PHS Negotiates Contract With Tufts University For Enzyme Center

Surgeon General Luther L. Terry recently announced that a contract for establishment of a New England Enzyme Resource at Tufts University School of Medicine has been negotiated with Tufts University by the Public Health Service. The contract involves $844,900 for the first 18 months' operation, with program administration assigned to the Division of Research Facilities and Resources.

Provides Needed Resource

The new facility, established to provide a much needed special resource, primarily to medical research in New England, will be located in a building adjacent to Tufts University School of Medicine within the Tufts-New England Medical Center complex in downtown Boston. The NIH project officer will work with a Scientific Advisory Committee composed of scientists selected by leading universities in the area, as well as with representatives of the scientific community outside the New England region.

Technical operations and facilities necessary for proper functioning of the Enzyme Resource will be the responsibility of Dr. Stanley (See ENZYME CENTER, Page 6).

3 Researchers in Bolivia Recover From Hemorrhagic Fever, Will Continue Study

Three Public Health Service researchers, stricken earlier this month with Bolivian hemorrhagic fever while conducting field studies of the disease in the Northeast, are recovering and have been discharged from the Gorgas Memorial Hospital in Ancon, Canal Zone, according to recent reports. The researchers, Dr. Karl M. Johnson, Dr. Ronald B. Mackenzie and Angel Munoz, contracted the dread disease in Beni Province where it first appeared in 1959. The disease kills about one out of three who get it.

Dr. Sarah E. Stewart Wins 'G. Lenghi Prize'

Dr. Sarah E. Stewart, a member of the Laboratory of Viral Oncology, National Cancer Institute, has been awarded the G. Lenghi prize for 1968 by the National Academy of Lincei, Rome, Italy. The prize, in the amount of two million lire (about $8,000), is given biennially to an investigator who has made important scientific contributions in the field of virology.

Internationally recognized for her research on the relationship of viruses to cancer, Dr. Stewart is best known for her research on the polyoma virus which she isolated and characterized.

In collaboration with Dr. Ber­nice Eddy, Division of Biologies (See DR. STEWART, Page 3)

Dr. Eddy, Division of Biologies

Specialist Sent by Plane

To provide specialized medical services for the researchers, Dr. George Entwisle of the University of Maryland School of Medicine was flown to Panama City to assist in their treatment. Dr. Ent­wisle gained his special knowledge of hemorrhagic fever in Korea, where a disease similar to the Bol­ivian variety exists.

Home headquarters for the Bolivian study—the Middle America Research Unit in Panama (MARU)—is a field facility of the National Institute of Science and the Walter Reed Army Institute of Research. The disease has been rampant in Northern Bolivia during the Southern American autumn which occurs in the late spring and early summer months of the Northern Hemisphere. Investigations of Bolivian hemorrhagic fever by MARU began in May of last year at the request of the National Institutes of Health.

NIH Record in New Location

The NIH Record moved July 19, from the 5th to the 4th floor of the B wing of Building 31. The new location is Rs. 4B13. The new tube station is DS-2. The phone extension remains 62159.

Dr. Smadel Dies, Was Famed for Virology Research

Dr. Joseph E. Smadel, 56, Chief of the Laboratory of Virology and Rickettsiology of the NIH Division of Biologic Standards, world-renowned for his pioneering assault on infectious diseases including typhoid fever, scrub typhus and Rocky Mountain spotted fever, died July 21 at University Hospital, Baltimore, after a short illness.

At the time of his death, he was working on several research projects, including cholera control.

The NIH scientist was the first to demonstrate, in 1948, that typhoid and the Rickettsial diseases could be treated successfully with the antibiotic chloramphenicol. Prior to utilization of this drug in typhoid cases, the mortality was 12 percent. It is now less than two percent.

Serves at Rockefeller Institute

Before joining NIH in 1956 as Associate Director for Intramural Research, Dr. Smadel conducted research on virus diseases at Rockefeller Institute for Medical Research in New York, and for 11 years was Chief of the Department of Virus and Rickettsial Diseases at Walter Reed Army Medical Center.

This past year, Dr. Smadel received the Albert Lasker Clinical Research Award, one of the most important given in the medical field. The Lasker judges made note of the urgent importance of his discoveries to American personnel in Southeast Asia.

Dr. Smadel helped establish a research laboratory as part of the SEATO program for cholera control, at Dacca, Pakistan, and his laboratory recently completed a project in measles research in Upper Volta, West Africa.

More than 730,000 West African children were painlessly inoculated, without the use of needles, by
NEWS from PERSONNEL

WORK INJURY BENEFITS

The question is often asked: What benefits are available to employees who are injured while at work?

In the first place, you are entitled to and are under an obligation to seek immediate medical attention from the Employee Health Service. The Federal Employees' Compensation Act also makes the Government responsible for your entire medical care, for rehabilitation services, and for compensation in the event of disability or death.

These benefits apply to all employees of the Federal Government, except PHS Commissioned Officers. Similar benefits are available for Commissioned Officers under the medical care and survivor programs of the Armed Services.

55 Speech Therapists

Guests of NIH July 11

Sixty-five members of the American Speech and Hearing Association saw and heard a specially arranged program at the National Institute of Dental Research while guests of NIH on July 11. The speech therapists were holding a 3-day meeting in Washington devoted to communicative problems in cleft palate. Dr. John Irwin was chairman of the group.

