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NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

Leading Pathologists Hold Meeting at NCI On Burkitt's Tumor

Nineteen leading pathologists from Europe, Africa, and North America met at the National Cancer Institute October 3-6 to define the pathologic features of Burkitt's tumor and to determine its place in a new classification of the lymphomas.

The group was brought together by the World Health Organization, and Dr. Humberto Torloni, Medical Officer of the Cancer Unit, WHO, served as secretary for the conference.

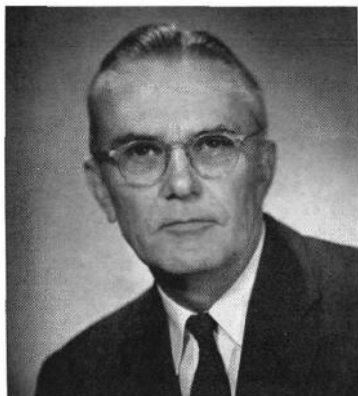
Dr. Kenneth M. Endicott, Director of the Institute, addressed the group in a speech that opened the

(See *PATHOLOGISTS*, Page 6)

Dr. Karl Habel Retires; To Continue Research

Dr. Karl Habel, chief of NIAID's Laboratory of Biology of Viruses since its establishment in 1959, retired from the PHS Commissioned Corps October 1, after almost 30 years of service.

An eminent virologist, Dr. Habel has directed his research in recent years to the role of viruses, particularly polyoma virus, in pro-

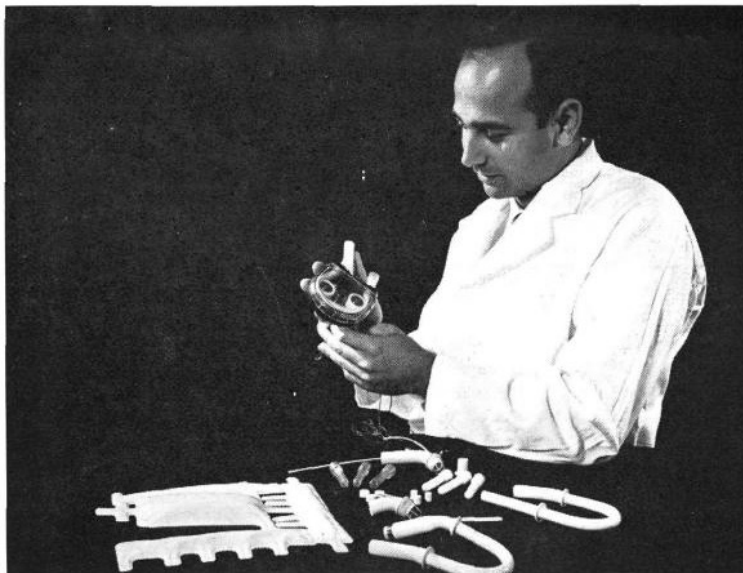


Dr. Karl Habel is one of world's foremost authorities on rabies.

ducing tumors in experimental animals, and his research has shown the importance of the host's immunologic response in determining

(See *DR. HABEL*, Page 3)

Biomedical Engineers at DRS Experiment With Prosthetic Applications of Spandex



John Boretos, BEIB biomedical engineer, examines heart pump, accessory components, and other prosthetics made from the polymer.—Photo by Roy Perry.

By Tony Anastasi

To stretch a point—the material used in your wife's girdle may help save your life someday.

Biomedical engineers in the Division of Research Services are experimenting with new biomedical applications of a well-known elastic material. This elastomer—segmented polyurethane—is used in women's foundation garments and is known commercially as Lycra spandex. The substance is a clear viscous solvent solution, free of plasticizers and fillers. Experience with several implanted devices indicates considerable promise for a variety of uses, especially in artificial organ work.

"The properties of this versatile polymer suggest its utility for a wide family of prosthetic devices, such as cannulae, catheters, heart valves, pacemaker lead wire insulation, blood tubing, and many others," says John Boretos of DRS. Mr. Boretos, of the Chemical Engineering Section, Biomedical Engineering and Instrumentation Branch, DRS, was commended by Branch Chief Dr. Lester Goodman for his innovative work with the polymer.

The new material promises to alleviate many problems associated with heart prostheses, such as pow-

(See *BIOMEDICAL*, Page 6)

Dr. Axelrod to Deliver NIH Lecture Oct. 25 At Clinical Center

Dr. Julius Axelrod, National Institute of Mental Health scientist and one of the country's foremost authorities on the pineal gland, has been selected to give an NIH Lecture at the Clinical Center auditorium, October 25 at 8:15 p.m. Dr. Axelrod will be the first of three lecturers in the series this year.

His topic will be "The Pineal Gland, a Biological Clock."

The NIH Lectures have been held since 1953 to recognize outstanding scientific accomplishment and to facilitate the exchange of scientific information. Lectureships are awarded by Dr. James A. Shannon, Director of the NIH.

Dr. Axelrod, Chief of the Section of Pharmacology, Laboratory of

(See *NIH LECTURE*, Page 7)

CC Blood Bank Honors Special Donors Oct. 20

Twenty-nine persons who each have donated blood at the Clinical Center Blood Bank for 10 years or longer will be honored at a ceremony on Blood Donor Day, October 20.

The ceremony will be held in



Matthew Werner, youngest member of the Gallon Donor Club, watches as medical technician Gerri Johnson, of the CC Blood Bank, takes a sample of his blood serum to test it for antibodies.—Photo by Ralph Fernandez.

the Blood Bank at 11:30 a.m. Dr. Jack Masur, CC Director, will pre-

(See *BLOOD DONORS*, Page 4)

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

FSEE ANNOUNCEMENTS

Copies of the announcement concerning the Federal Service Entrance Examination, which was recently opened for the 1967-68 academic year, are now available at all I/D personnel offices. This announcement includes instructions for application as well as the appropriate application form.

The first written test will be given on October 21, 1967, and thereafter written tests are scheduled to be given once every month through July 1968 with the exception of December 1967.

Depending upon educational accomplishment or experience, appointments to general positions covered by this examination announcement may be made at grades GS 5 or 7.

Management Intern appointments, also covered by this announcement, may be made at grades GS 7 or 9.

