New Sickle Cell Anemia Group Holds Meeting, Recommendations Made

Preliminary recommendations have been announced from the first meeting of the HEW Sickle Cell Anemia Advisory Committee (SCA) for expanded research and community-service programs against this chronic disease of black children and young adults.

Ruth Aikens of New York, committee chairman, said the Committee favors an approximately equal division of available funds between research and community-service activities.

Mrs. Aikens also characterized the $6 million to be allocated for SCA research during this fiscal year as only a beginning toward a maximum-effort program to control and, ultimately, to eradicate the disease as a major cause of disability and death.

The Committee will meet again within 60 days to recommend detailed goals and the relative emphasis to be placed on each.

The SCA Advisory Committee met Aug. 13 at NIH with Dr. Merlin K. DuVal, Jr., HEW Assistant Secretary for Health and Scientific Affairs; Dr. Robert Q. Marston, NIH Director; and Dr. Vernon Wilson, Administrator (See SCA COMMITTEE, Page 6)

Three U.S. Scientists Visit Soviet Union; Find Antiviral Research Programs Differ

Interferon and other antivirals are subjects of mutual interest to scientists in the United States and the Soviet Union. However, research on antiviral substances in the U.S.S.R., viewed recently by three U.S. scientists, differs significantly from that in America.

This was the opinion of Dr. George J. Galasso, NIAID's Collaborative Research Program, who with Dr. Julius S. Youngner, University of Pittsburgh College of Medicine, and Dr. Lowell A. Glasgow, University of Utah College of Medicine, visited institutions in three Russian cities in June.

Besides exchanging scientific information on antiviral research, the three hoped to encourage Soviet researchers to submit their findings to NIAID's Interferon Scientific Memoranda as well as to use international interferon reference reagents available in the U.S. and England.

The Americans visited the All Union Research Institute of Influenza in Leningrad, the August Kirchenstein Institute of Microbiology in Riga, Latvia, and the Institute of Experimental Pathology and Clinical Cancer Research, the Ivanovski Virology Institute, the Gamaleya Institute of Epidemiology and Microbiology, and the Institute of Poliomyelitis and Virus Encephalitis, all in Moscow.

The American scientists noted the Russian research approach employed (See SCIENTISTS VISIT, Page 4)

Interim Plan Announced For Government-Wide Wage and Salary Freeze

Secretary Elliot L. Richardson on August 24 announced an interim plan to implement the Government-wide Wage and Salary Freeze action.

The steps will remain in effect until Departmental plans are fully developed. They include prohibitions against:

1. New hiring of employees above the GS-5 level except where firm commitments were made on or before Aug. 24. Positions involved in direct patient care are exempted from this provision.

2. Promotion actions of all kinds, except promotions to vacant positions of greater responsibility at grade GS-7 and below.

Memoranda outlining the plan were sent to agency heads by Sec. Richardson and Rodney W. Brady, Assistant Secretary for Administration and Management.

Mr. Brady's memorandum said that the Division of Central Payroll has been instructed to process no personnel actions involving promotion, reclassification or accession if the effective date was Aug. 15, 1971, or thereafter.

The Division also has been instructed not to process within-grade raises, quality step increases or any other increases in basic compensation.

Library Identification Cards To Be Issued September 7

Beginning Sept. 7, new NIH Library Identification cards will replace the current ID cards.

Library users should re-register immediately to avoid any delay in services. All overdue books and journals must be returned before new ID cards will be issued.

The basic card will be blue plastic and will entitle the holder to the full range of Library services.

Paper cards with a specified expiration date will be issued for short-term users.
Many Apply, 250 Will Be Chosen--Via Lottery--for Upward Mobility College

Richard Seggel, NIH Associate Director for Administration, drew the first number in a lottery to determine the 250 students who will start the fall quarter at the NIH Upward Mobility College. Classes will begin Sept. 13.

The lottery was used because there were more applicants than classroom space or facilities.

The Upward Mobility College, a joint venture of NIH and Federal City College, is designed for Federal employees in non-professional jobs who are high school graduates, or equivalent, and who do not have a college degree.

After the applications were screened and numbered, the corresponding numbers—there were 728—were placed in a drum. The numbers drawn were listed, and will determine the order in which applicants will be considered for the college.

Norma Greene, Federal City College coordinator for the school here, and her staff are presently interviewing prospective students.

The school on the reservation is a branch of Federal City College; students are entitled to the same services and may take part in the same activities as those attending the downtown college.

Richard Striker, deputy assistant director for Training and Employee Development, OPM, explained that NIH plans to expand enrollment in the fall quarter at the NIH Upward Mobility College. Classes will begin Sept. 13.