After a welcome by Dr. Robert C. Likins, Chief of the Institute's Extramural Programs Branch, the Association members inspected the large colony of germ-free animals maintained at NIDR.

Germfree 20 Generations

Dr. Robert J. Fitzgerald, Chief of the Gnotobiatics Section, demonstrated the techniques used in maintaining these animals which have now been bred under germ-free conditions for more than 20 generations.

Other participants included Dr. Carl J. Witkop, Jr., Chief of the Human Genetics Branch, who described Institute activities in the field of genetics; and Dr. James F. Bosma, Chief of the Oral Pharyngeal Development Section, who discussed the clinical investigations now under way and demonstrated the techniques of cineradiography.

Dr. Herbert Cooper outlined chromosome studies in oral-facial anomalies, and Dr. Yasuaki Takagi described anatomic studies of the pharynx.

NIAMD Scientists Elected to ASCI

Two National Institute of Arthritis and Metabolic Diseases scientists, Drs. J. E. Seegmiller and Baruch S. Blumberg, have been elected to membership in the American Society for Clinical Investigation.

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Clinical Center Revolving Altar Permits Services in One Chapel by Three Faiths

Always interesting to visitors and new NIH employees is the revolving altar in the Clinical Center chapel, ready for use at any time, which permits Protestant, Catholic, and Jewish services to be held in one graciously appointed chapel seating more than 150 persons.

Through the years it has facilitated the work of the Clinical Center Chaplaincy Service, representing the three major faiths in the U. S. to the patients and their families.

The triple altars are mounted on a circular platform which is rotated manually.

Use of the turntable altars apparently was introduced during World War II at a Navy recruiting center in New York State. Dedicated in August 1943, it is believed to be the first Navy chapel altar designed for the use of all three faiths.

Altar One of First

The altar in the Clinical Center chapel was installed 10 years ago, when the 14-story building was under construction, making it one of the first of its kind in a United States Government facility.

Jewish services are held on Fridays at 1:30 p.m. Catholic Mass is celebrated on weekdays at 7 a.m., and Sundays at 7:15 and 8:30 a.m. Protestant services are conducted Sundays at 10 a.m.

The chapel is open to patients at all times for prayer and meditation, and NIH employees are invited to special services for Easter, Christmas, and certain Holy Days.

Services on Radio

Most patients walk to the chapel services, but those who are unable to do so and wish to attend are taken by wheelchair. The services also are broadcast to the bedside radios of CC patients.

Bibles in either Catholic or Protestant translations, and Torahs are available to the patients from the Chaplaincy Service or the Patients' Library. An extensive selection of other religious literature is also procured for them upon request.

Robert Burgess, DRG, Wins Suggestion Award

A Beneficial Suggestion Award was presented July 15 to Robert Burgess, audit clerk in the Grants Management Branch, Division of Research Grants, by Dr. E. A. Congrey, Acting Chief of the Division.

Mr. Burgess was commended for his suggestion to eliminate posting, in the IBM control book, work that was duplicated in the history cards.

The elimination of the duplicated operation has decreased overtime work in the Grants Management Branch and is estimated to save the Government $6,700 annually.
 Participation Urged; Cultural Center Campaign Extended

Dr. G. Donald Whedon, NIAMD Director, who is Chairman of the National Cultural Center campaign for NIH and the National Library of Medicine, has announced the campaign's extension because disrupted summer schedules have prevented many employees from participating.

This extension also enables other NIH and NLM non-contributors to join with other Federal personnel who are trying to insure success of the fund drive. Contributions are now being accepted by keymen in all NIH and NLM.

Urging employees to support the drive, Dr. Whedon said, "Participation in this campaign is a privilege and a responsibility which reflects the high value we place on the cultural attainments of our Nation."

PERSONNEL
(Continued from Page 8)

8 a.m. to 5 p.m., and on Saturdays, Sundays and holidays from 8 a.m. to 4:30 p.m. The North Health Unit, located in Bldg. 31, is open five days a week, from 8:30 a.m. to 5 p.m.

At times other than these hours, report to the Nursing Supervisor in the Clinical Center. A unit is also located in the Westwood Building, and a unit is scheduled to open in the Robin Building early this fall.

2. If further medical treatment is needed, you should obtain an order from the Employee Health Unit before treatment by an authorized physician or hospital.

Written Report Essential

3. Make a written report of the injury (even if it is only a minor one; it could develop into a serious condition) on Compensation Form CA-1 which will be given to you at the health unit. Submit this form to your supervisor within 24 hours of the accident. It is important that this form be completed and returned promptly, since it serves as your notice of injury and your original claim for compensation.

If you are injured in the line of duty, all absences for examination or out-patient treatment authorized by the Bureau of Employees' Compensation will be excused. If the injury results in your being off beyond the day of occurrence, you must decide whether to use leave or apply for disability compensation payments, whichever is applicable under the Act.

Your Personnel Officer can provide more detailed information on your rights and benefits under the Compensation Act.

NINDB Grantee Successfully Implants Plastic Corneal Disk in Eye of Rabbit

A procedure whereby a plastic corneal implant has been successfully tolerated in the eye of a rabbit for more than four years has been developed by Dr. William Stone, Jr., of the Massachusetts Eye and Ear Infirmary, who is a grantee of the National Institute of Neurological Diseases and Blindness.

His exhibit depicting the implantation procedure, displayed at the 112th Annual Meeting of the American Medical Association in Atlantic City, won a prize for being the best in the Section on Ophthalmology and received honorable mention among all the exhibits at the AMA meeting.