Closing date for both Management Intern and general position applications is June 12, 1968.

REEMPLOYMENT RIGHTS

Under the Universal Military Training and Service Act, non-temporary employees of the Federal Government or of the D. C. Government who leave their positions for active duty in the Armed Forces or the PHS are entitled to return to their former positions or positions of like seniority, status, and pay. However, in order to be eligible for such rights the employee must also meet the following conditions:

1. The period of military service which interrupted the employee's

Blood Bank at CC Reports September Blood Donations

The Clinical Center Blood Bank reports that 283 units of blood were received from NIH donors in September. During the same period CC patients received 1,568 units of blood.

Two NIH staff members joined the "Gallon Donor Club." They are: Charles A. Lauer, DRG, and Herbert J. Naylor, NINDB.

In addition, Milford D. Myers, DRS, reached the 3-gallon mark and Chris A. Hansen, OD, reached the 4-gallon mark.

employment must not exceed 4 years except if the period of military service has been extended by law.

2. The employee must have received a certificate to demonstrate that he has completed the period of military service satisfactorily.

Application Time Limited

3. The employee must apply for reemployment within 90 days from the date of separation from active service. In the event the employee is hospitalized for not more than 1 year after separation, he is eligible to apply for reemployment within 90 days after his release from the hospital.

4. The employee must be qualified to perform the duties of his former position. In the event the employee has incurred a disability in the armed services resulting in his inability to perform the duties of his former position, he must be restored to a position of like status, seniority, and pay for which he is qualified, or a similar job he can perform.

In addition to reemployment

Louise Goubeau, Elizabeth O'Toole Win \$300 Each for Money-Saving Suggestion



Suggestion awards of \$300 each were presented recently to (standing l to r) Louise D. Goubeau and Elizabeth B. O'Toole by Richard L. Seggel (right), Executive Officer of NIH. Seated is Richard P. Striker, a personnel management specialist with DCRT.—Photo by Ralph Fernandez.

Louise D. Goubeau, Personnel Management Branch, and Elizabeth B. O'Toole, formerly of the Supply Management Branch—now with PHS—each received a \$300 cash award for their joint suggestion to improve the form and the procedures used to obtain training in non-Government facilities. Estimated savings to NIH during the first year under the new system are \$30,000.

Richard L. Seggel, Executive Officer of NIH, presented the awards to Mrs. Goubeau and Mrs. O'Toole during a PMB seminar luncheon program at Stone House on October 4.

Prior to the adoption of Mrs. Goubeau's and Mrs. O'Toole's suggestion, three different forms—HEW-350, PHS-402, and PHS-83—were used in connection with training in non-Government facilities. By incorporating essential features of each of these forms into a single form they eliminated delays, multiple administrative handlings, and separate billings previously made by the training institutions.

Other agencies of DHEW that have adopted the use of the simplified procedure have also been responding in terms of savings to their respective organizations. This will mean further awards for Mrs. Goubeau and Mrs. O'Toole.

The awards were made under the NIH Employee Suggestion Award Program which is administered by Oscar L. Grabiner.

rights under this act, all employees, while absent on military duty must be considered for all promotions for which they would normally be considered had they not been absent.

Furthermore, employees who meet the above stated conditions must be restored at a rate of salary adjusted to include any pay

PAPER CLIPS

1. To avoid payment of postage, all mail from NIH addressed to agencies, departments, bureaus, or offices of the Government in the Washington area should be prepared for transmittal as follows: list the name of the person, branch or division of the agency, and the MAIL STOP number.

2. A list of MAIL STOP numbers can be found in the NIH Telephone and Service Directory starting on page 22.

PAPER CLIPS NEEDS CONTRIBUTORS! Please submit material for this column to Steffie Susman, Ext. 64606.

NIH Visiting Scientists Offered Help in Locating Housing Here

Mrs. Ulrich Weiss and wives of other NIH scientists have organized for the purpose of assisting Visiting Scientists and their families while at the NIH, particularly during the arrival and departure periods.

Mrs. Weiss, whose phone number has been changed recently, may be reached at 530-1740.

changes granted by law plus any step increases the employee would have earned had he remained on the job.

It is important to note that the employees' rights under this act are protected regardless of whether the personnel action is recorded as a furlough, a separation, or a leave of absence.

EST Returns October 29; Set Clocks Back One Hour

The last Sunday of this month—October 29—will mark the return of Eastern Standard Time in this area.

Employees are reminded to set the time on their clocks back 1 hour before the change which goes into effect at 2 a.m.

NIH personnel who work the tour of duty starting at 12 midnight on October 29 will work one extra hour that day for which they receive overtime pay.

Dental Institute Plans 'Open House' for ADA

The National Institute of Dental Research will hold an open house on the afternoons of October 27 and October 30 for the benefit of members of the American Dental Association and its affiliated components meeting in Washington, D.C. that week.

Headquartered in one of the few buildings in the world devoted entirely to dental research, the NIDR has become the international focal point for dental research and research training.

The expanding scope of its influence has prompted a steady flow of visits from dentists, researchers, and educators throughout the world. To accommodate this diverse interest, Institute staff de-

Dr. Chaparas Presents Paper at Mycobacterial Colloquium in Germany

Dr. Sotiros D. Chaparas, Division of Biologics Standards, participated in an international Colloquium on the Immunological Significance of Mycobacterial Fractions, held in Borstel, Germany, October 10 and 11.

Dr. Chaparas presented a paper titled "In vivo and in vitro studies on tuberculin-active polysaccharide and protein fractions." The work and protein fractions."

Continuing Project of DBS

The work was done in cooperation with Drs. Harold Baer and Henry Godfrey as part of a continuing research project of the Division's Laboratory of Bacterial Products. The investigators are attempting to fractionate and isolate specific skin-reactive tuberculins for the atypical mycobacteria which infect man.

Dr. Chaparas was one of three U.S. scientists invited to present their work at the Colloquium.

Prior to participating in the Colloquium, Dr. Chaparas attended the 19th International Tuberculosis Conference in Amsterdam at which representatives from many countries throughout the world were in attendance.

velops programs which provide both a general overview and a specific orientation in the visitor's field.