Awards Ceremony Held For Summer Employees

The Second Annual Summer Employees Awards Assembly was held in the Jack Masur Auditorium, CC, on Aug. 24. James R. Gregg, staff coordinator for Equal Employment Opportunity, Office of Personnel Management, was master of ceremonies.

Dr. John F. Sherman, Deputy Director, NIH, delivered the keynote speech, entitled "A New Dimension to the NIH Family."

He presented special achievement cash awards of $50 each to 79 Summer Aids and 32 employees appointed under other summer programs.

Each employee was also given a certificate for his "outstanding contributions to the Federal Summer Employment Program for Youth." Approvals for these awards were obtained prior to the Aug. 15 "freeze."

A performance by summer employee students in the NIH-sponsored black theater class was given during the latter part of the assembly.

R&W Forming Duckpin League

The Recreation and Welfare Association, Inc., is currently forming a mixed duckpin league to begin this fall.

The league will meet on Thursdays, 6:45 p.m., at Twinbrook Fair Lanes in Rockville.

Regular and substitute bowlers are needed.

For further information, call the R&W office, Ext. 66061.

Horse Show Proceeds Given to Clinical Center Patient Welfare Fund

A rider and his horse are about to take part in the Ken-Mar Farm horse show. Proceeds were donated to the CC Patient Welfare Fund.—Photo by Carol Ladd, "Gaithersburg Gazette."

In memory of Michael Newman, a former Clinical Center patient, the proceeds of a recent horse show were donated to the CC Patient Welfare Fund.

The show was held at Ken-Mar Farms in Potomac, Md., home of Michael's parents, Mr. and Mrs. Thomas Newman.

The Newmans also established the annual Michael Newman Perpetual Trophy, awarded to the competitor with the highest score in a number of equestrian events.

Proceeds will be donated annually to the Patient Welfare Fund.
Professor Manabu Sasa, Eminent Parasitologist, Joins Fogarty Scholars

Professor Manabu Sasa, Director of the Institute of Medical Science, University of Tokyo, has joined the Scholars-in-Residence Program of the Fogarty International Center and will remain to the end of the year.

The distinguished parasitologist and educator has made outstanding contributions to knowledge of basic aspects of schistosomiasis, filariasis, and related vectors, namely, snails and insects.

Dr. Sasa is well known among American parasitologists and epidemiologists.

He attended the Johns Hopkins University School of Public Health and Hygiene as a Rockefeller Foundation Fellow, and received his M.P.H. degree there in 1948.

In 1959 he was a visiting researcher, attending the summer session of Acarology at the University of Maryland.

Since 1968 Professor Sasa has been chairman of the Filariasi Control Research Committee in Japan.

When the Parasitic Diseases Program was established in 1965, under the auspices of the U.S.-Japan Cooperative Medical Science Program, Dr. Sasa was appointed to the Japanese Parasitic Diseases Panel. From 1968 to 1971 he served as panel chairman.

Professor Sasa, who is chairman of the Department of Parasitology as well as Director of the Institute of Medical Science, is chairman of a Japanese Government project on environmental pollution.

As a Fogarty Scholar, he will study the endemic parasitic diseases in Asia from the standpoint of ecology and geographic medicine. He will also review the worldwide epidemiology of filariasis.

Professor and Mrs. Sasa are residing in Stone House.

Students Working Here in A.U. Program Find Research Challenging, Exciting, Fun

Kathryn explains one of her summer projects to David (I) and William. The students will soon send in a report to American University on their work and the people they worked with at NIH.

Scientific research is not only stimulating and exciting, it is also fun. This evaluation was given by a student who took part in American University's Research Participation Program for Senior High School Students two seasons ago.

Those sentiments were echoed by three students at NIH taking part in the same program. The students are: Kathryn Vige and William Petri who were with the National Cancer Institute, and David Monahan who worked at the Division of Biologies Standards.

This summer 114 top science students were chosen for the program. Twenty-one were at NIH, the rest worked at other Federal research laboratories.

Scientists, in a previous report, described the students selected by A.U. with such phrases as: "strongly motivated... made real contributions... talented, congenial and ambitious." The description fit the three young spokesmen at NIH.

Kathryn, 17, entering her senior year at Stone Ridge, was selected by her Chemistry teacher for the program. She worked with NCI's Dr. John Mead in Experimental Therapeutics.

William, 15, a junior at McLean High School in Virginia, was in the Biology Branch under the supervision of Dr. John Weisburger, and David Monahan, a senior at Oakton High School in Vienna, Va., was with Dr. Clifford J. Maloney, in the DBS Biometrics Section.

