrenia. Dr. William Pollin, Institute psychiatrist, described the collaborative project in which one twin was schizophrenic, the other normal, at the recent annual meeting of the American Psychiatric Association in Los Angeles.

In a nation-wide search, Dr. Pollin's group located five pairs of twins which met its requirements: tests proved them to be identical; they had been raised by their own parents; and both parents were living.

### Twins, Parents Treated

The pairs together with the parents were brought to the Clinical Center for one to 12 months for extensive tests and treatment. The investigators reasoned that since both twins in a pair had identical genetic and socio-economic backgrounds, the causes for the sick twin's illness should lie in the environment—both prenatal and in the family life.

In the tests and the elaborate family histories which the scientists gathered from the twins and the parents, a clear-cut pattern unfolded:

1. In each case, the twin who became schizophrenic weighed less at birth than the normal child.

2. His parents feared for his life, worried about him, and showered him with special attention. His mother felt he needed her more than the stronger twin and was unable to change this attitude even when the weaker twin caught up in size.

### Develops More Slowly

3. He developed more slowly than the normal twin throughout childhood and made poorer grades in school.

4. He was the more docile and dependent of the two.

5. In each case, the sick twin said he liked the idea of being a twin, while the normal child stressed that it would be "desirable and interesting" not to be a twin.

6. In all five cases, the mothers had unusual fears of death, either for themselves or for the weaker twin.

7. In each family, one or both parents were unusually hard-driving, compulsive, rigid, intense, and success-oriented, despite a wide range in backgrounds.

8. The breakdowns of the twins occurred during adolescence or later when they were expected to become more independent and develop into adulthood.

Dr. Pollin concluded that the susceptibility to severe mental illness of the weaker twins sprang both from organic and psychological sources.

The differences in weight at birth reflected differences in prenatal conditions in the uterus. Once the parents noted the difference, they assigned a dependent passive role to the weaker child, who tended to fulfill the role expected of him. His poorer performance through life reinforced this idea.

### Parents Compensate

"It appears that the efforts on the part of the parents to compensate and make up for the smaller birth size have a built-in self-defeating factor," Dr. Pollin said.

"The very act of good mothering . . . fails to make up for the smaller twins' initial handicap. . . . Instead, what happens is a furthering and an intensification of an initially slight deficiency. . . . Life challenges in subsequent years constitute increased stress for the weaker twin. . . . We believe the findings in this series help to clarify why one twin rather than the other should become severely ill.

"However, as yet, we still cannot answer the question, 'Why should this illness have been schizophrenia?'"



With Mrs. Frazier a proud observer, Floyd A. Frazier, Head of Mail and Files, Operations Branch, Grants and Training, National Cancer Institute (right), receives a Sustained Superior Work Performance Award from Dr. Ralph G. Meader, NCI Associate Director for Grants and Training. Mr. Frazier was commended for "demonstrating devotion to duty and displaying initiative and judgment in promoting and maintaining an efficient mail and file service for Grants and Training."—Photo by Bob Pumphrey.

One thing about artists is that most of them agree in thinking that nothing important can be said about art. Another is that almost without exception they love to talk about it.—Selden Rodman from *Conversations With Artists*.

## KENNEDY

(Continued from Page 1)

times and Administration, and will seek to promote among young people of all nations President Kennedy's ideals of public service.

It will consist of a museum, an archive, and an institute.

The museum will house mementos such as the President's rocking chair, a hand-written draft of his inaugural address, gifts from 171 heads of states, and the coconut shell he used in the Pacific to send word that he and the crew of P. T. 109 were still alive.

It will make the experiences of recent history as vivid and electrifying as possible for the visitor, using the most modern devices of electronics and design to insure that the museum is not a dry and dusty collection of artifacts but a vital re-creation of the most exciting episodes of the Kennedy era.

### Archive for Scholars

The archive will contain President Kennedy's personal papers as well as copies of public records necessary for an understanding of the actions of his Administration. It will be used primarily by scholars and researchers.

Since many of the discussions leading up to the key policies of the Kennedy Administration were never recorded, a unique oral history has been started.