Dr. Grabar to Deliver Freund Lecture Oct. 20

Dr. Pierre Grabar, an internationally known French immunologist, will be guest lecturer for the 7th annual Jules Freund Memorial Seminar on Friday, October 20 at 2 p.m. in the Clinical Center auditorium.

Dr. Grabar is director of the Cancer Research Institute, Villejuif, France, and head of the Laboratory of Microbiological Chemistry at the Pasteur Institute, Paris. He will speak on "Immunochemical Analysis of Tissue Constituents."

Dr. Grabar has published extensively in scientific journals in the fields of immunology and immunochemistry of proteins, and has been coeditor of the proceedings of the biannual International Symposia on Immunopathology.

The yearly Freund lecture opens the season of seminars sponsored by immunologists of the various NIH institutes. Dr. Sanford Stone, head of the allergy and hypersensitivity section of NIAID's Laboratory of Immunology, is official host this year.

Dr. Jules Freund, renowned for his studies on the augmentation of immune responses, was chief of the Laboratory of Immunology from 1957 until his death in April 1960. Previous Freund Lecturers have been Drs. Merrill Chase, Michael Heidelberger, Ernest Wittebsky, Louis Dienes, Rene Dubos, and Felix Haurowitz.

DR. HABEL

(Continued from Page 1)

the development or rejection of virus-induced tumors.

He is arriving this week in La Jolla, Calif., where he will set up a laboratory at the Scripps Clinic and Research Foundation to continue his work in viral oncogenesis.

In 1966 Dr. Habel received the PHS Distinguished Service Medal, highest award for commissioned officers, "in recognition of the excellence of his achievements and his eminence in the field of viral research throughout his career." Last year also, he delivered the 15th annual Dyer Lecture at NIH, discussing the events in cells transformed by tumor viruses.

One of the world's foremost authorities on rabies, Dr. Habel was the principal participant in the development of the Habel-Sockrider apparatus for the preparation of ultraviolet-inactivated rabies vaccine. He also participated in the development of the mumps vaccine. In the 1950's he became prominently associated with polio research; and his achievements in basic research helped bring the disease under control.

Dr. Habel is an editor of *Virology*,

Dr. Ashwell New Chief Of Biochem., Metabolism Laboratory at NIAMD

Dr. G. Gilbert Ashwell has been named chief of the Laboratory of Biochemistry and Metabolism, National Institute of Arthritis and Metabolic Diseases. He replaces Dr. Leon Heppel, who retired recently from the PHS.

Dr. Ashwell received an M.D.



Dr. Ashwell came to NIH from Columbia University in 1950.

degree from the College of Physicians and Surgeons, Columbia University in 1948. After spending 2 years in the laboratory of Prof. Zacharias Dische, at Columbia, Dr. Ashwell came to the NIH in 1950.

His research work has centered on the enzymatic reactions involved in the biosynthesis and metabolism of carbohydrates. These studies have included investigations on various classes of sugars such as the pentoses, the hexonic and uronic acids, ascorbic acid, sugar nucleotides, amino and deoxy sugars.

Current Work Described

Current work in his laboratory is concerned with the role of the sugar moiety of the glycoprotein ceruloplasmin, and its relationship to Wilson's disease. Wilson's disease is a hereditary defect in copper metabolism which causes an accumulation of this mineral in vital organs such as the brain, liver, and kidneys, resulting in rigidity, tremors, psychiatric disturbances, and other disorders.

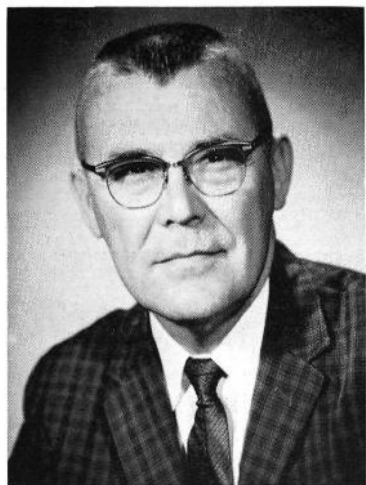
Dr. Ashwell is also a member of the board of governors of the American Academy of Microbiology, the board of managers of the Wistar Institute, the World Health Organization Expert Committee on Rabies, the board of trustees and advisory committee of the Federated American Societies for Experimental Biology. He is a graduate of the University of Pennsylvania, where he is an associate member of the board of trustees, and received an M.D. degree from Jefferson Medical College, Philadelphia, Pa. He joined the PHS at NIH in 1938.

'Young at Heart' Chemist Keeps Busy



Betty Pearson, a chemist in NHI's Laboratory of Biochemistry, prepares to concentrate a solution of acetone. When not working at NIH Miss Pearson's varied interests include singing in a church choir, bowling, swimming, and volleyball. On weekends she assists her mother in breeding Malemutes in Vienna, Va. and travels the dog show circuit.—Photo by Tom Joy.

Dr. Brown Assumes New Post at NIGMS



Dr. J. H. U. Brown holds a number of patents on biomedical engineering inventions.

Dr. Frederick L. Stone, Director of the National Institute of General Medical Sciences, has announced the appointment of Dr. J. H. U. Brown to the new Institute position of associate director for scientific programs.

In this position Dr. Brown is responsible for all scientific and technical aspects related to planning and conducting Institute programs. For the past 2 years he had been assistant director of operations for NIGMS.

Background Described

Dr. Brown initially joined NIGMS in 1960 as executive secretary of the biomedical engineering and physiology training committees. From 1962 he was with the Division of Research Facilities and Resources, moving up to the position of assistant chief for operations at DRFR before rejoining NIGMS in 1965.

Prior to commencing work for NIH, Dr. Brown was professor of physiology and acting chairman of the Physiology Department, Emory University Medical School.

He also has served as a visiting scientist at the Oak Ridge Institute of Nuclear Studies, as assistant professor of Physiology at the University of North Carolina, and was a Fellow and Head of Biological Sciences at the Mellon Institute in Pittsburgh. Previously he taught at the University of Pittsburgh, Rutgers University, Southwest Texas State College, and the University of Texas in Austin.

Dr. Brown in 1961 was winner of the Sigma Xi Research Award, and in 1950 he was awarded a Fulbright Lectureship to the University of Rangoon.