This is David's second year in the program, and words like "Wylie" and "linear regressions" fall easily from his lips.

When asked his age, he said, "I'm 16 now, but by the time the Record comes out again, I'll be 17."

The two students working at NCI stressed the same point—their work was not on the periphery of research—it was research. They did not wash glasses, run errands, or sharpen pencils.

EHS Movie of the Month Stresses Food and Nutrition

The Employee Health Service will present "Three Times A Day" as its September movie. The 28-minute color film emphasizes that man is what he eats.

Food and nutrition information—do's and don'ts—in the movie point out ways to avoid excessive weight, high blood cholesterol, and coronary heart disease.

Shopping tips and practical day-to-day guides for good nutrition are also given.

The movie will be shown in the Jack Masur Auditorium, Clinical Center, Wednesday, Sept. 15, at 11:30 a.m. and 12:15 p.m., and in the Westwood Conference Room D, Thursday, Sept. 16, at 1:15 and 2 p.m.

DBS Opens EEO Library; Gives Access to Books On U.S. Ethnic Groups

The Division of Biologies Standards recently established an "EEO Library," the first of its kind at NIH.

It will provide access to books devoted to the cultural and historical backgrounds of American ethnic groups, including blacks, Spanish Americans, and Asian-Americans.

Established under a priority program—"The Right to Read!"—of the HEW Office of Special Concerns, the library is operated by the DBS Equal Employment Opportunity Counselor, Norma Duffin. It is comprised of paperback books selected from a Civil Service Commission list.

To date, 48 books, purchased with DBS funds, have been acquired. DBS employees may also contribute books included on the list.

Mrs. Duffin points out an interesting book in the new library to Dr. Rodrick Murray, DBS Director.

Other Institute and Division EEO counselors, according to Mrs. Duffin, have requested copies of the booklist in anticipation of establishing similar libraries.

The DBS-EEO library is located in Bldg. 29-A, Room 1A-15.

Dr. J. Brody to Appear On Telethon Labor Day

Dr. Jacob A. Brody, chief of the NINDS Epidemiology Branch, will appear on the Jerry Lewis-Muscular Dystrophy Association telethon on Labor Day, Sept. 6, on WTTG, Channel 5 and WMAR in Baltimore.

He will discuss his research on Amyotrophic Lateral Sclerosis, a fatal neuromuscular disease which strikes adults in the prime of life. ALS is sometimes called Lou Gehrig disease, after the famous baseball player.

Dr. Brody has been studying ALS among natives in Guam, where approximately one in 10 adults die of the disease. He has been conducting research with MDA which maintains a clinic on that island.
SCIENTISTS VISIT

Ph.D. degrees early clinical applications of scientific findings.

The Russians are primarily concerned with the use of live or inactivated virus vaccines to induce the production of non-specific interferon in the face of a specific viral infection.

Other areas of antiviral research include the use of exogenous interferon (both human and chick) and other antivirals such as pyrimidine nucleosides and derivatives of adenovirus and enterovirus infections, but is dispensed only to high risk groups because of limited supply.

Before returning to the United States, the Americans attended the International Congress on Virology in Budapest.

Graduation Ceremonies Held for 9 Candidates in Computer Program

Graduation ceremonies were held earlier this month for nine candidates who had completed the Division of Computer Research and Technology's training program for computer operators.

Dr. Robert Q. Marston, NIH Director, speaking to the graduates and their families, said that DCRT's program embodies essential factors to help employees achieve their full potential in their jobs. Employees are trained for responsible positions. Trainees, representing many Institutes and Divisions, had been working as file clerks, guards, animal caretakers, and laboratory workers.

Before the end of the course, all of the graduates were offered positions as computer operators at NIH or other Federal agencies.

Among the guests attending the graduation exercises were Dr. Arnold Pratt, DCRT Director; James Robinson, vice chairman, HEW Steering Committee on Upward Mobility Programs; James Naughton, chief of the Computer Center Branch, and the instructors from that branch.

Graduates, who received certificates at the close of exercises, pose with Dr. Marston and two visitors from HEW. L. to r. are: Jerry Van Sant, Jerry Hoffman, James Goodman, Jesse Wade Jr., Ethel Taylor, Clarence Magwood, Dr. Marston, Janie Taylor and Mr. Robinson, HEW, Douglas Careton, Alice King, and Melvin Wiggins.

NCI Will Allocate Funds For Construction Grants Needed in New Areas

A call for construction grant applications from nonprofit cancer research institutions throughout the country has been issued by the National Cancer Institute.