Dr. Stone said his technique represents toleration of an "incompletely covered foreign body—a concept that was thought to be impossible some 10 years ago."

The implant is made of methyl methacrylate manufactured in the Ophthalmic Plastics Laboratory of the Massachusetts Eye and Ear Infirmary.

A team of high-polymer chemists make the implant specifically for that purpose, having found the properties of commercial methyl methacrylate too inexact to use in implantation procedures.

25 Percent Benefit

Dr. Stone said that only about 25 percent of persons who are blind or partially blind from corneal scarring can benefit from eye-bank corneal transplantsations. In the eye bank procedures, he said, the donor graft often separates over vessels and grows into the graft.

The implantation technique, he hopes, will benefit many of the 90,000 persons in the U.S. who are blind or partially blind, plus 10 to 20 percent of the population of many Near and Far Eastern countries who are blind from corneal scarring.

To implant the plastic disk-like cornea, the rabbit's cornea is split in two layers from limbus to limbus, the implant is slid between these layers, and the disk is sutured along the periphery.

To accommodate the implant, part of the center of the anterior corneal layer is removed by trephination. If opacity occurs, the same procedure is performed on the posterior layer of the cornea.

The disk has holes in its periphery to permit the ingrowth of fibroelastic tissue. Occlusion of the trephine hole with fibroelastic tissue and epithelial cells was prevented by placing a raised "nubbin" at 0.75 mm above the corneal disk.

Device is Adeptable

The presently used plastic implant has a removable threaded nubbin which can be unscrewed from the basic disk. This permits access to the corneal layer behind the disk and allows interchange of the nubbin to suit varying optical prescriptions.

The idea of using plastic for corneal implantation occurred to Dr. Stone after World War II when he examined the eyes of U.S. airmen whose corneas often had 75 or more microscopic slivers of plastic from airplane canopies which were shattered during combat.

"In several cases," Dr. Stone said, "removal of these tiny splinters would have been tantamount to removing the cornea." Thus many slivers were left in the eye which in a very short time became tolerant of the plastic and which retained a reasonable amount of good vision.

Dr. Stone said the implantation Clearinghouse for News

Is Established by NIH,
Its Functions Explained

A National Clearinghouse for Mental Health Information has been established within the Office of the Associate Director for Extramural Programs at the National Institute of Mental Health.

Dr. Robert H. Felix, Institute Director, at the same time announced the appointment of Joseph H. Douglass, Ph.D., as Chief of the Clearinghouse, and Lorraine Bouthilet, Ph.D., as Program Director.

The purpose of the Clearinghouse is to provide a central, coordinated source of information on all aspects of mental health and illness.

When fully operational, the Clearinghouse will collect, store, and retrieve information derived from scientific and professional literature, manpower studies, mental health programs, and all other sources.

Manifold Functions Cited

It will analyze, interpret, and evaluate trends in the mental health field and disseminate scientific and programmatic information to scientists, practitioners, and administrators so that new research findings, therapeutic experiences, and administrative practices can be rapidly put to use. The Clearinghouse also expects to respond to requests for information from professionals and lay individuals and groups.

Clearinghouse policy will be to avoid duplication of effort and to foster cooperation among the many organizations now collecting and disseminating mental health information. Informational activities within NIH will continue, with the Clearinghouse serving to supplement and coordinate them.

The Clearinghouse is now in the planning stage, and several pilot activities have begun. Simultaneously, the design for a comprehensive information system is being developed.

Activities Expand Gradually

Pilot activities as well as the system design and implementation will be expanded gradually in a series of stages during the next few years, with the expectation that the Clearinghouse will be functioning on a full-scale basis within three or four years.

Announcements will be issued regularly to organizations and groups to keep them informed of the status and available services of the Clearinghouse. The technique will be applied to human eyes only after it has been proved reliable and safe following "sufficient animal experimentation."
means of the “jet” inoculator which he had helped develop.

This inoculator permits immunization of 300 persons an hour by propelling the fluid vaccine at high speed so that it penetrates the skin. His work in the technical improvement of medical equipment was well known.

Dr. Smadel was born in Vincehces, Ind. He graduated from the University of Pennsylvania in 1928, and received his medical degree in 1931 from the Washington University Medical School in St. Louis. He served in the army for four years.

Honors Received

The NIH scientist had received honorary degrees from Yale University, Jefferson Medical College and the University of Maryland. He received several distinguished awards in addition to the Lasker.

Dr. Smadel lived at 1440 Hemblock Street, N.W., Washington, and is survived by his wife, Mrs. Elizabeth M. Smadel, of the home address. Memorial services were held July 28 at the Walter Reed Chapel.

RESEARCHERS

(Continued from Page 1)

the Bolivian Ministry of Health.

Since it first appeared in 1959, frustrating the Bolivian Government’s interest in the economic and agricultural development of fertile northeast areas in Beni Province, the disease has assumed major importance to the people of Bolivia.

The small village of Orobaya was completely abandoned. San Joaquin, another hard-hit town, suffered the loss of about 500 residents who fled to other areas during severe outbreaks.

The disease is characterized by a slow onset, fever and chills, aching, headache, intestinal bleeding, nose-bleed, tremor of the tongue, shock and coma.

Fatality Rate 30 Percent

Among cases observed, death seemed to be most common among young children and old people, and the case fatality rate has averaged about 30 percent, although exact epidemiological statistics are unavailable.