Dr. Brown is a native of Nixon, Tex., and received his B.S. degree from Southwest Texas State College, San Marcos, and his Ph.D.

Surgeon General Accepts Deed to Site For Headquarters of DEHS in N.C.

On September 26, 1967, Surg. Gen. William H. Stewart officially accepted the deed to a 500-acre tract in the Research Triangle Park of North Carolina which will be the site of the new National Environmental Health Sciences Center. The current planning provides for the development of a master site plan for the new Environmental Health Sciences Center to be completed within a year.

The site will be the headquarters of the Division of Environmental Health Sciences as well as the National Center for Air Pollution Control, with occupancy of the facilities currently estimated for 1973. This facility, which is some 200 acres larger than the NIH reservation, represents the first time a major component of NIH has been located away from Bethesda.

Prior to his acceptance of the deed, Surgeon General Stewart, accompanied by Dr. John Middleton, Director of the National Center for Air Pollution Control; Raymond Goldberg, Facility Planning Officer for NCAPC; Dr. Samuel Her-

man, Associate Director for Extramural Research for DEHS; and Ned Huffman, Executive Vice-President of the Research Triangle Foundation, met with Dr. Paul Kotin, Director of DEHS, and toured the interior research facilities currently occupied by the Division.

Universities Visited

Following a tour of the National Center for Air Pollution Control, presently located in Durham, N.C., and the campuses of Duke University and the University of North Carolina at Chapel Hill, Dr. Stewart and his party attended a luncheon at the Raleigh City Club in Raleigh, N. C. At the luncheon, Luther Hodges, acting in his capacity as Board Chairman of the Research Triangle Foundation, presented the deed to Surgeon General Stewart.



Surg. Gen. Stewart (center) accepts deed for a 500-acre tract for NEHSC and NCAPC from Governor Dan K. Moore (left) of North Carolina and former Governor Luther Hodges.

degree in biochemistry and physiology from Rutgers University. He holds a number of patents on biomedical engineering inventions and is the author of more than 80 technical and scientific publications.

Dr. Brown is a Fellow of the American Association for the Advancement of Science and a Senior Member of the American Chemical Society and the Institute of Electrical and Electronic Engineers.

He also is a member of the New York Academy of Science, the Society for Experimental Biology and Medicine, the American Physiological Society and the Endocrine Society, and of a number of professional societies.

Dr. Hurst Is Appointed To Natl. Heart Council

Dr. J. Willis Hurst, Professor and Chairman of the Department of Medicine, Emory University School of Medicine, Atlanta, has been appointed to the National Advisory Heart Council for a 4-year term beginning October 1, Surg. Gen. William H. Stewart announced recently.

Dr. Hurst has served previously on the Subcommittee on Heart Disease of the President's Commission on Heart Disease, Cancer, and Stroke. He was also a member of the National Advisory Council for Regional Medical Programs.

BLOOD DONORS

(Continued from Page 1)

sent certificates.

Also being honored at the ceremony is the youngest member of the Gallon Donor Club, Matthew Werner, 20, a University of Maryland student. He started donating when he was 18 and has given 11 pints. Both his parents, Mr. and Mrs. Seymour Werner, are longtime donors. Mrs. Werner is a clerk in NIMH.

The list of Ten-Year Donors includes both NIH employees and those from the community. Their motivations for giving blood year after year are varied. Raymond S. Catlett, a NIDR animal caretaker technician, started giving several years ago after being impressed with the usefulness of blood when his wife required transfusions.

Motivations Noted

"I have a fairly unusual blood type, and I like to keep up with others of the same blood type so we can be mutually helpful if the need arises," he said.

Fred L. Kendall of 820 Northwest Drive, Silver Spring, has been interested in the process of transfusing platelets to children suffering from leukemia. CC Blood Bank officials have been impressed with his willingness to donate on nights and weekends, or whenever needed. Mr. Kendall is director of a private school in Silver Spring.

The certificates to be presented to the Ten-Year Donors state: "In grateful appreciation for regular donations of life sustaining blood for patients at the Clinical Center for over 10 years and thus substantially contributing to research studies of broad significance and the advancement of medical science for the ultimate benefit of all mankind."

Other events of Blood Donor Day include open-house at the CC Blood Bank, 11 a.m. to 4 p.m. On Thursday, October 19, preceding Blood Donor Day, a movie "River of Life" will be presented by Employee Health Service in the CC auditorium. Show times are 11:30 a.m. and 1 p.m.

Dr. Joseph M. Merrill Is Named To Two Posts at Baylor Univ.

Dr. Joseph M. Merrill, who has served as chief of the General Clinical Research Centers Branch, Division of Research Facilities and Resources, since 1964, is leaving the Division to accept an appointment as Dean of Scientific Affairs and Professor of Medicine at Baylor University College of Medicine, Houston. Dr. Merrill has also been named Scientific Director of the Cardiovascular Center headed by Dr. Michael de Baakey.

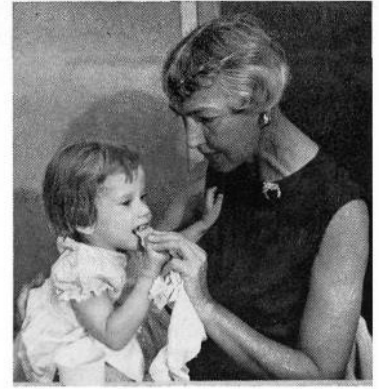
Three NIH Keyworkers for CFC Pay Visit to Center for Handicapped



Snapping a clothespin on a box lid sometimes is a major achievement. Here young Vince finally manages the task by himself as Lamont B. Smith (right), CC therapist, and a Center employee look on with approval.



The adult workroom for patients at the Center for the Handicapped where handmade articles teach manual dexterity and are available for sale. Standing left rear is C. Ashley Humphrey, Center program director. In the background Center Director Elwood E. Swarmer explains the program to Jeannette Schorr (center), Louise Bezdek, and Lamont B. Smith, NIH keyworkers.



Louise Bezdek, CC therapist and NIH keyworker for the CFC campaign, helps little Kathy during morning refreshment break at the Center for the Handicapped in Silver Spring, Md.—Photos by Roy Perry.