The deadline is Nov. 1. Applications will be given final review and recommendation by the National Advisory Cancer Council, and applicants will be notified of the results by April 1972.

The Institute has allocated $11 million for construction grants from the $100 million supplemental appropriation it received from Congress at President Nixon's request in support for a national commitment for the conquest of cancer. The Federal grants will provide 75 percent of construction cost, the remainder to be funded locally.

To be eligible for a grant an institution must be actively engaged in cancer research of high quality, and must show that the construction is needed for more effective research for carrying out critical studies.

In part, these NCI funds seek to "develop new, strong, multidiscipline cancer efforts in regions of the country where they do not now exist."

Information on the procedure for filing applications is available from the Associate Director for Extra-mural Activities, NCI.

Bolivar J. Lloyd Retires, Came here 26 Years Ago

Bolivar J. Lloyd, a virology technician at the National Cancer Institute, retired last month. Mr. Lloyd was with the Electron Microscopy Section, Viral Biology Branch, and had been here for 26 years.

For a number of years he worked with Dr. Herbert Kahler, the scientist who used the first electron microscope purchased in 1945—at NIH.

Design Standard

He and Dr. Kahler, who died in 1960, were then in the NCI Laboratory of Biophysics. There, they both collaborated on the design for a swinging tube ultracentrifuge for isolating virus by the isodensity method.

That design has become standard equipment in laboratories all over the world. The original is now in the Army Medical Museum.

In 1945 NIH paid $15,000 for the first electron microscope. Now, there are about 95 on the campus—but the prices have changed. Today, they range from $50,000 to $60,000.

Research with that machine has also changed, especially in the field of virology, Mr. Lloyd said.

Machine Complicated

"At first, nobody wanted to play with them unless they were biophysicists.

"Biologists weren't ready to handle the machine when it first came out, it was too complicated," he explained.

Mr. Lloyd received a degree from Texas A & M. He is the co-author of a number of research publications on electron microscopy.

He will continue, in private industry, the work he has done here on the isolation of viruses using an electron microscope.

1st Internat'l Congress Of Immunology Reflects New Areas of Concern

The first International Congress of Immunology held in Washington early this month "represented the culmination of almost a century of immunology's pervasive effects on clinical medicine," according to Dr. Maurice Landy.

Dr. Landy, who was Secretary-General of the Congress, is chief of the Allergy and Immunology Branch in the National Institute of Allergy and Infectious Diseases' Extramural Programs.

The Congress was organized by the American Association of Immunologists and sponsored by the International Union of Immunological Societies.

The Union represents immunological societies of 15 nations and affiliated societies of five other nations.

Dr. Cinader Comments

Dr. Bernhard Cinader, of the University of Toronto, who was reelected president of the Union, announced that the second Congress will be held in Sydney, Australia, in the summer of 1974.

Commenting on the Congress, Dr. Cinader observed that "immunology started as a science that concerned itself with infectious diseases and was, therefore, closely associated with microbiology . . .

"Then, suddenly as it became more oriented and concerned with regulation in areas such as transplantation, autoimmune diseases, and genetic deficiencies, it moved entirely apart from microbiology."

Four of the five eminent immunologists who received awards for distinguished service have been NIAID grantees: in the United States, Dr. Felix Haurowitz, Indiana University; and Dr. Michael Heidelberger, New York University School of Medicine.

Also, Sir F. Macfarlane Burnet, of the Walter and Eliza Hall Institute of Medical Research, Victoria, Australia; and Dr. Pierre Grabar, who holds two emeritus positions, in France—one in the Institut Pasteur in Paris, the other in the Institut de Recherches Scientifiques in Villejuif.

The fifth honoree was Dr. John Marrach, of Cambridge, England.

The edited proceedings of this Congress will be published in December 1971.

The 1200-page volume will be entitled Progress in Immunology.

DAHM Issues New Publication

A publication describing accreditation and certification practices among 16 allied health professions has been issued by the Division of Allied Health Manpower, BHME.

Single copies may be obtained from the DAHM Information Office.
\textbf{Dr. Roland Chez Named NICHD Branch Chief}

Dr. Ronald A. Chez has been named chief of the newly created Pregnancy Research Branch of the National Institute of Child Health and Human Development.

The establishment of this branch represents the first step in the Institute's efforts toward developing an obstetrical research unit as an integral part of its Intramural Research Program.

\textbf{Goals Outlined}

The goal of these efforts will be to improve understanding of the biochemical and physiological interrelationships of the fetus, placenta, and mother, and the identification of diagnostic and therapeutic aids.