The disease probably requires a carrier—a vector such as a tick or mite—and does not seem to be transmitted directly from one person to another. It is also well-known that one attack provides a lasting immunity, as is the case with many systemic virus diseases.

The period of crisis occurs between the fourth and tenth days of the illness. During this time hemorrhage occurs, as well as other serious toxic reactions.

PHS Issues Thesaurus

Of Biomedical Terms

The Public Health Service recently announced the publication of a thesaurus of biomedical terms entitled “Medical and Health Related Sciences Thesaurus.”

The medical thesaurus was published in two editions: a preliminary key-word system compiled for use in the indexing of the 1962 edition of the Research Grants Index.

Persons concerned with data retrieval and documentation systems will find the reference volume of interest as a pattern or guide in the preparation of similar indices.

Contains 12,200 Terms

The thesaurus (PHS Publication No. 1031) contains approximately 12,200 biomedical terms, of which 6,900 are main headings. In addition to the main headings, 2,300 “see” references; and 1,000 instructional items. It was produced by the Research Documentation Section of the Division of Research Grants.

In establishing this terminology, effort was directed toward compatibility with existing compilations, particularly the Medical Subject Headings of the National Library of Medicine.

Copies Available

Single free copies of the Medical and Health Related Sciences Thesaurus and the Research Grants Index (PHS Publication No. 926, 1963 edition) may be obtained from the Research Documentation Section, DRG Ext. 67543, Rm. 405, Westwood Bldg., Bethesda, Md.

Additional copies of both may be purchased from the Superintendent of Documents, Printing Office, Washington 25, D.C., at $1.50 and $7 per copy, respectively.

Since 1959 Bolivian hemorrhagic fever has presented difficulty in diagnosis. It is commonly referred to as “la tifa negra” — the black typhus—by the natives of Beni Province. Its resemblance to other diseases has complicated investigations, and specific laboratory studies are required to clearly differentiate it from typhus and other infections.

Investigations by Dr. Henry K. Beye, Director of MAIU, and his staff indicate that the Bolivian disease clinically resembles Argentinian epidemic hemorrhagic fever, caused by the Junin (pronounced who neen) virus. The virus was first isolated in laboratory studies by Drs. Alexis Sheklokov and Ned H. Wiebenga at the National Institute of Allergy and Infectious Diseases which suggested that the Argentinian and Bolivian hemorrhagic fever viruses were serologically related.

The search for the responsible agent made significant progress last month when unidentified viruses were isolated from patients in San Joaquin. Dr. Beye emphasized the importance of the definitive diagnosis of the virus. Positive identification is prerequisite for all other measures relating to the treatment and control of the disease.

Present studies are also directed to the identification of the vectors and reservoirs that transmit the disease to man. Investigators connected with the project led by Dr. Beye believe the virus is arthropod-borne, probably by mites, ticks, or lice that infect rodents common in the area.

Once the virus is identified, other phases of the study will include a classification and characterization of the virus and a search for an immunizing agent to protect against the disease.

At the present time there is no vaccine against any of the types of hemorrhagic fevers. Since Bolivian hemorrhagic fever is relatively unknown and unstudied, the researchers of the MAIU project maintain close liaison with Bolivian health authorities who are responsible for the care and treatment of fever victims.

Virus is Studied

Hemorrhagic fevers exist in the Soviet Union, India, Thailand, the Philippines, an Malaria, in addition to Korea and Argentina.

If the virus recently isolated in Bolivia is identified as the actual agent that causes Bolivian hemorrhagic fever, it will permit a major effort by NIH to study the effects of the disease with a view toward its eventual control, prevention, and treatment.
National Conference on Public Health Training Set for August 19-22

Surgeon General Luther L. Terry of the Public Health Service recently announced that the Second National Conference on Public Health Training will be held in Washington, D.C., August 19-22. The conference will bring together 100 leaders in the several health professions to evaluate the Public Health Service's program of traineeships for professional public health workers.

Members include the National Advisory Committee on Public Health Training which was established by law in 1956 to guide the program.

Manpower Is Lacking

Commenting on the significance of the conference, Dr. Terry said, "Adaptively trained public health manpower is in extremely short supply in many sections of the country."

"Our traineeship program has helped to train more than 4,000 public health professionals over the past seven years, and we look to this conference to help us make a still more effective contribution to recruitment and training in the years ahead."

Dr. William R. Willard, Vice President for the Medical Center, University of Kentucky, will serve as Conference Chairman. Dr. Willard is also Chairman of the President's Health Resources Advisory Committee, Executive Secretary of the Conference is Dr. William L. Kissick of the Public Health Service.

Materials Developed

Four pre-conference committees have developed with the conference staff background materials for consideration by the conferences in the major areas of concern. The four areas and chairmen are:

- Mission of Public Health Training—Dr. Myron E. Wegman, Dean, School of Public Health, University of Michigan; Training Needs and Resources—Dr. Kerr White, Chairman, Dept. of Epidemiology and Community Medicine, School of Medicine, University of Vermont; Personnel Needs and Resources—Dr. Ralph E. Dwork, Deputy Secretary of Health, Commonwealth of Pennsylvania; and Policy and Administration—Dr. John D. Porterfield, Coordinator of Medical and Health Services, University of California.

Definition of abstract art: "A product of the untalented, sold by the unprincipled to the utterly bewildered."—Al Capp.