By Linda Ashworth

Continuing the trips to Combined Federal Campaign-supported agencies initiated early in September were three keyworkers from the Clinical Center.

Seeing first-hand how funds contributed by NIH personnel are utilized at the Center for the Handicapped in Silver Spring, Md. were: Louise Bezdek, occupational therapist; Jeannette Schorr, chief of the admissions unit, CC Administrative Branch, and Lamont B. Smith, a physical therapy rehabilitation staff therapist.

Patients Observed

A young social fellow named Todd served cookies and a good stout drink of fruit juice to everyone at his table, then sat down to enjoy the respite himself after a busy morning of stringing beads, meeting new people, making friends, and adjusting to the routine on the first day of school.

For Todd, 5, who is in his second year at the Center for the Handicapped (formerly the Cerebral Palsy Center) the CFC means visitors with cameras and questions. He is too young to realize that a successful CFC drive last year meant \$44,000 of assistance to the school's \$75,000 budget to keep up the cheerful, personalized training he needed.

CFC Pledges Help

The hands that fill out pledge cards to answer this 1968 CFC appeal will help further strengthen Todd's weak left hand, as well as solve problems faced by the other 70 patients at the Center.

The staff is comprised of two teachers, three therapists, an assistant teacher, and about four aides. Besides their daily work with the patients, they submit four reports a year to each individual's doctor, who is asked to act as medical advisor to the staff for his patient. Admission to the center requires a referral from a private physician.

"We do not turn down any child

we feel can benefit from our programs," said Center Director Elwood E. Swarmer. "We have some functional children with an IQ of less than 30."

The age range of individuals who use the Center spans the years from two to 50, with a brief break at the beginning of maturation when the public school system's Center for Retarded Children provides classes.

Special Aids Available

In the Center for the Handicapped's occupational therapy room there is a special typewriter being used to improve the communication abilities of patients. There are also shelves of jolly, multi-hued toys and oddments used for lengthening attention spans, teaching the art of buttoning shirts and tying shoelaces.

One of the Cinderella stories of the clinic is about one of the current patients benefitting from this room. Last year the child did not walk, talk, or show cognizance of her surroundings. Keyworkers from NIH saw her as she made her way—walking at times—across a lobby toward the therapy room, where she laughed and giggled with the woman who sat at the table with her, watching the child thread colored circles onto a colored cone.

Math, Grammar Taught

In another room children were engaged in the age-old conquest of elementary grammar and mathematics. The teacher had carefully printed "Today is Monday. 5 children are here today." The simple sentences proved a base for all sorts of exercises, both physical and mental.

The pairs of crutches sitting be-

CFC Collections to Oct. 10

Institute	Total Collected	Percent of Quota	Percent Participation
NCI	\$9,569.75	26.5	28.6
DRG	8,473.93	67.5	69.9
DRS	8,438.10	38.8	33.5
NIAMD	7,136.50	39.7	32.3
CC	6,110.70	31.4	43.1
NIAID	5,376.90	55.8	57.9
NINDB	5,009.85	42.7	39.1
NHI	4,251.50	25.0	28.3
NIDR	3,780.50	52.4	62.9
NIGMS	3,626.50	63.0	79.2
DBS	3,503.50	62.3	78.2
NICHD	2,396.50	52.6	38.1
DCRT	2,324.00	39.8	43.1
OAM	2,070.14	12.7	13.2
DRMP	1,884.00	80.5	61.4
OD	1,574.00	24.3	17.5
DRFR	775.00	22.2	31.7
DEHS	558.00	92.9	63.3
NIH	\$77,389.37	37.7	38.5

hind the physical therapy room door were so tiny they seemed to have no practical value, until young Patrick, who is learning how to use them, slipped between them and began to make his way across the room.

A fragile child with great determination, he left the room and made his way down the hall, grinning with pleasure at his success. His smile was repeated by the three keyworkers who watched him come slowly, cheerfully toward them.

Therapy a 'Must'

"He's so young, so small," a keyworker in the room said softly.

It was the sort of scene that would prompt anyone with a heart to run down the hall and scoop him up so that he could be protected from pain and having to try hard.

And it is just that sort of emotion that the generous hearts at the Center struggle daily to control, for they have seen the sadness that can come to adults who have not had proper therapy or training and who must depend upon another person for everything. The Center's staff is convinced that the more a child can manage

PAYROLL PLAN

(Continued from Page 1)

253 local member groups.

The National Health Agencies is not a part of UGF, but is composed of organizations such as the American Cancer Society, the American Heart Association, the United Cerebral Palsy Association, the National Foundation (formerly the March of Dimes campaign), the National Society for Crippled Children and Adults, and other national voluntary health organizations.

Contributions May Be Earmarked

The International Service Agencies is composed of the American-Korean Foundation, CARE, and Project HOPE.

Contributions which are designated to a participating voluntary agency will be honored and credited towards the campaign goal of the appropriate group. Undesignated funds remaining after the goal of each group has been met will be distributed in accordance with a predetermined percentage agreed upon by member groups. The National Health Agencies receives 17.3 percent of this figure, the International Service Agencies 7.1 percent, and the United Givers Fund, 75.6 percent.

to do for himself now, the less he will have to ask someone to do later.

So don't go there if you're a softie. You'll want to cuddle the children and pamper them and shield them from the difficulties cerebral palsy has thrust upon them.

If you're a softie, just contribute to the Combined Federal Campaign and thereby help the staff of the Center for the Handicapped teach the children independence and self-sufficiency in between rest periods and cookie breaks.

PATHOLOGISTS

(Continued from Page 1)

meeting. He discussed the need to formulate an authoritative definition of the "Burkitt Tumor" that will be acceptable to clinicians and pathologists and enable a more accurate reporting of cases. Such a definition would also permit better epidemiological and other studies related to etiology and pathogenesis and allow accurate comparison of therapeutic schedules.

During the 4-day session, the pathologists studied tissue sections, smears, and clinical data from patients with Burkitt's tumor and compared them with material from other lymphomas. An attempt was made to determine whether the Burkitt classification refers to a lymphoma consisting of a specific cell type, or a lymphoma with a special clinical behavior and/or anatomic distribution, or both.

