Dr. G. B. Mider Moving
To New Post at NLM
As Special Assistant

By Jane Stafford

The most accessible person at NIH has been Dr. G. Burroughs Mider, Director of Laboratories and Clinics. If you needed or wanted to see him about a problem, whether you are a scientist or an administrative assistant or a science writer in an information office, you could see him, and usually within a very short time of asking for an appointment.

If you wonder how such an important and busy person found time for all the big and little people, the answer is very simple: He "moved papers" fast, he made decisions (See DR. MIDER, Page 2).

Fifteen Employees of NIH Being Honored
Today at Annual Awards Ceremony Here

Fifteen NIH employees are being given special recognition at the annual Awards Ceremony today (May 28) at 2 p.m. in the Clinical Center auditorium.

The Superior Service Award is being given to Robert J. Eisel, National Cancer Institute medical technician, for receiving a $1500 cash award for a Special Act or Service. Eisel, who has been at NIH for 25 years of service, was appointed NIH Deputy Director on August 1, 1962.

During his career at NIH, Dr. Sessoms was the recipient of two Meritorious Service Awards. The first, in 1964, was in recognition of his accomplishments as chief of the Cancer Chemotherapy National Service Center.

Deputy Director Since '62

He continued to be responsible for the cancer chemotherapy program from 1958 to 1962. It was during this period that Dr. Sessoms was appointed NCI associate director (1960), and associate director for collaborative research (1961) with responsibility for NCI's new Virology Research Resources Branch. He was appointed NIH Deputy Director on August 1, 1962.

During his career at NIH, Dr. Sessoms was the recipient of two Meritorious Service Awards. The first, in 1964, was in recognition of his accomplishments as chief of the Cancer Chemotherapy National Service Center. (See DR. SESSOMS, Page 15)

Dr. Stuart M. Sessoms Retires From Fed. Govt.

Dr. Stuart M. Sessoms, Deputy Director of the National Institutes of Health since 1962, is retiring from the Federal Government after 25 years of service to assume new duties at Duke University effective Aug. 1.

Dr. Sessoms will serve there as director of the Duke Hospital, professor of medicine and associate dean for clinical sciences at the School of Medicine.

Dr. Sessoms came to NIH in 1958 as a staff member of the National Cancer Institute. From 1958 to 1957 he was assistant director of the Clinical Center, and assistant director of the NCI prior to his appointment in 1958 as chief of the Cancer Chemotherapy National Service Center.

The Superior Service Award is being presented to 13 employees, and the international marshalling of data to guide the treatment of cancer. Dr. Hans L. Falk, associate scientific director for Carcinogenesis, NCI, "... for his highly significant contributions to the development of a national program on experimental carcinogenesis.”

Dr. Robert A. Manaker, head, (See AWARDS, Page 15)

Photos by Ralph Fernandex.

Shown here is the amino acid sequence of thyrocalcitonin. The 32 amino acid components of the molecule are arranged in a single polypeptide chain with a loop at one end. Particularly interesting molecular sites include tyrosine (amino acid 12), the point at which radioactive iodine was attached to the molecule for radioimmuno-assay studies; and methionine (amino acid 25), whose extensive alteration does not affect the molecule’s hormonal activity—

Fundamental and Applied NHI Research Aids in Synthesis of Thyroid Hormone

Fundamental and applied research by National Institutes of Health scientists on thyrocalcitonin—a thyroid hormone recently discovered in several animal species—has:

• Provided the first chemical definition of the hormone’s structure that has just led to synthesis of the hormone by Swiss researchers;

• Provided a sensitive method of measuring the normally minute amounts of hormone circulating in the blood;

• Established through the assay method the hormone’s physiological importance in bone and mineral metabolism; and

• Demonstrated that the purified hormone, administered to patients suffering from high blood calcium levels and bone demineralization, produces rapid and beneficial results.

These findings, of far-reaching scientific and medical importance and the subject of intensive research efforts by many research teams in this country and abroad, were presented May 21 at the International Symposium on Protein and Polypeptide Hormones, Liege, Belgium, by Dr. John T. Potts, Jr., of the National Heart Institute’s Laboratory of Molecular Diseases.

Dr. Potts, head of the Laboratory’s Section on Polypeptide Hormones, and his coworkers, Drs. Hugh D. Niall, Henry T. Keutmann, H. Bryan Brewer, Jr., Leonard J. Deftos, and Michael R. Lee, have also reported these findings in the April and May issues of the Proceedings of the National Academy of Sciences.