Important Government officials and other public leaders, as well as close personal friends of the President, have been asked to record on tape, while still fresh in their minds, their recollections of pertinent discussions with him.

These oral interviews, unique in historical records, will give the Kennedy Library a fresh and intimate view of the late President.

The institute will have as its central purpose the education of young Americans and young people everywhere in the understanding and practice of democratic political life. It will also try to bring together the world of ideas and the world of public affairs.

### Available to All

Scholarships, research material, lectures, seminars, and public programs will bring to the institute people from every State and from abroad to help in the achievement of these purposes.

Although the Kennedy Library will be located in Boston, it will be available to all Americans. It will be equipped for national telecasting of its activities, and the Kennedy Institute will draw its Fellows from all parts of the country.

Since the Library will be a memorial to President Kennedy, it will seek to express in architecture the spirit and style of the 35th President. An Advisory Committee

### Bethesda Bank First Donor To NIH for JFK Memorial

The Bank of Bethesda didn't wait for the arrival of Donation Day to make an unsolicited contribution to the Kennedy Library Fund.

Notified that funds collected here would be deposited in the bank for safe keeping, Sue M. Imirie, Assistant Cashier, wrote immediately to Clifford F. Johnson, Chief of the Office of Research Information and Chairman of the NIH Campaign:

"We are pleased to make a donation to the John Fitzgerald Kennedy Library Fund and enclose our Cashier's check in the amount of \$100."

on Arts and Architecture, consisting of 14 noted architects from this country and abroad, has agreed to advise the trustees on how best to do this.

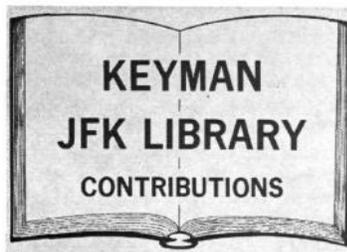
The Kennedy Library, to belong to all Americans, will be built by voluntary contributions—large and small—from all Americans. The cost of the project will total \$10 million. All gifts are tax deductible and may be made, if desired, over a 3-year period.

In a memorandum to all employees of the Public Health Service, Surgeon General Luther L. Terry said:

### Praises Kennedy's Leadership

"In the health field, President Kennedy's leadership gave impetus to bold new programs. Among them are community health centers for the mentally ill and mentally retarded, comprehensive community health services for the aged and chronically ill, and increased Federal support for the training of health personnel.

"The John Fitzgerald Kennedy Library offers all Public Health Service employees the opportunity to pay tribute to the memory of a great national leader and to honor a crusader for the improved health of all Americans. Your contributions to the Library will help to ensure that the ideals of our late President will be preserved and carried forward."



All NIH contributors to the Kennedy National Library fund tomorrow will turn their contributions over to keymen wearing this green pin.

## Laurence Crisp Retires As DRS Section Chief, Cited for Gov't Service

Laurence R. Crisp, whose retirement last Friday as Chief of the Mechanical Engineering Section of the Instrument Engineering and Development Branch, Division of Research Services, concluded 30 years of outstanding Government service, received a sustained superior performance award at a recent retirement party in his honor.

### Citation Quoted

The award, presented by Chris A. Hansen, Chief of DRS, cited Mr. Crisp "for unrelenting endeavor and achievement in inventing, improving, and refining precision research and scientific instruments and equipment necessary in supporting and enhancing biomedical research and investigation; for perseverance in fostering the biomedical instrumentation program; and for selfless dedication to the best interests of the National Institutes of Health."

Mr. Crisp's career has paralleled the development of bioengineering as a science vital to medical progress. In the 28 years since he



Amid flowers presented by NIH friends, Mr. and Mrs. Laurence Crisp smile happily at party honoring him on his retirement as Chief of the Mechanical Engineering Section.—Photo by Bob Pumphrey.

joined NIH, the scope of bioengineering here has expanded from the first instrumentation shops that produced special "hardware" to engineering sections capable of the design and construction of complex instrumentation systems.

The present Instrument Engineering and Development Branch, which applies biomedical engineering to research here, is built on the foundation laid by Mr. Crisp.

In 1936 Mr. Crisp joined the Division of Industrial Hygiene, PHS, then located in downtown Washington. During 1937 he worked with Dr. Wilton R. Earle, National Cancer Institute, in designing the microcinematograph.