21 PHS Commissioned Corps Physicians Embark on New NCI Planning Program

A group of 21 PHS Commissioned Corps physicians were brought to active duty at the National Cancer Institute this month to embark on a new program combining various aspects of research planning and management with clinical medicine. Assigned to various NCI activities, these physicians are in addition to the Clinical and Research Associates.

Of the group, nine have been assigned to hospitals and university medical centers across the country to take on assignments in NCI's nationwide cancer chemotherapy research program. They will work directly with the chairmen of nine of the groups of physicians participating in clinical trials within the program.

Communications Expedited

In addition to participating in clinical chemotherapy and its associated specialties, they will also help expedite communications between the cooperating groups and NCI's Collaborative Research staff, which administers the chemotherapy program.

A small group of physician-officers will be based in the Office of the NCI Director. During their first year here they will rotate through various NCI areas of research planning and management.

This group includes Drs. Ray R. Newell, Donald W. Schlott, Nathan T. Connally, Jr., and Thomas E. Steele.

Two others, Drs. Samuel Shoss and Michael R. Fogel, will be working in administration in the Office of the Associate Director for Grants and Training.

Dr. Ronald A. Yankee has been assigned to the Institute's Medicine Branch, where he will combine clinical research activity with certain administrative duties.

Dr. Tate M. Minckler will be working in the Virology Research Branch.

Of the nine officers assigned to field positions with cooperative chemotherapy groups, eight are new to the Public Health Service. One, Dr. Thomas G. McGinn, has been a Commissioned Officer since 1961, when he became associated with the chemotherapy program as a member of the staff of the Institute's Clinical Branch, Collaborative Research. He will be at Duke University, Durham, N. C.

The others in the group with Dr. McGinn, and their assigned stations, are: Drs. Raymond D. Bahr, Roswell Park Memorial Institute, Buffalo, N. Y.; Stephen E. Blomgren, University of Wisconsin; Philip J. Burke, University of California, Los Angeles; H. Thomas Foley, Georgetown University; John P. Howard, Memorial Sloan-Kettering Cancer Center, New York City; Leland E. Kellerhouse, University of Illinois, Chicago; Michael E. Siegelman, M. D. Anderson Hospital, Houston, Tex., and David C. Stolinsky, University of Southern California, Los Angeles.

4 in Chemotherapy

Four of the 21 physician-officers will be in the chemotherapy program as staff members of NCI's Clinical Branch. They are Drs. Bayard H. Morrison, Jose L. Campos, Arthur A. Serpeke, and Stanley Schwartz.

To prepare for their assignments, the officers underwent an intensive orientation at NIH during the first three weeks of July. They were thoroughly briefed on all NCI activities. Areas of specialty interest and training include internal medicine and hematology, pathology, pediatrics, and radiation therapy.

Intramolecular Defect in Collagen Maturation Indicated in Lathyrysm

A new National Institute of Dental Research study of lathyrysm indicates that a defect in the intramolecular crosslinking of collagen affects the integrity of connective tissue.

The toxic condition known as lathyrysm is caused by eating the sweet pea Lathyrus odoratus. The symptoms include a general weakening of tendons and ligaments and increased tissue fragility and such connective tissue malformations as ecchymoses, hernias, and aneurysms.

This condition can be induced in growing animals by the administration of several simple compounds, including beta-aminopropionitrile.

Molecular Defect Responsible

The gross symptoms of lathyrysm appear to be due to a molecular defect in the normal maturation of collagen, according to Drs. G. R. Martin, Karl A. Piez, and Marc S. Lewis, all of the Laboratory of Biochemistry, NIDR.

The investigators based the recent study, reported in the Biochemistry et Biophysica Acta, on a previous finding that one step in the normal formation of collagen is a biochemical process creating covalent bonds between newly synthesized primary subunits.

In the new study, the metabolism of skin collagen in normal and lathyritic rats has been compared by isotope incorporation experiments, chromatography, and C14 assay.

The investigators demonstrated in lathyritic collagen a decreased number of crosslinks between primary subunits and slowing down of the process of building larger units believed to contribute normally to the tensile strength of collagen.

Primary Effect Postulated

The disruption of intramolecular crosslinks or interference with their formation, the investigators report, may be the primary effect of the toxic agents causing lathyrysm.

In the absence of crosslinking, it is likely that collagen fibrils would not attain optimal tensile strength.

This study emphasizes the importance of the maturation of collagenous tissue through crosslinking and suggests that there may be pathological conditions, other than lathyrysm, which could affect the process.

Money talks—but the only thing it says to most people is "Good bye."—The Washington Post.
Medical-Legal Study of Mentally Ill Criminals Receives NIMH Support

A year-long study to collect information on day-to-day legal and medical handling of mentally ill criminal offenders has been undertaken by the American Bar Association with the assistance of a $99,000 grant from the National Institute of Mental Health.

This medical-legal endeavor, ranging over California, Florida, Illinois, New York, and the District of Columbia, will have nine psychiatrists and six lawyers as consultants.

**Officials Observed**

Police officers, judges, magistrates, attorneys, psychiatrists, mental hospital and prison personnel, and others who daily deal with mentally ill offenders will be observed and interviewed at their work.

Richard N. Janopaul, American Bar Association research attorney, and Dr. Marcus A. Jacobson, a practicing psychiatrist, are co-directors for the project.

Study findings, according to the co-directors, should supply a basis for critical review of traditional ideas concerning the responsibility and treatment of mentally ill criminal offenders.