Previous research in this country and Canada had found a substance that lowers blood calcium levels, (See SYNTHESIS, Page 15)
Military Chaplains Attend CC Program To Broaden Hospital Pastoral Skills

Four military chaplains, on duty at other hospitals, discuss pastoral problems with CC Chaplain, Robert Robey (second from right). Left to right are: Chaplains O. Ray Fitzgerald, Floyd Heckard, David Polhemus, Chaplain Robey, and Father John Brennan.—Photo by Ralph Fernandez.

Four Washington area military chaplains recently completed a Clinical Center training program which included seminars and consultations with patients and staff members. The program was under the direction of Clinical Center Chaplain, Robert Robey.

This training is part of a year-long program which enables experienced chaplains to earn certification in the Association for Clinical Pastoral Education.

Gain Fresh Perspective

Chaplains John Brennan, Floyd Heckard, and David Polhemus represented Walter Reed Army Hospital. Chaplain O. Ray Fitzgerald came from the National Naval Medical Center. Each has had at least 12 years of service as a professional military chaplain.

By working and talking with patients and staff members in a hospital other than their own, the chaplains agreed that they were able to gain a fresh perspective on their roles as members of a hospital team.

At the Clinical Center, the chaplains were assigned to fewer patients than they would normally have had in their respective hospitals. This left them more time for consultation with medical and paramedical personnel, and for analysis of their study group activities.

According to the chaplains, the number of CC staff members in proportion to patients was greater than in most hospitals. Also, patients treated here had a greater variety of illnesses. Both factors, they thought, helped them to broaden the pastoral skills they would need as part of a hospital team.

While their pace at the Clinical Center may have been more leisurely, their daily schedules were more demanding.

The chaplains spent 4 hours, beginning at 7:45 a.m., with patients in their own hospitals. Then they worked at the Clinical Center from noon until 8:30 p.m.

Soon after the military chaplains departed, a group of seminarians arrived at the Clinical Center to begin the regular pastoral training program.

Dr. Tester to Serve on NIGMS Behav. Sciences Training Comm.

Dr. John R. Tester, ecologist and associate professor, Department of Ecology and Behavioral Biology, College of Biological Sciences, University of Minnesota, has been appointed to the Behavioral Sciences Training Committee of the National Institute of General Medical Sciences.
fast, he reviewed the endless stream of reports fast.

Now Dr. Mider is moving to the National Library of Medicine. To many people at NIH, Dr. Mider himself has seemed a walking medical library, and one needing no computer to retrieve the vast fund of information stored in his mind.

**Duties Defined**

But since NLM has 1,500,000 books, journals, theses, films, microfilms and pamphlets with computers, and even satellites to increase the computer service, one wonders about what Dr. Mider will do.

Officially, he will be a Special Assistant to Dr. Martin M. Cummings, the Director. Unofficially, he may be known as the Library of Medicine's physician or medical specialist.

The Library has on its staff many specialists: information system specialists, chemists, pharmacologists, historians, and so on. But few medical people, aside from Dr. Cummings himself.

**Is Well Known**

Because Dr. Mider is known, both by reputation and to a large extent personally, in every government agency and institution conducting or administering medical research in this country and abroad, he will be able to augment Dr. Cummings' activities in making the Library both better known and more responsive to the needs of the medical research community and to the medical profession through medical schools and the larger community hospitals.

Another one of his concerns at the library will be the review for possible publication of various original papers deposited in the library.

Dr. Mider first came to NIH as a research fellow at the National Cancer Institute in 1939. In 1941, when that fellowship was terminating, Dr. Carl Voegtlin, Director of NCI, suggested that Dr. Mider apply for a Commission in the PHS.

**Rejoins NIH in '52**

Subsequently Dr. L. R. Thompson, Director of NIH, called Dr. Mider into his office and told him he could not meet the physical standards for a Commission and advised him to leave NIH because there was no future in the organization unless one was an officer. Dr. Mider went to Cornell.

It was not until 1962 that Dr. Mider came back to NIH as associate director in charge of research at the NCI. The growth, or rather, the evolution of the National Cancer Institute from a small institution of scientists concerned with biology in a rather narrow sense to

**WOMEN AT NIH**

**Novice Dentist's Vacation Visit to NIH Sparks Interest in Electron Microscopy**

**By Hilah Thomas**

At NIH a slim, youthful, soft-spoken Dane, who speaks English like a native, is an international authority on the fine structure of dental tissues.