This world-famous time-lapse in-

## MMES. CELEBREZZE, TERRY LIKE NIH ART



Mrs. Anthony J. Celebrezze, wife of the Secretary of Health, Education, and Welfare and honorary chairman of the recent NIH art exhibit, and Mrs. Luther L. Terry, wife of the Surgeon General of the Public Health Service, are intrigued by the small sculpture, "Goat," that won second prize for Mrs. Mary W. Witkop, wife of Dr. Carl J. Witkop of the Dental Institute's Human Genetics Branch. Winner of an honorable mention for her oil painting, "The Barn at Beaumont," Eloise A. Schneider's name was inadvertently omitted from the list of prize winners in the May 19 issue of the Record. Mrs. Schneider is Secretary to the Director of the Clinical Center.—Photo by Ed Hubbard.

strument allows the investigator to observe and photographically record behavior and morphological changes in living cells.

In 1939 the Division moved to the NIH reservation where Mr. Crisp worked under Dr. Frederick Brackett. During World War II Mr. Crisp's background in aviation and machine design was used for developing instrumentation needed for hand-eye coordination studies of pilots' reaction times at various altitudes—studies which were carried on in the high altitude chamber at NIH.

### Displays Leadership

Under Mr. Crisp's leadership the instrumentation staff increased about 200 percent from 1950 to 1952, in anticipation of the completion of the Clinical Center, whose modern design incorporated many bioengineering innovations.

As Chief of the Mechanical Engineering Section, Mr. Crisp was responsible for the design and functional operation of research and scientific instruments, apparatus, special controls, and devices created to meet the needs of NIH medical and scientific researchers.

His contributions to medical instrumentation are recognized far beyond the limits of NIH; he is a recognized authority in the field, with 28 publications and two patents to his credit. After his retirement, Mr. Crisp will serve IEDB as a consultant.

## Rise in Corneal Infection Due to Antibiotics Use, Dr. Zimmerman Reports

Mycotic keratitis, a disease recognized since 1879, has increased greatly in frequency during the last decade, according to Dr. Lorenz E. Zimmerman of the Armed Forces Institute of Pathology, an expert on the pathology of fungal diseases, who spoke at a recent Grand Rounds of the National Institute of Allergy and Infectious Diseases.



Dr. Zimmerman

Dr. Zimmerman pointed out that mycotic keratitis is probably never a primary infection of an otherwise healthy cornea, but it is produced by opportunistic fungi that invade injured or diseased tissues.

### Early Diagnosis Important

"There is good reason to believe," Dr. Zimmerman said, "that the widespread topical use of steroids and antibacterial antibiotics is responsible for the increased frequency of keratomycosis. Systemic diseases are rarely a factor in the pathogenesis of these fungal infections."

Early clinical diagnosis and appropriate management are most important because the infection so often leads to corneal perforation, or enucleation of the eye. Scrapings obtained from the infected corneal stroma are required for diagnostic mycology since conjunctival exudate gives both false positive and false negative results.

Successful therapy requires removal of infected tissue or use of effective antifungal medications that can be brought into contact with the fungus, even though the organisms may have penetrated deeply into the corneal stroma.

### Clinical Course Described

Mycotic endophthalmitis following accidental and surgical penetration of the globe has also been observed with increased frequency during the past decade.

As a result of studies of such cases, he said, there has emerged a realization that exogenous fungus infection presents itself as a rather distinctive clinical and pathologic entity. The clinical course is characterized by:

1. A latent period varying from several days to several months between trauma and the often sudden appearance of the intraocular inflammation.

2. A slowly progressive, localized infection of the anterior segment of the globe, which may be accompanied by formation of a

(See CORNEAL, Page 8)

## NHI Issues New Booklet To Aid Understanding of Cardiovascular System

"A Handbook of Heart Terms," a new publication designed to give clear definitions in non-technical language of heart and blood circulation subjects, has been issued by the Public Health Service.

Primary purpose of the booklet is to make reading and writing about the cardiovascular system easier, especially for people who communicate with the public.