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**ENZYME CENTER**

(Continued from Page 1)

E. Charn, Technical Director, who was recommended by the Scientific Advisory Committee, and appointed by Tufts University as Associate Professor of Biochemical Engineering,

It is planned to isolate and purify on a large scale certain naturally occurring biopolymers and enzymes that are not available in the state of purity or quantity needed for biomedical research.

Primary emphasis will be placed on materials directly involved in the synthesis and metabolism of proteins, amino acids, nucleic acids, polysaccharides, and other biologically active substances.

Consultants Give Advice

Engineering consultants from several universities and elsewhere will provide advice concerning the building of the laboratory and certain special equipment that must be installed.

Dr. Alton Meister, Head of the Department of Biochemistry at Tufts University School of Medicine and a prime mover in setting up the new Resource, has stated research progress in a number of important areas of medical science can be accelerated by making available large and suitable quantities of purified biologica.

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**Steve Callahan, 16, Gets Pilot’s License Before Receiving His Driver’s Permit**

By Lillian Gluckman

Steve Callahan, not yet 17, recently soloed after receiving his student pilot’s license. But someone has to drive with him too to qualify for a license because he can’t solo in a car. He hasn’t yet obtained his driver’s license.

“I’ll get the driver’s license when I have a free moment,” he said. “Flying is more important. I’ve always wanted to fly.”

Steve is the son of Bob Callahan, Assistant Information Officer of the National Institute of Dental Research. He has earned the money for his flying instruction by mowing lawns and working at odd jobs after school.

**Begins Flying Lessons**

After a year of saving, Steve began taking flying lessons the day after school closed in June.

With nine hours in the air in a dual-control Cessna 150, Steve was ready to solo at the Montgomery County Air Park, near Gaitersburg, Md. He made the three required landings with flying enthusiasm. His father and mother, who at Steve’s request did not watch these flights, were a lot more nervous than he was.

“The next step?” he said. “It will take more hours of flying to make me eligible for a private pilot’s license. But it takes a long time to earn the money for flight time, so I may have to wait almost another year for that.”

In Plane Once Before

Steve had never been in a plane except for a brief helicopter sight-seeing trip “way back when I was in junior high.” But that short trip was enough. Flying became his goal.

He is not sure whether he will make a career or a hobby of his flying, but he is sure that it has a place in his life whatever he decides to do. He is already making plans to “check out” in a larger plane, and eventually to graduate to aircraft with two motors or more.

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**Recent Motion Picture On Juvenile Delinquency Has Support of NIMH**

“Headed for Trouble,” a film designed to improve police methods of handling juvenile delinquents, was made recently by the Public Affairs Committee under a grant from the National Institute of Mental Health.

The 16 mm sound, black-and-white, training film is designed to start a discussion that will lead members of the audience to discover for themselves the best methods of dealing with youthful offenders in their particular community.

Uniformed and juvenile police and juvenile court officers are depicted as they deal with three typical youthful offenders: a juvenile delinquent in an underprivileged area; a repeat offender; and a radical “repeater,” all of whom at Steve’s request did not watch these flights, were a lot more nervous than he was.

The new facility will not underwrite the usual facilities. "When these materials are available in quantity, a new dimension will be added to enzyme research.

In the future, more enzymes will be available in pure form and in good yield, a new dimension will be added to enzyme research.

There are now a great many medical scientists in the several universities of New England who are carrying out research projects in which attempts are being made to gain information at the molecular level. Many of these scientists prepare needed materials in their own laboratories, even though such preparation puts a severe strain on the usual facilities.

"When these materials are available in larger amounts, more of the scientists' time can be devoted to experiments." The new facility will not undertake the preparation of substances that are now commercially available.

In addition, all new procedures developed in the facility will be made available to interested individuals and institutions. Whenever commercial producers are willing to take over, the Tufts Center will turn to producing other needed materials.

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**NIAD Will Pay Volunteers In Summer Colds Research**

Dr. Robert M. Chanock of the Laboratory of Infectious Diseases, NIAD, whose laboratory has been conducting a comprehensive study of the "common cold" group of infections, reports that "additional volunteers with summer colds are essential to the continuation of the project."

Until now there has been a sufficient number of volunteers for the project, Dr. Chanock said, but with the advent of summer there has been a tapering off.

Underway since last November, the study is designed to isolate and identify unknown respiratory viruses through studies of nasal washings and blood specimens.

Volunteers with summer colds, particularly those within the first three days of infection, are paid $2 each for the two blood specimens necessary for the study. Those wishing to participate in the project may obtain further information from Mrs. Hilda Kennedy, Ext. 6818.
Drs. Ingram, Dury Named Scientist Administrators With Branch of NIGMS

Dr. Robert L. Ingram and Dr. Abraham Dury have been appointed as Scientist Administrators in the Research Grants Branch of the National Institute of General Medical Sciences. In his new position, Dr. Ingram will analyze and review research grant applications and assist in the development of grant-supported research programs in the biochemical sciences, especially in the area of biochemistry. Dr. Dury will be responsible for the analysis and evaluation of research in the biochemical sciences and for the maintenance and continued development of a highly effective grant-supported research program in this area.

Comes From NIAID

Dr. Ingram comes to NIGMS from the National Institute of Allergy and Infectious Diseases where, as a research biochemist, he participated in research on immunofluorescence, tissue culture, chemotherapy, and nucleic acids of malarial parasites.