The expert on that subject is Dr. Marie U. Nylen, National Institute of Dental Research, a widely known electron microscopist and the author of numerous papers on the development and structure of enamel and dentin.

She has also written papers on the process of calcification as it occurs in such diverse places as invertebrate animals, in dental calculus, and in aortas and tendons.

Dr. Nylen was the first to demonstrate the atomic characteristics of a biological substance when she photographed the crystal lattice of enamel. She showed how these minute crystals grow and what the relationship are between them and their organic matrix.

In addition to activities in a number of scientific organizations, a world-renowned institution giving leadership in every phase of cancer research followed.

From the NCI Dr. Mider moved to the position of Director of Laboratories and Clinics, NIH, where the process of growth and evolution was already under way.

Much of Dr. Mider's professional career has been spent in teaching and in administration. Unlike many scientists, he likes administrative work. He also likes writing and editing, and is expert at both.

Birdwatching is one of his hobbies, and he and Mrs. Mider can frequently be seen in the early morning walking along the towpath of the C. and O. canal above Pennfield Lock watching for the many varieties of birds that can be seen in that vicinity during spring and fall migrations.

Dr. Mider is a member of many scientific societies and a recipient of the Distinguished Service Award of the Department of Health, Education, and Welfare.

Dr. Nylen has served as an advisory editor to the Journal of Dental Research. She is also a Fellow of the American College of Dentists.

Today, Dr. Nylen administers the Laboratory of Histology and Pathology and studies such problems as the effect of the antibiotic, tetracycline, on tooth structures.

She is also in charge of training young scientists in electron microscopy, a much-needed skill in modern biomedical research.

**Is Badminton Champion**

In addition, she manages a home and three children, and in addition to that, the attractive doctor is a champion in her favorite sport—badminton. At one time she was badminton champion of both the District of Columbia and New England.

Twice, she won the All England Singles Championship, and she was fourtime winner of the women's doubles championship in Denmark.

Dr. Nylen grew up with three brothers. As a youngster she dreamed of becoming a physician. Her ambitions were fostered by her father, a law professor, who brought up his daughter with the maxim that marriage was not equivalent to earning a livelihood.

During the war years the young student switched her ambitions of becoming a doctor, to that of dentistry; the change in plans somewhat accelerated her education.

Dr. Nylen graduated from the Royal College of Dentistry, in Copenhagen. Soon after she became

**Banner Year Predicted By Officials for NIH's '68 Savings Bond Drive**

As the Record went to press first reports were coming in on the 1968 Savings Bond Drive. About 500 Institute and Division keymen began the drive with a person-to-person canvas of NIH's 12,000 employees.

Some campaign officials are predicting that this will be a record year for payroll deduction in the Bond drive.

**Advantages Cited**

Dr. G. Donald Whedon, NIAMD Director and Chairman of the 1968 Bond Drive, emphasized that the purchase of Savings Bonds by payroll deduction represents good business sense and offers many advantages.

"The system is automatic, convenient, and the interest rate was raised recently. It is the only savings-interest income which is not subject to State as well as Federal tax," Dr. Whedon explained.

Canvassers throughout NIH are being provided with Bond pamphlets that show how investors may use their Savings Bonds upon retirement and obtain special interest advantages.

The pamphlets also point out how a fund for educating the children can be established with Bonds, and how the compounding of interest over a long term can lead to substantial savings.

...
Dr. Giovanni Di Chiro, head of the Section on Neuroradiology, Medical Neurology Branch, National Institute of Neurological Diseases and Blindness, has been elected to associate membership in the American Association of Neurological Surgeons at its annual meeting held in Chicago in April. Associate members of the AANS "constitute the leaders in the fields of neurological sciences" according to the secretary of the organization, which was founded in 1931 as the Harvey Cushing Society.

Research Interest Noted

Dr. Di Chiro has been with NINDS since 1958. His research interest encompasses both basic and diagnostic uses of x-rays and radioactive isotopes in the neurological sciences.

He has contributed to the development and improvement of several techniques for studying and visualizing the brain and spinal cord.

Dental Research Careers Illustrated in New Film

A film to illustrate the various fields of research in dental science, is being produced under the auspices of the American Dental Association and supported by the National Institute of Dental Research. It is planned for autumn release.