Dr. Chez comes to NICHD from the University of Pittsburgh School of Medicine where he was professor of Obstetrics and Gynecology and associate dean of Academic Affairs.

Dr. Chez received his A.B. degree from Johns Hopkins University (1934) and his M.D. degree from Cornell University Medical College (1957).

He was a PHS trainee in Reproductive Physiology and a Research Fellow in Biophysics at Harvard Medical School from 1964 to 1966.

\textbf{OFM Office of Assistant Director For Finance Undergoes Change}

The Office of the Assistant Director for Finance, OFM, was recently reorganized.

The reorganization divides the former Fiscal Services Branch into two independent accounting entities—Operations Accounting and Federal Assistance Accounting Branches.

The Grant Accounting and Financial Reports Branch has been renamed Federal Assistance Financing Branch.

The purpose of the change is to make finance services more responsive to program offices and to organizations administering Federal assistance programs for NIH.

\textbf{‘NIH Data Book’ Issued; Contains Charts, Facts On Research Support}

The 1971 edition of Basic Data Relating to the National Institutes of Health has been issued by the Special Projects Branch in the office of the NIH Associate Director for Program Planning and Evaluation.

The annual publication contains 58 pages of charts, tables, and historical facts concerning NIH, derived from NIH records and studies available from the Office of Communications Services, DDH.

\textbf{Support Data Developed}

The Office of Resource Analysis, OD, develops the data on national support for medical research from annual surveys and other sources.

The Statistical Analysis and Surveys Section, DRG, compiles the data on NIH awards and prepares the charts.

The new edition contains graphs showing national support for medical research, data on health manpower, consolidated tables on NIH appropriations and obligations, charts on NIH obligations by function and program, summary tables on NIH awards, and data on the distribution of NIH personnel.

The "NIH Data Book" is printed in limited quantity for administrative use. The restriction is due to the absence of text explaining NIH programs, which limits the usefulness of the book for the general reader. It is not for sale.

HEW personnel and NIH advisors may obtain single copies from Information Offices.

\textbf{Report Features Training Dental Students to Use Chairside Assistants}

A report on the use of chairside assistants has recently been published by the Division of Dental Health, BHME.

The 7th Dental Auxiliary Conference was held last year to train dental students across the Nation on the use of chairside assistants.

An exchange of ideas and experiences on the Dental Auxiliary Utilization program was also a feature of the conference. Until recently this program was supported through grants from the Division of Dental Health.

Proceedings of the conference, Training Dental Students to Use Chairside Assistants, includes DAU objectives and guidelines, the program director's guide to DAU grants, and a list of conference participants.

Copies of the publication are available from the Office of Communication Services, DDH.

\textbf{Increased Funds in NIH's '72 Budget To Permit Expansion in Specific Areas}

NIH's total budget authority for fiscal year 1972 is $1.683 billion. Considering that portion of the Bureau of Health Manpower Education's program for which authorizing legislation is still pending—primarily student assistance—the NIH appropriation will exceed the President's revised budget request by $156.1 million.

The President signed the Department of Labor, and Health, Education, and Welfare, and Related Agencies Appropriation Act, 1972, on Aug. 10.

House hearings on the National Cancer Authority are scheduled to begin on Sept. 15. HEW Secretary Elliot L. Richardson will be the first witness.

Part of the increase for research was to restore the 1971 program level for all research and training grants and contract programs that were below that level in the budget.

\textbf{Grants Increased}

A portion of the increase will enable Institutes not already doing so to fund at least half of the approved competing grant applications.

These are: the National Institute of Arthritis and Metabolic Diseases, the National Institute of General Medical Sciences, and the National Institute of Child Health and Human Development.

The remainder of the increase for the research components is for expansion of selected research initiatives. For example, the National Heart and Lung Institute's increase provides for expanded research on all aspects of cardiovascular and lung diseases.

The increase for the National Institute of Neurological Diseases and Stroke provides for support of acute spinal injury clinical research centers, studies into the causes of multiple sclerosis, and research on communicative disorders.

Increased funds also provide for expanded research on digestive diseases, common causes of kidney disease, and arthritis by the National Institute of Arthritis and Metabolic Diseases.

The Bureau of Health Manpower Education's increase for student assistance will support scholarships, direct loan, and traineeship programs in health manpower areas.

Increased funds for the National Library of Medicine will help maintain the 1971 program level in intramural as well as extramural programs.

\textbf{Dr. Brewer (Continued From Page 1)}

the Division (now Institute) of General Medical Sciences.

Dr. Brewer has been with NIH since then, except for one year as associate dean of the University of Texas Graduate School of Biomedical Sciences.