NCI Participants Listed

NCI pathologists who participated officially in the meeting were Dr. Louis B. Thomas, head, Surgical Pathology and Post Mortem Service, and Dr. Gregory T. O'Connor, currently serving as head of the Environmental Patho-biology Program of the International Agency for Research on Cancer. Dr. John M. Bennett, Clinical Pathology, Clinical Center, and Dr. Costan W. Berard, Pathologic Anatomy, NCI, also participated.

A formal statement on conclusions reached by the group will be published in a report by the World Health Organization.

William M. Doak Wins \$100 for Suggestion

William M. Doak, administrative assistant in the Collaborative Research Program, NIAID, recently received a \$100 suggestion award.

Mr. Doak was presented the award and a certificate "in recognition and appreciation for submission of a suggestion beneficial to the Service" by Dr. Dorland J. Davis, NIAID director.

Central purchasing of magnetic tape for use with certain "Selectric" typewriters, instead of the individual buying of tapes as needed, will result in an estimated \$2,000 saving annually.

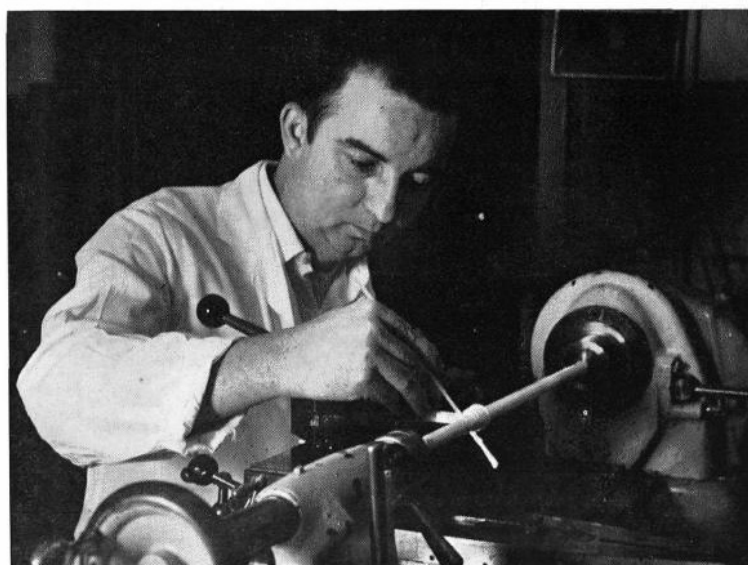
Mr. Doak is a 1966 graduate of Pennsylvania State University and was an NIH management intern for a year before joining the NIAID staff.

BIOMEDICAL

(Continued from Page 1)

er consumption, reliability, hemolysis rate, and blood clotting. It exhibits excellent endurance and wear resistance, and is easily fabricated, with uniform dimensions and smooth surfaces in a variety of shapes.

Lycra polymers were first developed in 1959 by textile chemists at DuPont who were seeking materials superior to natural rubber for elastic thread. The fiber soon gained acceptance in the garment industry because of its exceptional resistance to hydrolysis, oxidation, thermal degradation, and attack by oils. Equally important was its



Mandrel spinning of the polymer (part of the process of making heart pump tubing) is carried out by James Donachy, BEIB technician.—Photo by Ralph Fernandez.

ability to recover rapidly after being stretched and to resist flex fatigue.

Segmented polyurethane possesses the ability to rapidly recover its original shape after severe mechanical deformation and stretching. This feature has been lacking in many materials tested for critical medical tasks, and constitutes an important consideration for efficient operation.

Previous work outside NIH suggests that polyurethanes have many advantages for prosthetic use. Polyester urethans have functioned quite satisfactorily over

short periods of implantation. But trials showed them to be highly susceptible to hydrolysis when implanted subcutaneously for periods in excess of 8 months. More recent work demonstrated the susceptibility of polyester urethans, in general, to hydrolysis and substantiated the greater stability of polyether elastomers. This fact has also been well recognized for urethane foam. Since segmented polyurethane is a polyether in nature, long-term stability to hydrolysis is anticipated.

Calf Implants Made Here

Thus far, 22 implants of an electromechanical left ventricular assist pump containing segmented polyurethane tubing have been made in calves at NIH. No tubing failures and no changes in tensile properties were observed when tested after 11 days of continuous operation. No undue blood clotting was observed even though anticoagulants were not employed. Silicone rubber tubing tested under similar circumstances failed in flexure within 2 days and showed 50 percent loss in stress at 100 percent elongation.

The physical and chemical behavior of this polymer observed thus far have prompted DRS biomedical engineers to undertake a thorough investigation of its utility as a prosthetic material under various conditions.

Research is underway to seek out and thoroughly define all pertinent biomedically related properties, with the hope that this material will help solve a number of important research and clinical problems.

Digestive diseases cause an estimated economic loss of greater than \$3 billion per year. Affecting the intestinal tract and liver, they occur primarily in middle age.



Participants in the recent international meeting on pathology of Burkitt's tumor at the NCI were (l to r): Dr. Robert J. Lukes, U.S.C. School of Medicine; Dr. John M. Bennett, CC; Dr. Dennis H. Wright, Uganda; Dr. B. O. Osunkoya, Nigeria; Dr. I. Hamlin, England; Dr. Philip H. Lieberman, N.Y. Memorial Hospital; Dr. Costan W. Berard, NCI; Dr. Robert J. Hartsock, Armed Forces Institute of Pathology; Dr. James D. Butler, M.D. Anderson Hospital, Houston; Dr. Henry H. Rappaport, University of Chicago; Dr. Gregory T. O'Connor, France; Dr. H. Torloni, WHO, chairman of meeting; Dr. R. Gerard-Marchant, France; Dr. John Rebeck, Henry Ford Hospital, Detroit; Dr. C. A. Linsell, Kenya; Dr. Ronald Dorfman, Washington U. School of Medicine; Dr. Frank King, AFIP; Dr. K. Lennert, Germany; and Dr. Louis Thomas, NCI.—Photo by Ed Hubbard.