Prior to joining NIGMS, Dr. Dury was Technical Director of the Research-in-Aging Section, General Medical Research, at the Veterans Administration Hospital in Pittsburgh for three and one-half years. During this period he also was a Research Associate Professor of Cellular Physiology in the Department of Anatomy, University of Pittsburgh School of Medicine.

List of Latest Arrivals Of Visiting Scientists

7/1—Dr. Jose Luis Campos-Guramendi, Spain, Effects of Preoperative Supravoltage Irradiation in Lung Cancer. Sponsor, Dr. T. P. Waalkes, NCI, Robin Bldg., Rm. 2A04.

7/1—Dr. J. Alastair Mitchell, Canada, Liaison with Field Offices on Contact Information. Sponsor, Dr. P. Kolin, NCI, Nave Bldg., Rm. 2A22.

7/8—Dr. David John Boulion, U.K., Role of Amines Studied in Lung Cancer. Sponsor, Dr. T. Philip Waalkes, NCI, Robin Bldg., Rm. 2A04.

7/8—Dr. David John Boulion, U.K., Role of Amines Studied in Lung Cancer. Sponsor, Dr. T. Philip Waalkes, NCI, Robin Bldg., Rm. 2A04.

Harry Cain Wins Wife, Job, Golf Title Since Joining NIH Program Last Year

Things have happened rather fast to 25-year-old Harry P. Cain, 2nd, since he qualified last year for enrollment in the Management Intern Program here at NIH.

Last February he married Miss Maury Bethea, secretary to Senator Estes Kefauver of Tennessee. On June 21 he completed the management training course.

Three days later, June 24, he was appointed Staff Assistant to Dr. H. Atwell, Program Planning Officer of the National Institute of Mental Health.

On Sunday, July 14, he rocketed to prominence in the Washington area sports world by unexpectedly winning the District of Columbia amateur golf championship.

Makes All-Star Team

Immediately following this upset victory he was named a member of the all-star District Golf Association team, headed by Deane Beman, Middle Atlantic amateur champion, who defeated a picked team of Virginians at the Farrington Country Club, Charlottesville, Va., the following Sunday, July 21.

A husky 6-foot, 2-inch, 185-pounder, Harry admits with a chuckle that his greatest triumph was about winning the District amateur was his prior lack of recognition as a golfer. He played the qualifying round on Thursday, July 11; two matches on Friday, two on Saturday (18 holes each), and the 36-hole title match on Sunday in one of the heaviest and most persistent rainstorms of the season.

"It's a lot more golf than I ever thought I would win in my life," he said, "and I'm really surprised." He said his biggest thrill was being named to the All-Star Team.

Has Need of Stamina

Harry had need of all his stamina in the D. C. amateur tournament, played on four successive days on the nearby Woodmont Country Club course. He qualified in the morning round. In the afternoon half of the final, Cain was six over par for the 17 holes played, and Jamison was seven over.

Harry reports an amusing incident of the morning round. On the 15th green he was handing his umbrella to his caddy when gusts of wind turned it inside out. "It was ruined," he said, "but we then quit for dry clothes and lunch. The club pro kindly loaned me his umbrella for the afternoon round."

Former Senator's Son

Harry is the son of former Senator Harry P. Cain of Washington, D.C., who was appointed Staff Assistant to Mr. Dury. Harry has need of all his stamina in the D. C. amateur tournament, played on four successive days on the nearby Woodmont Country Club course.

The morning after he won the District amateur title, Dr. Robert H. Felix, Director of the National Institute of Mental Health, greeted him with, "Congratulations! But I think you ought to see a psychiatrist for having played in all that rain yesterday."—Ken Stabler.

Hearing bells of ice-cream wagon, one small fry to another: "Listen! They're playing our song."—Register and Tribune Syndicate.

NIH Camera Club Holds Annual Awards Banquet Election of Officers

The 33-member NIH Camera Club, sponsored by the Recreation and Welfare Association of NIH, is fast becoming one of the most active organizations here.

In recent weeks the camera bugs have held an annual awards banquet, taken a field trip to Harper's Ferry, participated in the Greater Washington Council of Camera Clubs Photoorama at Annapolis, won second place in the GWCC inter-club competition, and elected officers for the coming year.

Fifteen members and their guests attended the Spring Awards banquet held at Francisco's Restaurant in Bethesda. Highlight of the evening was the awarding of trophies to the winners in the two-color competition categories.

High-Scorers Honored

Category one featured the high point scorers from the club's bi-monthly competitions. The club President, Dr. Dieter H. Sussdorf, NIAID, took first place in this category with 168 points. John Reed, FMB-OD, was second with 165, and Dr. Lloyd G. Herman, DRS, was third with 133.

The second category was for the best color slides of the year. The winning slides were selected by secret ballot at an earlier meeting. The winners were John Reed, first; Dr. Sussdorf, second; and Dr. E. G. Berry, NIAID, third. The winning pictures were shown at the dinner.

At the last GWCC inter-club competition the NIH Camera Club came second among 12 participating clubs in the color slide division. John Reed won the silver medal (second prize) for one of his entries in the color division.

Officers Elected

The club's newly elected officers for the coming year are Dr. Sussdorf, re-elected President; Dr. Ella Miyashiro, DBS, Vice President, and Roena Bayes, CC, re-elected Secretary-Treasurer. The club also formed new committees for Programs, Color Pictures, Black and White Pictures, and Field Trips.