From 1956 to 1960, he was chief of the Research Division, U.S. Army Chemical Corps Research and Development Command in Washington.

Prior to that, Dr. Brewer worked for 12 years at Fort Detrick, Md., in the Biological Sciences and Allied Sciences Divisions.

He received his B.A. degree (1934) from Simpson College and his Ph.D. degree in Physiological Bacteriology (1939) from Iowa State University.
from the Health Services and Mental Health Administration, and other Federal health agency officials.

“This Committee is unique,” Dr. DuVal said, “in that it marks the first time that a national level advisory committee, reporting directly to the Secretary of HEW, has been established to focus government attention on a specific disease problem.”

Is High Priority Disease

President Nixon in his Feb. 18 Health Message identified sickle cell anemia, an inherited blood disorder that afflicts an estimated 50,000 blacks, as a high-priority disease target and called for a $5 million increase in Federal expenditures for research on this disorder during the current fiscal year.

The NHLI appropriation will contain the FY 1972 funds earmarked for this program, but these funds may also be drawn upon by other Federal health agency officials.

APSA Meeting to Show Film, 'Rock-A-Bye-Baby'

"Rock-A-Bye-Baby," a 30-minute film documentary, has been selected by the American Psychological Association to be shown at its annual meeting in Washington on Sept. 6.

The film describes the work of scientists, supported by the National Institute of Child Health and Human Development, on the effects of maternal-social deprivation in animals and humans.

It will also be shown at the Fifth World Congress on Psychiatry and the American Anthropological Association's annual meeting.

The movie was produced by Time-Life, Inc. for "The World We Live In" series for television.

10-Year Study Suggests Blood Pressure Affects Mental Ability of Aging Persons

It may not be normal for aging persons to lose their mental abilities. Without pathological processes, the aging might well retain their intellectual capacities suggest researchers at the Duke University Medical Center.

The Duke scientists at the Center for the Study of Aging and Human Development were supported by the National Institute of Child Health and Human Development.

They observed aging persons over periods of 10 years or more. Among patients who were first examined in their sixties, only those who had high blood pressure at the first examination showed a significant intellectual decline over the next 10 years.

The scientists started with 202 persons, none of whom showed any evidence of cerebrovascular disease or were hospitalized. At the start of the study ages ranged from 60 to 79 years.

The patients came back to the Duke Medical Center for 2 days every 2½ years. Eighty-seven completed all phases of the study.

The two groups of subjects—those in their sixties and those in their seventies—were divided into three groups, according to blood pressure during the intervals that the heart is not pumping (the diastolic pressure).

Readings of 65 to 95 were considered to be normal, those between 96 and 105 to be borderline elevated, and those above 105 to be high.

WAIS Test Used

The Wechsler Adult Intelligence Scale (WAIS) was among the tests used initially and at 2½ year intervals.

Those in the 60 to 69 age group had initial total WAIS intelligence test scores ranging from the high 80's to the low 90's. At the 10th year, those who had normal blood pressure readings showed virtually no intellectual change.

Those who had borderline elevated blood pressure increased their average score by a little over 3 points. Those who had had high blood pressure dropped by almost 10 points—a striking intellectual loss.

Among those who were in their seventies when first examined, none with high blood pressure completed the 10 years of study.

Those with normal blood pressure had WAIS scores of about 95 at the beginning and dropped by only 5 points 10 years later. Those with mildly elevated blood pressure had WAIS scores of about 76 at the start and dropped by a little more than 11 points.

The Duke researchers think that perhaps the mildly elevated blood pressure in these persons could not overcome the long-term effects of cardiovascular disease or that other disease processes common to old age had their effects.

The Duke scientists are continuing their studies in this area.

Frances Wilkie and Dr. Carl Eis dorfer reported on their 10-year study in a recent issue of Science.

Joseph Naughton Given Award by Foundation

Joseph D. Naughton, Division of Computer Research and Technology, received a Meritorious Award from the William A. Jump Memorial Foundation.

He was selected as the HEW nominee by Secretary Elliot L. Richardson. A certificate was presented to him For Exemplary Achievement in Public Administration.

Mr. Naughton, chief of the Computer Center Branch, DCRT, was cited for . . . leadership, competence, integrity, and dedication to excellence in public administration . . . .

The award was established for the late William A. Jump who was budget and finance officer, U.S. Department of Agriculture.

NIH Visiting Scientists Program Participants

8/5—Dr. Basil M. Rifkind, Scotland, Lipid Metabolism Branch. Sponsor: Dr. Robert I. Levy, NHLI, Bldg. 10, Rm. 7N220.