The film points out how such interrelated fields as microbiology, biophysics, biochemistry, and similar subjects, are all represented in dental research.

The motion picture, produced by Wexler Film Productions in Los Angeles, will be shown to high school and college freshmen who are primarily science majors.

Cameras at a Dental Institute laboratory for a film illustrating how many fields of science are represented in dental research.

NCI Study Finds Enzyme Abnormality in Chronic Myelogenous Leukemia Patients

National Cancer Institute investigators have reported that patients with chronic myelogenous leukemia, even those in remission, have abnormally low levels of pyrimidine deoxyribosyltransferase.

The enzyme pyrimidine deoxyribosyltransferase, which catalyzes the synthesis of deoxymyidine and deoxyuridine, normally is more than five times as active in granulocytes as in other white cells. Low levels of the enzyme in patients with acute and chronic myelogenous leukemias and lymphocytes in these patients are due in part to the decreased number of normal granulocytes in these patients.

The investigators, Dr. R. Gallo, Dr. S. Perry and C. Davis, assayed the white blood cells of 14 patients with chronic myelogenous leukemia (CML) in remission and found that 16 of 17 samples showed below-normal transferase activity. By contrast, control samples from 14 normal volunteers had normal transferase levels.

Abnormality Explained

The abnormality in the CML patients was not due to chemother-apy since values in eight patients not receiving therapy did not differ from results with patients on therapy. By contrast, four patients with acute myelocytic leukemia in remission had normal enzyme levels.

Transferase deficiency is apparently characteristic of CML granulocytes even though the cells are morphologically mature, the differential count is normal, and patients are in remission.

The investigators believe that this enzyme deficiency may suggest a chemical alteration in these cells at the level of gene expression.

It is hoped that the finding may have diagnostic usefulness in chronic myelogenous leukemia—a disease in which blood changes may occur years before significant symptoms appear.

Drs. Bradley and Vaughn Named to NIAID Board

Dr. L. A. Bradley, Ph.D., Professor of Microbiology at the University of Minnesota, and John H. Vaughn, M.D., Professor of Medicine in the University of Rochester School of Medicine and Dentistry, will join the Board on July 1. Two new members have been appointed to 4-year terms on the National Institute of Allergy and Infectious Diseases Board of Scientific Counselors.

S. Gaylen Bradley, Ph.D., Professor of Microbiology at the University of Minnesota, and John H. Vaughn, M.D., Professor of Medicine in the University of Rochester School of Medicine and Dentistry, will join the Board on July 1.

Upon retirement from NIH, Dr. Stuart M. Sessoms will assume new administrative and teaching duties at Duke University on Aug. 1, from the Medical College of Virginia in 1946. He did graduate work at Johns Hopkins School of Medicine and received additional training at the Memorial Center for Cancer and Allied Diseases in New York prior to joining NIH.

Dr. Sessoms is a Diplomate of the American Board of Internal Medicine, a Fellow of the New York Academy of Sciences, and a member of the Association of Military Surgeons and the American Hospital Association.
SYNTHEIS

(Continued from Page 1)

identified this as thyrocalcitonin, and its origin as the thyroid gland, and strongly suggested that this was another important thyroid hormone that acts in concert with the parathyroid hormone to regulate blood calcium and prevent bone demineralization.

Evidence Provided

The NHI scientists' studies provided evidence that thyrocalcitonin is a hormone and is continually released into the bloodstream in small amounts to perform a normal physiological role, that of controlling the rate of bone demineralization and thereby helping to regulate blood calcium levels.

The NHI scientists previously had isolated the hormone in pure form from partially purified extracts of pig thyroid, increased its potency 50,000 times, and subjected it to stringent tests which established its purity.

Molecule Structure Defined

These isolation studies next led Dr. Potts and his coworkers to a definition of the structure of the thyrocalcitonin molecule, a peptide containing 32 amino acids, the sequence of which was determined by several biochemical methods.

The identical results from these methods showed the 32 amino acids arranged in a single polypeptide chain with a loop at one end.

Ultimate proof that the correct structure has been obtained and practical application of the knowledge of hormonal structure requires laboratory synthesis of the thyrocalcitonin, by using as their "blueprints" the structural information supplied by Dr. Potts' group.