"Most of our club's success during the past year," said Dr. Sussdorf, "has been due to our monthly competitions. Not only do they provide continuity to our activities, they have improved our level of photographic competence."

Members can pay their 1963-64 club dues of $3 to the Secretary-Treasurer or at the R&W office in Building 31. Dues for new members are $5, including $2 for initiation.
2 NIDR Staff Changes Announced by Dr. Arnold

Two staff changes in the Extramural Programs Branch of the National Institute of Dental Research were announced recently by Dr. Francis A. Arnold, Jr., Institute Director.

Dr. Philip Ross, Assistant Chief of the Training Section since 1962, has been named Acting Chief of the Research Grants Section. In this position, he will be responsible for the administration and formulation of the overall program planning of the research grants program.

A major goal of the Research Grants Section is to develop well-balanced programs based on national research needs and objectives in dentistry.

A former Fulbright Research Scholar, Dr. Ross served with the Military Geology Branch of the U.S. Geological Survey before coming to NIDR.

Scientific Interests Cited

A professor-lecturer at American University since 1959, Dr. Ross's major scientific interests are in tropical ecology, distributional patterns of vegetation and microclimates.

In the second staff change, Nelson E. Lytle has been appointed Executive Secretary of the Dental Program-Project Committee. He will be responsible for the development of broad programs involving the research interests of many investigators.

The Program-Project Committee recommends grants for large programs which are beyond the scope of individual research grants.

Before coming to NIDR in 1958 he was for many years a scientific administrator with the U.S. Army Chemical Corps.

New Office Set Up to Aid Reassigned 'CO' and Civilian Employees in Moving

James B. Davis, Chief of the Supply Management Branch, has announced the establishment of a new office to handle the shipment of household goods and personal effects of NIH civilian employees and all PHS Commissioned Officers in the Washington, D.C., area.

Designated the Household Effects Movement Office, it is under the supervision of David S. Smith, Freight Traffic Officer of the Property and Supply Section, SMB.

DR. STEWART
(Continued from Page 3)

At the recent first anniversary celebration of the Division of Research Facilities and Resources, Dr. Frederick L. Stone, DFRR Chief, serves the first piece of birthday cake to Helene Fink, the Division's newest distaff member.—Photo by Bob Pumphrey.

Dr. Keresztesy, new Chief of the Nutrition and Endocrinology Laboratory, NIAMD, controls the rate of the flow of air in one of the Laboratory's 100-gallon capacity fermentation units for the growing of various nonpathogenic microorganisms.—Photo by Jerry Hecht.

Civilian employees and members of the PHS Commissioned Corps who are subject to separation, transfer or reassignment, or those who are being transferred to or from other foreign or domestic posts, may avail themselves of this new service.

The obligation of the Household Effects Movement Office is to give advice and offer assistance preparatory to moves, to arrange for competent carriers, explain the carrier's responsibility and service, and handle arrangements for the moves by the most effective and economical methods.

Handles All Shipments

Movements of household effects, the announcement said, will vary from those involving small shipments and large storage to those involving large shipments and small storage.

Carriers, it was explained, prefer the more profitable long distance moves. The new office, however, will dispatch shipments so that equal distribution of large and small shipments are made between the various carriers.

The new office is located in Building 14A, Rm. 120A. Personnel who need to move their household effects are requested to forward a copy of their Personnel or Travel Orders and three copies of Form PHS-4013 (Rev. 2/65). "Application for Shipment of Household Effects," to this office as early as possible prior to the date of the intended move.

This is essential, the announce—

Dr. Keresztesy Named Chief of NIAMD Lab of Nutrition, Endocrinology

Dr. John C. Keresztesy has been appointed Chief of the Laboratory of Nutrition and Endocrinology, National Institute of Arthritis and Metabolic Diseases, where he has served for 16 years. He has held the position of Acting Chief of the Laboratory since December.

As Chief of the Laboratory's Section on Fractionation and Isolation since 1949, Dr. Keresztesy made a number of outstanding contributions in the field of folic acid metabolism that have advanced both nutrition and biochemistry, as well as clinical medicine.

Isolates Citrovorum Factor

Among his major contributions at NIH is the isolation from natural sources of the "citrovorum factor," a form of the vitamin, folic acid, and the isolation and synthesis of "Prefolic A," which is a major folic acid compound in liver.

Prior to joining NIAMD in 1947, Dr. Keresztesy was with the Cancer Research Laboratory at Mt. Sinai Hospital in New York City, studying the role of folic acid in cancer chemotherapy.

From 1934 to 1945 he was Head of the Nutritional Research Laboratory at Merck and Company, Inc., Rahway, N.J. He worked there on the isolation and chemistry of various B vitamins, thiamine, pyridoxine, pantothenic acid, biotin and rhizoperin, a form of folic acid.

Degrees, Affiliations Cited

Dr. Keresztesy received his B.S. degree from City College of New York in 1928 and his M.S. and Ph.D. degrees from Columbia University in 1932 and 1935, respectively.

He is a member of the American Chemical Society, the Society for Experimental Biology and Medicine, the Washington Academy of Sciences, the American Association for the Advancement of Science, the American Society of Biological Chemists, and the New York Academy of Medicine.

At the recent first anniversary celebration of the Division of Research Facilities and Resources, Dr. Frederick L. Stone, DFRR Chief, serves the first piece of birthday cake to Helene Fink, the Division's newest distaff member.—Photo by Bob Pumphrey.