8/9—Dr. Harhara M. Mehendale, India, Analytical and Synthetic Chemistry Branch. Sponsor: Dr. Philip W. Albro, NIEHS, Research Triangle Park, N. C.

8/15—Dr. Wakatsu Nagai, Japan, Laboratory of Chemistry. Sponsor: Dr. Louis A. Cohen, NIAMD, Bldg. 4, Rm. 328.

8/16—Dr. Frederick A. Miles, United Kingdom, Laboratory of Neurophysiology. Sponsor: Dr. Edward V. Evarts, NIMH, Bldg. 9, Rm. 140.

8/17—Dr. Menahes Ben-David, Israel, Reproduction Research Branch. Sponsor: Dr. Mortimer B. Lipsett, NICHD, Bldg. 10, Rm. 12N204.
Compound Found in Eye Inhibits Enzyme Believed to Cause Cataract Formation

A compound which occurs naturally in the lens of the eye has been found to be an effective inhibitor of an enzyme believed to play a role in the formation of sugar cataracts.

National Eye Institute grantees

Dr. Joan Martin Named DRG Grants Associate

Dr. Joan Martin recently joined the NIH Grants Associates Program for one year of training in grants administration. She is the eighth woman and the 79th trainee to participate in the program which has been in existence for 10 years.

Dr. Martin was a postdoctoral trainee in the Psychiatry Department (1965-67), and a postdoctoral fellow in the Center for Aging and Human Development (1967-69) at the Duke Medical Center.

In 1969 she became an assistant professor in the Department of Medical Psychology and a research associate in the Department of Anatomy. She held both positions until her appointment to the Division of Research Grants.

Dr. Martin also taught part-time in the Psychology Department at North Carolina Central University from 1966 until she came to DRG.

She received her B.A. degree in Boston have found that the coenzyme triphosphopyridine nucleotide (TPN) can block the action of aldos reductase, an enzyme believed to play a primary role in the formation of cataracts from experimental galactosemia and diabetes.

Because this enzyme may be involved in diabetic complications of the kidney and nervous tissue as well, attempts have been made to seek specific aldose reductase inhibitors that can control its activity.

In a study published last year, one of the Boston investigators, Dr. Jin H. Kinoshita of the Howe Laboratory of Ophthalmology, Harvard Medical School, and the Massachusetts Eye and Ear Infirmary, demonstrated that tetrathymylene glutaric acid (TMG) is an effective aldose reductase inhibitor.

Other Inhibitors Needed

However, a relatively high level of TMG is needed to inhibit the formation of sugar cataracts in lens culture making it impractical for use as an agent for altering the course of cataracts in animals. Other more potent inhibitors are needed.

Now, Dr. Kinoshita and Dr. J. A. Jedziniak have found that TPN at a concentration at which it is normally found in the lens can effectively inhibit purified aldose reductase.

From this and other studies the investigators say that they are now beginning to understand the chemical structure necessary to make a compound an effective aldose reductase inhibitor.

TPN Molecule Explained

The TPN molecule has a ring structure and negative groups, but its action is probably quite different from TMG, attaching itself to a different site on the enzyme.

The action of TPN, as well as other inhibitors, appears to disassociate the active enzyme into inactive forms.

Drs. Jedziniak and Kinoshita reported these findings in a recent issue of Investigative Ophthalmology.

In addition to a grant from the National Eye Institute, the work was supported by the Atomic Energy Commission.

In a recent questionnaire, they were asked: "Are you in favor of continuing this program next summer?" Seventy-six answered, seventy-six said "yes."

One scientist went even further, he said: "Find more. They are intelligent, cooperative, ambitious and unafraid of hard work."

Dr. Martin is a member of the American Psychological Association, the Psychonomic Society, and the Animal Behavior Society.

(1959) from the University of Florida, her M.S. (1962) and Ph.D. degrees in Experimental Psychology (1965) from Florida State University.

Dr. Martin has written a number of publications on the subsequent behavioral effects of teratological agents on the fetus.

Dr. Martin agreed. "You meet fantastic people here, the top researchers in the Nation. I feel as if I'm doing something here."

There was dissent on only two points: the small stipend paid to the students by the A.U. program for transportation and lunch, and the amount of administrative work they thought scientists engaged in.

David considered the only program change should be in "the pay, maybe."

"Friends ask how much am I making. When I tell them, they say, 'Why are you doing it?' I tell them because of the future, my knowledge of computer programming and statistics can be used later."

Kathryn was asked if she could reconcile a medical career with a home, husband and children.

Her answer was a quiet, "I certainly hope to," adding, "at my school it is emphasized that women should try to excel."