'Ruth Johnson Day' Scheduled From 10 a.m. To 5 p.m. October 25

The program for "Ruth Johnson Day," October 25, has been announced by Louise Anderson, Clinical Center Nursing Department Chief. Miss Johnson, who conceived and made a reality of the unique CC nursing service, is being honored on the occasion of her retirement from the Public Health Service.

The day's activities will begin at 10 a.m. in the CC auditorium. Guests will be welcomed by the CC Director, Dr. Jack Masur. Other speakers will be Mrs. Anderson and the USPHS Chief Nurse Officer, Margaret McLaughlin. Margaret Benson, Chief, Allergy and Infectious Diseases Nursing Service, will preside.

Chiefs of nursing services will review their activities. Speakers will be Ruth J. Metka, Miss Benson, Josephine I. O'Connor, Mary Louise Burgess, Beatrice Marino, Elizabeth Edwards, Sallie M. Keys, and Janet L. Fitzwater.

At 2 p.m. in the CC auditorium, nurses of the Arthritis and Metabolic Diseases Nursing Service will present a Nursing Clinical Conference on "Nursing Care of Patients with Cystinosis." Miss O'Connor will preside. A panel discussion will be conducted by Concetta Leone, Charlie Delehanty, and Linda Funk.

Other events of the day will include a luncheon and an afternoon reception. The reception, in CC Room 1S-207 from 3:30 to 5 p.m., is open to friends and acquaintances of Miss Johnson.

NIH LECTURE

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Clinical Service, NIMH, at the NIH Clinical Center, was one of the first to unlock many secrets of the pineal gland which up to 10 years ago was considered a mystery organ with no function.

He was the first to discover that the pineal gland is the only organ in the human body which contains the enzyme which produces melatonin. Melatonin was found to have an inhibiting effect on estrus, the cycle of sexual receptivity.

The gland was also found to contain large quantities of noradrenalin and serotonin.

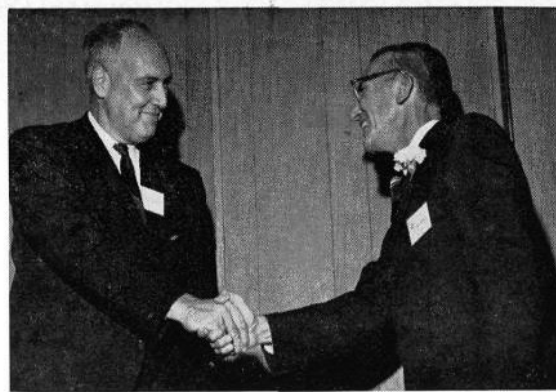
Significance Described

The most significant finding about the gland was its ability to translate light into chemical messages. These messages received from light control the levels of the various active biochemical substances contained in the gland as well as regulating the production of the hormones it secretes. For instance, research has shown that light influences the synthesis of melatonin and this in effect con-

Many Friends Honor Dr. Arnold As He Retires From PHS



Dr. Seymour J. Kreshover (left), Director of the National Institute of Dental Research, offers hearty good wishes to Dr. Francis A. Arnold, Jr. at the latter's retirement party. —Photos by Sam Silverman.



Surg. Gen. William Stewart (left) gives his farewell handshake to Chief Dental Officer Francis A. Arnold, Jr. Dr. Arnold's service with PHS spanned 30 years.

Dr. Francis A. Arnold, Jr., Assistant Surgeon General and Chief Dental Officer, PHS, received the best wishes of his friends at a farewell reception September 22 as he retired from the Service. He is assuming the post of Coordinator of Research, School of Dentistry, University of the Pacific, San Francisco, Calif.

Leader in Fluoridation

An able diplomat, effective administrator, and friendly person, Dr. Arnold spent his entire career with the PHS and was among the leading strategists in achieving fluoridation for a major part of the Nation.

His association with the dental programs of the National Institutes of Health spanned 30 years. At one time he was the Director, National Institute of Dental Research.

Among nearly 200 attending the evening reception at the Walter Reed Army Medical Center Officers Club were Surgeon General and

Mrs. William Stewart; General Joseph L. Bernier, Chief of the Army Dental Corps, and Mrs. Bernier; Dr. Jerome J. Hiniker, Assistant Chief Medical Director for Dentistry, Veterans Administration, and Mrs. Hiniker; Deputy Surgeon General Leo Gehrig and Mrs. Gehrig.

Also Dr. G. B. Mider, Director of Clinics and Laboratories, NIH, and Mrs. Mider; Assistant Surgeon General Seymour J. Kreshover, Director of the National Institute of Dental Research, and Mrs. Kreshover, and other program leaders of the PHS.

Born in Orrville, Ohio, on December 30, 1910, Dr. Arnold received his B.S. degree from Western Reserve University in 1932 and his D.D.S. degree from that university in 1934. After serving his internship at the U.S. Marine Hospital in Cleveland, Ohio, he was commissioned in the PHS in 1936.

He joined the staff of the Dental Research Section of the NIH in

and metabolism of several hormones and identifying four normally occurring metabolic compounds in the urine which have proved useful in diagnosing tumors of the sympathetic nervous system. He has devised many micro-methods for measuring drugs, hormones and enzymes, and has traced several drugs, hormones and biogenic amines through the body and determined their role and effect on body processes.

Honors Noted

His recent honors include the Award for Meritorious Research given by the Association for Research in Nervous and Mental Diseases and an honorary Doctor of Science degree from the University of Chicago, and the Gairdner Award. He received that award for his findings on the metabolic pathways of drug detoxication in the liver and other tissues, on the degradation pathways of adrenalin

1937, and served as assistant chief of the Section from 1943-48. He was Associate Director of NIDR from 1948 to 1953, when he became Director. He served in this position until his appointment in 1966 as Chief Dental Officer.

Praised by Friends

To contrast his considerable energy, quick movements, and restlessness in getting a job done, his close friends and colleagues dubbed him "Pokey" Arnold.

Says a long-time friend and mentor, Dr. Thomas J. Hill of Ohio: "During his long and successful Public Health Service career, his services have helped to develop a powerful influence in American dentistry. In this he is well justified in having much pride."

Dr. John L. Oncley Appointed To NIGMS Advisory Council

Dr. John L. Oncley, Director of the Biophysics Research Division of the Institute of Science and Technology at the University of Michigan, has been appointed to the National Advisory General Medical Sciences Council.