Scientists of two other pharmaceutical firms, Ciba Pharmaceutical Company in Switzerland, and Ledere Laboratories in the United States, have also announced considerable success in its synthesis.

Assay Technique Developed

Development by the NHI scientists of a sensitive radioimmunoassay technique for determining small, physiological amounts of the hormone in blood has opened the door to evaluation of thyrocalcitonin's importance in normal bone and mineral metabolism and its role in various disease states.

With this technique, the NHI scientists were able to detect, for the first time in any normal animal, the minute quantities of thyrocalcitonin continuously secreted into the blood of intact rabbits, and to measure the rapidly increasing amounts of hormone released in response to infusions of a calcium solution.

Studies Suggest Value

Tests with the assay in human patients have shown that a certain form of thyroid cancer produces excessive quantities of thyrocalcitonin, a finding that may explain many of the symptoms of this disorder, the NHI scientists believe.

These studies have strengthened the probability, currently under study by a number of clinics, that thyrocalcitonin has value in treating patients suffering from certain diseases characterized by softening and weakening of the bones, as well as in combating high blood calcium levels. The blood assay should prove useful in monitoring blood levels of the hormone during such therapeutic use.

In one NHI patient, afflicted with widespread cancer of the parathyroid glands and extensive destruction of bone (uncontrollable by conventional therapy), blood calcium has been maintained at normal levels for a period of 5 months, and bone lesions healed, by only intermittent treatment with small amounts of the highly purified hormone preparation supplied by Amour Pharmaceutical Company.

This and other clinical studies were performed by the NHI Laboratory of Clinical Endocrinology, headed by Dr. Frederic C. Bartter.

"Fingerprints" of various peptide fragments of thyrocalcitonin are shown being discussed by Dr. Henry T. Keutmann of NHI's Laboratory of Molecular Diseases (center), Dr. John T. Potts, Jr., head of the Laboratory's Section on Polypeptide Hormones (left), and Lynn "Skip" Callahan, Laboratory technician. The fragments, soon as spots on the filter paper, were stained to render them visible following their separation by electrophoresis. The spots are then cut out and washed with solvents to remove the fragments for further processing by several techniques recently developed by Dr. Keutmann to digest the fragments into their component amino acids. These are then individually analyzed by Mr. Callahan in the machine directly behind him, the Automatic Amino Acid Analyzer.

Dr. Potts (right) examines a strip chart emanating from an Automatic Recording Radioactivity Detector with Dr. Leonard J. Deftos (center) and Dr. Michael R. Lee, a visiting scientist from Oxford University, England. Drs. Deftos and Lee have focused their efforts toward the development of the new radioimmunoassay technique.
Grants-Management Officers Evaluate Their Role at Three-Day Conference

The first Grants Management Seminar sponsored by the NIH Advisory Committee for Extramural Management Procedures recently held a 3-day series of lectures and discussions at Airlie Conference Center, Warrenton, Va.

The seminar, under the auspices of the NIH Committee on Staff Training Extramural Programs, brought 26 grants management officers and specialists from NIH (including the National Library of Medicine), and the National Institute of Mental Health.

According to Dr. Thomas Bowery, associate director for Operations, Division of Research Facilities and Resources, who acted as seminar moderator, the purpose of the meeting was to discuss:
1. The proper role of the grants management officer in an organization administered by scientists;
2. The function of the grants management officer at various levels within the department;
3. The function of grants administrators in relation to their university counterparts.

Participants in a recent Grants Management Seminar at Airlie Conference Center, from left, are: Row 1) George Parrish, NIAMD; Anna Marie Perrell, DEHS; Robert Ginsburg, NIDR; Lee Susan Brown and Jack Coleman, NCI; Dr. Thomas Bowery, DRFR; Steven Bernard, NHI; Gregory Lewis, NIAMD; Bernard Drockin, DRFR; John Spain, NLM. Row 2) Virginia Lehr, NIAID; Margaret Pusey, NLM; Richard Hopkins, NICHD; Ernestine Taylor, NHI; Kenneth Anderson and Robert Dickerson, DRFR; Helen Schroeder, NIGMS; Linda Noff, NIAMD; Nicholas Morrissey, DRG; Jacob Seldenberg, FMB-OD. Row 3) Guerry Smith, DRG; Donald Townsend and Eleanor Offutt, NIMH; Dr. Robert Gibbs, OD-NIH; Robert Paul, NIGMS; Irving Nash, NINDS; Donald Clark, NICHD; James Quirk, NIAID. Jane Knopp, DRG, was not present for the photo.