The handbook contains a selection of words, phrases and illustrations commonly used in the heart field. Criteria used for inclusion of information in the booklet were the frequency of use and the possibility of general unfamiliarity.

### Arranged Alphabetically

The publication includes words from medicine, anatomy, physiology, instrumentation, pharmacology, and some special terms used by certain related professions dealing with the subject of heart disease. Terms are arranged alphabetically, and each term is followed by a phonetic spelling to indicate its preferred pronunciation.

Further information about the booklet, PHS Publication No. 1073, may be obtained from the Heart Information Center, National Heart Institute, National Institutes of Health, Bethesda, Md. 20014.

**DR. DYER***(Continued from Page 8)*

of the epidemic killers of 50 years ago have been wiped out through modern vaccination techniques.

"Still there is much to be done," he said. "One vast area of research involves, of course, the chronic diseases, many of which are treatable with our present knowledge, yet remain incurable and afflict more people every year.

"In infectious disease studies, we must now find ways of eradicating mutant strains of such organisms as staphylococcus; we must also devote time to the problems of air and water pollution and the upset of the balance of nature that results from continuing technological progress."

Expressing a fatherly pride in the National Institutes of Health, Dr. Dyer attributed much of the modern progress in the war against disease to the growth of medical research made possible by the NIH grants and awards system over whose inception he presided during his years at NIH.

**Earns M. D. in 1915**

Dr. Dyer graduated from Kenyon College in Ohio in 1907. He taught school for four years before entering the University of Texas Medical School from which he graduated in 1915.

After his residency at the Philadelphia General Hospital, he began practice in Texas, but decided after only about three weeks that clinical work was not his field.

He then joined the PHS Commissioned Corps and went to work in the Hygienic Laboratory. Today he holds the grade of Assistant Surgeon General (Ret.).

Upon his retirement as Director of NIH in 1950, Dr. Dyer became Director of Research at Emory University in Atlanta, Ga., a position he held until 1957.

Asked how he likes retirement, Dr. Dyer smiled a knowing smile. "I like it," he said.

**Evelyn Trowbridge Wins County TB-Heart Award**

For the second straight year Evelyn Trowbridge, Special Projects Officer of the National Heart Institute's Heart Information Center, has received a certificate of award from the Montgomery County Tuberculosis and Heart Association for "outstanding service in Montgomery County."

Mrs. Trowbridge, who is responsible for NHI exhibits and special projects, was honored for her strong support of various programs of the Association, including her service with the Annual Medical Research Seminars program for local high school science students.

**Family Interactions Are Non-Normal if A Child Is Schizophrenic or Delinquent**

Patterns of interaction between parents and children in families with a child who is schizophrenic or delinquent are different from those in normal families, according to a study being carried out at the National Institute of Mental Health.

This research was reported recently by Dr. James R. Stabenau, Dr. Joe Tupin, Dr. William Pollin, and Martha Werner, M. A., at the annual meeting of the American Psychiatric Association in Los Angeles.

Their report was based on analysis of data from three matched groups of families which were studied by means of a battery of psychiatric and psychological tests.

**Family Groups Matched**

The three 5-family groups were matched on the basis of age, sex and socio-economic status.

Each family unit in the first group included a schizophrenic child, a normal sibling, and parents; in the second group the family included a delinquent child, a normal sibling, and parents; and in the third group all family members were normal.

Characteristic patterns of interaction among family members were determined by means of two tests—the Thematic Apperception Test (TAT) and the Revealed Differences test. A third test, Object Sorting, was used to assess conceptual thinking. Subsequent reports will take up findings obtained by the other procedures employed.

As indicated in the TAT scores, parent-child interaction in the "schizophrenic" families was intense but seen in terms of satisfying the parents' needs rather than the child's. Children were visualized as an extension of the parents and allowed limited self-expression.

**Parents Demanding, Punitive**

In the families with a delinquent child (second group), the involvement of parents with the children appeared superficial and impersonal, although parents were depicted as demanding and punitive.

When the child did not live up to the parental "standards," he was impulsively rejected rather than helped. The child appeared to manipulate rather than cope with the environment; little basic trust by the parent in the child's ability was revealed.