Before assuming his present position at the University of Michigan in 1962, Dr. Oncley was on the faculty at Harvard University Medical School for 23 years.

and noradrenalin metabolism, and on the role of the pineal gland in the biochemical and nervous regulation of endocrine secretion and circadian rhythms.

Dr. Axelrod has held his present position since 1955. He received his B.S. degree from College of the City of New York in 1933; his M.A. degree from New York University in 1941; and his Ph.D. from George Washington University in 1955.

Dr. Axelrod, his wife and two children live at 3220 Park View Road, Chevy Chase, Maryland.

'Meadowlark,' a 33-Foot Sailboat, Built By Maslands as 13-Year Family Project



Dr. and Mrs. Richard Masland and their sons sail on the "Meadowlark" which took them 13 years to build.—Photo by Don Edwards, Oxford, Md.

A 13-year hobby for Dr. Richard L. Masland, Director, NINDB, culminated this Labor Day with the launching of a 33-foot sailboat the Masland family built themselves. The boat, formerly christened the "Meadowlark," was launched from Applegarth Marine Yard on the eastern shore of the Chesapeake Bay.

Mrs. Masland, a diagnostician in speech and language pathology at Johns Hopkins Medical School and the Montgomery County Health Department, described the boat as "entirely seaworthy, racing along beautifully in a strong wind, and beyond all expectations in ease of handling."

Project Described

Dr. Masland, with the help of his four children and several friends, began building the sailboat while he was a professor of neurology and psychiatry at Bowman Gray Medical School in Winston-Salem, N. C. The frame or ribs of the boat were built in the family playground in Winston-Salem.

The "Meadowlark" was placed in the yard of the family's Washington home when Dr. Masland moved to NINDB in 1957. The boat carries three sails, a jib, a mainsail and mizzen and sleeps four. Cooking is done on an alcohol stove.

Through the years, Dr. Masland's boat building hobby has become a family project. His two sons and two daughters, all of col-

lege age now, helped paint the sailboat, and the boys also did carpentry work.

Dr. von Brand to Head Parasitologists in '68

Dr. Theodor C. von Brand, physiologist and parasitologist of the National Institute of Allergy and Infectious Diseases, was recently named president-elect of the American Society of Parasitologists.

He will serve for 1 year beginning August 1968. Dr. von Brand was elected during the 42nd annual meeting of the society, held August 21-26 at the University of Arizona, Tucson.

Dr. von Brand is head of the section on physiology and biochemistry of NIAID's Laboratory of Parasitic Diseases. A former vice president of the American Society of Parasitologists, he is also a past president of the Helminth Society of Washington, D.C.

Last year Dr. von Brand gave a 2-month series of lectures at German universities on parasite physiology and biochemistry, sponsored by the Federal Republic of Germany's agency which supports scientific research.

NCI Prepares New Report on 'Drugs vs. Cancer'

"Drugs vs. Cancer," a 17-page report on the current status of cancer chemotherapy research prepared by the Research Information Branch, National Cancer Institute, was released recently by the PHS.

The new publication, the third in a Research Report series, describes the major classes of cancer drugs—alkylating agents, antimetabolites, and hormones—and discusses their

mechanisms of action as presently understood.

Single copies of "Drugs vs. Cancer" (PHS Publication No. 1652) are available without charge from the PHS, Washington, D. C. 20201, or may be bought in quantity from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402 at 15 cents a copy.

Women at NIH

Dr. Marie Jakus, Study Section Head At DRG, Seeks Unusual Ways to Relax

By Marian Oakleaf

There is nothing that Dr. Marie Jakus enjoys more than a brisk walk . . . or island hopping! These are favorite ways to relax for the executive secretary of the Visual Sciences Study Section at the Division of Research Grants.

Dr. Jakus, who holds a doctorate in biology, this summer travelled along the inland waterways via the St. Lawrence Seaway to Montreal on an 80-ft. cruiser. The journey took her through 57 locks, each different from the last.

The previous year, on the same cruiser, she went on an island hopping trip among the New England islands. If it is unusual, Dr. Jakus can be counted on to try it.

From Dr. Jakus' interesting and varied professional background it can be clearly seen that she has earned the occasional "away from it all" trips she now takes.

Background Given

For instance, Dr. Jakus has a national reputation for electron microscopic studies of the fine structure of eye tissues which she made between 1951 and 1961 at the Retina Foundation in Boston, Mass. Also, she has authored and coauthored many publications dealing with electron microscopic and ocular studies, among them a volume of electron micrographs of ocular tissues and papers describing the fine structure of collagen, paramyosin, trichocysts, and Descemet's membrane in the cornea.

Dr. Jakus came to NIH in 1961 as a program coordinator in vision in the extramural programs of the National Institute of Neurological Diseases and Blindness. In this capacity, she was responsible for the administration of research grants and programming activities along disease-oriented lines for all disorders of the eye.

She later joined the staff of the Division of Research Grants as a scientist administrator and is now executive secretary of the Visual Sciences Study Section responsible for review, analysis, evaluation, and processing of applications for research grants related to the visual sciences.

Dr. Jakus received her B.A. from Oberlin College where she was a student assistant for 5 years. She

worked as a graduate assistant at Washington University between 1938 and 1941 before leaving to join the staff of the Massachusetts Institute of Technology as a research assistant.



Dr. Jakus has made important microscopic studies of eye tissue.

At M.I.T. she began working toward her Ph.D. in biology, receiving it in 1945. Dr. Jakus remained at M.I.T. as a research associate until 1951. During her 10 years there she was awarded a Rockefeller Foundation Fellowship and took a year's sabbatical leave to study at the Institute for Cell Research at Karolinska Institutet in Stockholm, Sweden.

Dr. Jakus has received many honors including membership in Phi Beta Kappa and Sigma Xi, a fellowship from Oberlin College, Ohio, in 1938, to study marine invertebrate zoology at Woods Hole, Mass., followed by another fellowship in 1941 again at Woods Hole, but this time from Washington University, Missouri, in physiology.

Dr. Jakus is a member of the Electron Microscopy Society of America, the American Association of Anatomists, and an honorary member of the Association for Research in Ophthalmology.