Dr. John G. Hayward, OIR Administrator, Dies

Dr. John G. Hayward, a health science administrator in the Office of International Research, died May 18. He was 50 years old.

At the time of his death, Dr. Hayward was a staff member of the U.S. Secretariat of the U.S.-Japan Cooperative Medical Science Program, and was responsible for the coordination of research activities for the Parasitic Diseases (schistosomiasis and filariasis) and Tuberculosis Panels.

Background Described

Dr. Hayward, born in Irvington, N.J., received the DVM degree from Texas A & M University in 1941.

He worked for the USDA Bureau of Animal Industry for 2 years and then served in the U.S. Army Veterinary Corps from 1943 to 1945.

Dr. Hayward engaged in private practice in Russellville, Ark. from 1945 to 1956. During these years he became extremely interested in parasitic diseases, and conducted an internal and external parasitic control program for city and county public health agencies.

He also developed numerous veterinary surgical techniques such as cornal transplants for animals, pelvic repair, and “buttonhole surgery.”

Travelled Extensively

Leaving private practice, Dr. Hayward served as a veterinary advisor to the Administration for International Development, Department of State, for 5 years. He traveled extensively in the Caribbean area and in Africa, establishing national disease research laboratories and disease control programs and conducting nutritional studies.

In November 1965, Dr. Hayward joined NIH as a Research Grants Associate.

Dr. Hayward is survived by his widow, Betty, and two sons, John G., Jr. and Stephen.

Dr. Hayward coordinated research activity for the parasitic diseases and tuberculosis panels, U.S.-Japan Cooperative Medical Science Program.
Eighteen Kalamazoo College sophomores are among the 45 normal volunteers currently undergoing research studies at the Clinical Center.

These students are participating in the Kalamazoo College Career and Service Program, under which third quarter sophomores are given the opportunity to work on jobs related to their major fields of study.

Not all the students in the current group are science or psychology majors. Rod Krapf, a history major, and Steve Anker, an economics major, are particularly pleased to be working in an area which is new to them.

Study Explained

Rod commented, "I've learned a lot of things here that I couldn't have learned any place else."

Both boys are on a rice diet for a study under the direction of Dr. Robert S. Gordon, Jr., clinical director of the National Institute of Arthritis and Metabolic Diseases.

While visiting East Pakistan, Dr. Gordon particularly observed the disease, cholera, among the native people. Because these people subsist on a diet consisting mainly of rice, which is low in potassium, Dr. Gordon decided to study the effects of a low potassium diet upon healthy individuals.

Simulates Bengali Climate

After 4 to 6 weeks on this diet, the boys will be placed on an hour and a half per day in a metabolic chamber at 110 degrees and 60 percent humidity, a simulation of the Bengali climate. Sweat from the forehead will be collected, and the amount of potassium in it checked.

Dr. Gordon is especially proud of the fact that of the four volunteers on his study, three of them are doing their "career assignments" under his direction.

Rod is helping to compile data from charts, and Steve is working with electronic equipment. Of his experience here, Steve said, "It's exciting to be working with the real top pioneers of research."

Mary Goodwin, a French major at Kalamazoo College, is participating in fever studies under the direction of Dr. Sheldon M. Wolff, clinical director of the National Institute of Allergy and Infectious Diseases.

The purpose of her particular study is to determine the normal body's ability to remove particles of a fever-inducing drug from the blood. A sample of the volunteer's blood is checked originally to provide a base line.

Then a fever is induced periodically to which the volunteers build up a resistance. Later, the volunteers are rechecked to see how well their bodies are removing particles from the blood.

Mary also will soon be on a study to help investigate different ways of administering flu vaccine. She will be given flu serum either by nose drops or by injection.

For 3 weeks afterwards, she will have 5 cc's of saline solution introduced in her nose which she will expel into a paper cup for analysis in the laboratory.

Mary is working with Dr. Robert L. DuPont, Jr., of the Laboratory of Clinical Science, National Institute of Mental Health, for her career assignment.

Assists in Mental Study

She is helping to compile ratings of psychotic patients in therapeutic wards. The behavior of these patients is rated weekly by their nurses and doctors. These ratings are now being collected and graphed in order to locate trends of behavior or states of mind.