The students have a chance to officially evaluate their summer in a questionnaire that will be sent to Margaret Maury, associate director of the A.U. program. Scientists also evaluate the program.

Dr. Smith, Gerone, Goy Are Appointed Directors Of 3 Primate Centers

Drs. Orville A. Smith, Jr., Peter J. Gerone, and Robert W. Goy have been appointed directors of three of the seven regional primate research centers supported by the Division of Research Resources.

Dr. Smith will head the Washington Regional Primate Research Center at the University of Washington.

Before coming to the center as associate director in 1969, Dr. Smith was on the faculty of the Washington School of Medicine.

He is the author of numerous scientific papers on the interaction of the central nervous and cardiovascular systems, and has served as consulting editor for the Journal of Comparative & Physiological Psychology and the Journal of Medical Primatology.

Dr. Gerone will be the new director of the Delta Regional Primate Research Center in Covington, La.

He was chief of the Virology I Branch, Virus and Rickettsia Division, Department of the Army, Fort Detrick, Md., and conducted research there since 1954.

He was a member of the National Cancer Institute's Biohazard Control and Containment Working Group.

Dr. Goy will serve as director of the Wisconsin Regional Primate Research Center, University of Wisconsin.

He was formerly chairman of the Department of Reproductive

Studying 3 Projects

"I've done three small projects on my own—well, more or less on my own," Kathryn explained. "I didn't know anything about leukemia research or research in general, but I've been instructed. Every angle has to be investigated, nothing is left unturned."

William agreed. "You meet fantastic people here, the top researchers in the Nation. I feel as if I'm doing something here."

There was dissent on only two points: the small stipend paid to the students by the A.U. program for transportation and lunch, and the amount of administrative work they thought scientists engaged in.

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Many illnesses leave the patient with some form of disability. That's where the Clinical Center's Rehabilitation Department comes in. Pain must be relieved, normal range of movement of body segments restored, weakened muscles strengthened, and, if necessary, mechanical aids furnished.

Under the direction of Dr. David Fried, department chief, 19 staff members see approximately 500 CC patients in need of some form of therapy each month.

Patients are referred to the department by NIH clinicians. Each patient is directed to the Physical Therapy Service, Occupational Therapy Service, or both.

Should the patient require speech therapy, a consultant is called in.

Therapy is administered in the nursing unit if the patient is not ambulatory.

Rehabilitation begins with testing. In the Physical Therapy Service, tests may include evaluations of muscle strength, range of motion (how much the patient can bend his arm, leg, etc.), self-care, and posture.

Exercises Coordinated

A patient scheduled for chest surgery may be directed to do chest expansion exercises, while one with rheumatoid arthritis may be given exercises to increase the range of motion of the finger joints.

Patients with neurological and muscular disorders, including muscular dystrophy, are treated in the Physical Therapy Service.

Modern equipment helps therapists meet any treatment situation. Custom casts and splints are applied. Specially designed hot packs relieve pain and muscle spasms.

Tilt tables, weights and pulleys,

Mary Duncan, physical therapist, uses a goniometer to measure the range of motion of an arthritic patient's elbow.

Activities may include crafts, homemaking, writing, and dressing. Sometimes custom-designed tools, such as a button hook or a long-handled toothbrush, are needed.

The Occupational Therapy Service also provides pre-vocational evaluations to determine the patient's aptitude, interests, and limitations.

These findings are incorporated into a vocational training program recommended for the patient after he is discharged.

In addition, the Physical and Occupational Therapy Services may recommend at-home activities.

Thus the patient benefits from the services of the Rehabilitation Department long after he has left the Clinical Center.

Progressive resistance exercises, supervised by physical therapist Richard Hetherington, strengthen weak quadiceps (thigh) muscles.

Marsha Lampert, physical therapist, operates a respirometer which measures lung volumes and rates of airflow, and detects any abnormalities.

self and perform tasks useful at home or on the job in such a way that his body is not taxed.

In addition, the program is designed to build up work capacity and endurance and facilitate psychological adjustment.

Occupational therapist Louise Bezdek times a patient as he dons a jacket. Results allow the research physician to evaluate treatment procedures and the patient's progress.

A cutting board with spikes enables a patient to peel an apple using only one hand.

Bronchial drainage is facilitated by using the tilt table while physical therapist Arthur Plumstead administers clapping and vibration over lung areas.

Photos by Tom Joy

by Ann Bainbridge

Development of the patient's ability to care for himself.

Bronchial drainage is facilitated by using the tilt table while physical therapist Arthur Plumstead administers clapping and vibration over lung areas.