In the "normal" families, on the other hand, parents allowed children to act with a measure of autonomy, demonstrated understanding of the child's need and right for self-expression, and saw their children as capable of achieving success with adequate striving.

The Revealed Difference test showed that in the "schizophrenic" families (1) emotional tone was overcontrolled and often inappropriate; (2) control was maintained by the use of guilt and families showed considerable concern about conforming to external standards; (3) communication between family members was fragmented and clarity was seldom reached; and (4) family organization was rigid, with distortion of role differentiation and expectation.

In the "delinquent" families (1) emotional tone was uncontrolled and intense—at times it seemed artificial and was characterized by a self-destructive quality; (2) interactions showed a teasing manipulation of other family members, which sometimes produced shame and doubt; and (3) family organization was unstable, with an absence of clear role differentiation.

The qualities listed above were not present in the "normal" families, which exhibited flexible relationships, with a consistency of family organization and reliability of role fulfillment.

**Conceptual Thinking Tested**

In the Object Sorting test, used as an objective assessment of conceptual thinking, members of the "normal" families and the "normal" siblings of the schizophrenic and delinquent families were found to have significantly higher "clear conceptualization" scores.

Thought disorder was not limited to parents of schizophrenics but also appeared in parents of delinquents.

The authors conclude: "These data support but do not prove that differing patterns of interaction between parents and child are causally related to the development of psychopathology and the establishment and maintenance of mental health."

**Richard Culbertson, New DRG Employee, Dies**

Richard C. Culbertson, 45, of the Division of Research Grants and former Navy Hospital corpsman, died May 8 after a fall in his home.

Mr. Culbertson, a native of Oklahoma, retired from the Navy in 1960 after 20 years of service, including wartime duty in the Pacific and on Guadalcanal. He worked several years as a medical representative for surgical firms after retiring from the Navy and joined the DRG staff two weeks before his death.

He is survived by his wife, Alma, a secretary at the National Institute of Allergy and Infectious Diseases; a 17-year-old son, Richard, Jr.; and his father, Roy C., of Tulsa, Okla.

**Dr. Henry A. Imus Dies Of Cancer in Florida**

Dr. Henry A. Imus, Deputy Director of Research at the U.S. Naval School of Aviation Medicine, Pensacola, Fla., and former Assistant to the Director of the National Institute of Neurological Diseases and Blindness, died of cancer at Baptist Hospital in Pensacola on May 18. He was 61 years old.

From 1954 to 1958, Dr. Imus handled a number of Institute administrative and planning problems, established the Institute's Program Analysis Office, and made a significant contribution to the early programming of the Collaborative Perinatal Project.

Born in Holland, Mich., Dr. Imus received an A.B. from Rochester in 1931, an M.A. from Harvard in 1932, and a Ph.D. from Dartmouth in 1939.

**Joins ONR in 1946**

Following staff appointments at Princeton, Brown, and Wisconsin Universities, he joined the Office of Naval Research in 1946 as head of the Psychophysiology Branch, and continued his interest in physiological optics and psychology.

After four years with NIH he returned to Naval research as head of the Psychology Department and later as Deputy Director of Research at Pensacola.

In addition to his outstanding work with the Neurology Institute, Dr. Imus will be remembered for significant contributions to the field of psychophysiology. He was especially interested in vision and hearing testing for military personnel and in recent years was directing research interests in this area to problems of space travel.

Dr. Imus is survived by his wife, Ruth, of 3710 Summit Boulevard, Pensacola; a son Richard and two grandchildren of Kensington, Md.

**CORNEAL***(Continued from Page 7)*

plastic pupillary membrane or by the appearance of a white exudate in a segment of the pupil which may slowly advance from behind the iris into the anterior chamber.

3. Persistence of good light projection for a remarkably long period after appearance of the inflammatory process.

4. Rapid initial suppression of the inflammation by antibiotics and steroids followed by exacerbation and progression in spite of all therapy.

5. Enucleation because of pain and chronic inflammation.

"Precise etiologic diagnosis is difficult and indiscriminate administration of antibiotics and steroids appear to be detrimental," Dr. Zimmerman concluded. "Prophylaxis is all important."