Studies will then be done to try to find the causes of each new trend. For example, a period of depression may follow the assignment of a new doctor on the ward.

Mary is especially excited about the people she has had the opportunity to meet here. "One of the things that impresses me most about NIH is the friendliness of nearly everyone," she declared.

Volunteer Service Stressed

Delbert Nye, administrator of the Normal Volunteer Patient Program at the Clinical Center, stressed the importance of volunteer participation. "Much of the research done here at NIH could not go on without the normal volunteers," he said.

In order to study the effects of disease on the body, it is first necessary to establish a normal, or control, base line with which to compare the effects of disease.

"Two basic qualities are essential in a normal volunteer," Mr. Nye continued. "The first is, of course, a willingness to volunteer since the studies are performed only with the volunteer's written consent given after a careful explanation of each project.

Integrity Aids Research

"The second is a basic integrity. It would be easy to cheat on some of the tests, particularly the metabolic diet studies, and this of course would make any results valueless."

Mr. Nye is particularly pleased with the Kalamazoo group of volunteers. He called them "A wholesome, healthy group of young people."

The Normal Volunteer Program has been in existence nearly as long as the Clinical Center. Begun in 1954, the program has included over 3500 volunteers, and is now averaging about 400 per year.

These healthy people are accepted through a sponsoring organization such as Kalamazoo and other colleges, churches, and civic groups.
Influences on Standards Described at Conference Sponsored by NICHD

A conference on Studies of the Acquisition and Development of Values was held at the Pan American Health Organization Building in Washington, D.C., May 15-17.

This conference, sponsored by the National Institute of Child Health and Human Development, presented research material concerned with determining moral values, ethical standards, and character formation.

Sherman Opens Conference

The conference opened with an introduction by Dr. John F. Sherman, NIH Associate Director for Extramural Programs.

The major address was given by Dr. John G. Stoessinger, acting director, Political Affairs Division of the United Nations' Department of Political and Security Council Affairs. Dr. Stoessinger presented an historical review of society's concern for value systems.

More than 50 eminent scientists from the fields of theology, ethics, sociology, philosophy, psychology, anthropology, psychiatry, and human development attended.

Influencing Principles Discussed

The conferences described the principles which influence the development of values and that identify the scientific teachings which contribute to an understanding of these values.

Conference speakers included:
Dr. Richard Flacks, University of Chicago; Dr. Lawrence Kohlberg, Harvard University; Dr. Urie Bronfenbrenner, Cornell University; Dr. Francis Hsu, Northwestern University; Dr. Robert J. Lifton, Yale University School of Medicine, and Dr. Abraham Edel, City College of New York.

Guerry R. Smith Retires After 40 Yrs. in Govt.

Guerry R. Smith, chief of the Grants Management Branch, Division of Research Grants, retired last month after 40 years in Federal Government. For the past 5 years he has been with DRG.

Mr. Smith started his career in 1927 with the Government Printing Office.

Since that time he has held administrative positions with a number of Federal agencies including the Departments of Agriculture, State, and Commerce, Secretariat.

A trained lawyer, Mr. Smith earned two degrees from George Washington University—a B.A. in 1935, and an LLB in 1938.

His retirement plans include gardening, sailing, and traveling.

Dr. Margaret Kelly Dies, With NCI for 28 Years

Dr. Margaret Kelly, pharmacologist at the National Cancer Institute, died of cancer on May 5 in the Clinical Center. She was the wife and collaborator of Dr. Roger W. O'Gara, a pathologist at NCI. Dr. Kelly used her maiden name throughout her career.

Dr. Kelly joined the Institute in 1940 as a medical technician in the Laboratory of Pathology. She was a senior investigator in the Laboratory of Chemical Pharmacology at the time of her death. Prior to her

Dr. Margaret Kelly's research interests included the pharmacology of drugs used in cancer chemotherapy.

NCI appointment, she worked for a group of pathologists in the Washington area, and later, for the Walter Reed Army Medical School.

Her research interests included the pharmacology of drugs used in cancer chemotherapy, carcinogenicity, and chemical protection against radiation and alkylating agents.

Dr. Kelly's studies with laboratory animals showed that sulfhydryl compounds may protect against toxicity from x-irradiation and alkylating agents by a distribution pattern which causes more of a protective compound to accumulate in the sensitive tissues than in the tumor.

She also demonstrated that newborn mice are as sensitive to chemical carcinogens as they are to viral carcinogens.

Breeding Colonies Established

In recent years, Dr. Kelly established one of the first rhesus monkey breeding colonies in this area for the study of carcinogenicity in primates.

She used these animals to produce the first consistently reproducible primate tumor, a liver tumor induced by diethylnitrosamine. Recently these induced liver tumors produced an alpha fetoprotein similar to that produced by human hepatomas. Dr. Kelly succeeded in growing this tumor in tissue culture.

In collaboration with Dr. Michael Walker, a neurosurgeon, she developed techniques for adapting this
drum to grow within the monkey brain as a quasi-metastatic type of cerebral neoplasm. This research gave scientists a prototype primary liver tumor for chemotherapeutic experiments. It also provided a prototype metastatic brain tumor for chemotherapeutic and pharmacologic experiments.

Dr. Kelly was born in 1906 in Minneapolis, Minn. She attended the University of Minnesota from 1923 to 1927. While working at the National Cancer Institute she continued her studies at George Washington University. She received the B.S. degree in chemistry in 1941, the M.S. degree in biochemistry in 1943, and the Ph.D. in pharmacology in 1961.

It was Dr. O'Gara's request that any tributes should be in the form of contributions addressed to the Anna Fuller Fund, administered by Dr. W. U. Gardner of Yale University School of Medicine, or the American Cancer Society.

Dr. Fraley and Paulson Share Award for Essay on Laboratory Research

Drs. Elwin E. Fraley and David F. Paulson of the Surgery Branch, National Cancer Institute, recently shared first prize of $500 in the American Urological Association's annual essay contest for laboratory research.

The NCI scientists were honored for their morphological and biochemical studies of virus (SV40) transformed prostatic tissue.

In collaboration with Dr. Alan Ressing, Medical Director of the Laboratory of Pathology, Branch, NCI, Drs. Fraley and Paulson prepared tissue cultures from prostatic cells of newborn hamsters. The tissue cultures were then transformed with the SV40 virus and injected into adult male hamsters.

Research Result Cited

The result of their research was the development of prostatic tumors in the hamsters which resemble human carcinoma of the prostate.

Dr. Fraley is a senior investigator in the Surgery Branch. A native of Pennsylvania, he received his M.D. degree (cum laude) from the Harvard Medical School in 1961.

He served his internship and residency in surgery and residency in urology at Massachusetts General Hospital. He was on the staff of that hospital until he joined NCI.

In 1967 he received first prize in the American Urological Association contest for clinical research.

Dr. Paulson was born in Washington, D.C. and received his M.D. degree from Duke University School of Medicine in 1964. He is a third year clinical associate in the Surgery Branch.

Dr. Cantarow Elected Vice-Pres., Association For Cancer Research

Dr. Abraham Cantarow, National Cancer Institute, has been elected vice president (president-elect) of the American Association for Cancer Research.

Dr. Cantarow is research planning officer in the Program Analysis and Formulation Branch, NCI.

He is a well-known teacher and investigator in both medicine and biochemistry. An authority in the field of calcium metabolism and chemical carcinogenesis, he is the author and coauthor of more than 180 scientific articles and textbooks.

A graduate of Tufts College, he received the M.D. degree from Jefferson Medical College.

Dr. Cantarow began his career in research in 1924 as a resident chemist at Jefferson Medical College Hospital. He held several positions there until 1966 when he joined NCI as associate chief of Program Planning Awards Review and Technical Administration Branch, Extramural Activities.

Dr. Abraham Cantarow is an authority in the field of calcium metabolism and chemical carcinogenesis.

Dr. Cantarow, who is active in a number of scientific organizations, was a member of the Chemotherapy Study Section at NIH from 1960 to 1964. Since 1947 he has been a consultant in Biochemistry in the U.S. Navy's Bureau of Medicine and Surgery.

Dr. Huebner Presents 1968 Ricketts Lecture

Dr. Robert J. Huebner, chief of the Laboratory of Viral Diseases, National Institute of Allergy and Infectious Diseases, presented the Howard Taylor Ricketts Lecture for 1968 at the University of Chicago on May 22. His subject was "Cancer as an Infectious Disease."

Dr. Huebner is a member of the American Association for Cancer Research which encourages the presentation and discussion of new, significant observations and problems in cancer.

Dr. Abraham Cantarow, National Cancer Institute, has been elected vice president (president-elect) of the American Association for Cancer Research.

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