WHO Issues Guide for International Exchange Of Transplant Organs

Each year thousands of persons die who could have benefited from organ or tissue transplantation. Since the resources of a single area or country are frequently inadequate to provide the needed well-matched tissues, at least eight organ-sharing programs have been launched which cross national or regional lines.

Thirteen World Health Organization consultants—a number of them supported by the National Institute of Allergy and Infectious Diseases—have drawn up guidelines for establishing cooperative transplantation programs.

The guidelines include the following recommendations:

- HL-A types (histocompatibility antigens) and ABO blood groups of patients requiring transplants should be determined by the reference laboratory of a region or by a local laboratory under general supervision of the reference laboratory. Standardized typing techniques should be used throughout the region served by the program.
- Typing data and other relevant

This crisp winter scene outlines the symmetrical beauty of Buildings 35, 36, and 37 which won the 1969 Oliver Owen Kuhn Cup for NIH. It was awarded by the Bethesda-Chevy Chase Chamber of Commerce, and marks the third time NIH has won this trophy.

The National Institutes of Health was awarded the Oliver Owen Kuhn Cup for 1969 by the Bethesda-Chevy Chase Chamber of Commerce for its new research complex, Buildings 35-36-37. Dr. Robert Q. Marston, NIH Director, accepted the cup at ceremonies held last Thursday (Jan. 29) at the Bethesda Country Club.

This was presented to both the architectural firm which designed the buildings—Smith, Hinchman and Grylls Associates, Inc., and the builder, Blake Construction Company.

The planning and construction of the research complex was administered by the Public Buildings Service of the General Services Administration, with the assistance of the NIH engineering staff. Secretary of Health, Education, and Welfare Robert H. Finch dedicated the research facilities last Nov. 18 before an audience of more than 500 invited guests.

The first recipient of the trophy was Luke L. Wilson, who was awarded the cup posthumously in 1958 for donating the original tract of land on which NIH is located.

Dr. Louis Leakey, Noted Anthropologist, to Give NIH Lecture Feb. 11

Dr. Louis S. B. Leakey, Director of the Centre for Prehistory and Palaeontology in Nairobi, Kenya, and one of the world's foremost anthropologists, will deliver the next NIH Lecture on Wednesday, Feb. 11, at 8:15 p.m. in the Jack Mauer Auditorium of the Clinical Center.

In his lecture, "The Evidence of the Evolution of the Family of Man (Hominidae) in Africa from Miocene Times Onward," Dr. Leakey will discuss some of his findings in more than 40 years' work in this field.

Born in Africa of English missionary parents, Dr. Leakey was raised with children of the Kikuyu tribe, and learned that language before he grew to understand English.

He was tutored by his parents until he was 16, attended public school for 2 years in England, and then enrolled in Weymouth College...
Ylda Novik to Present Recital at CC Feb. 19

In addition to being a concert pianist, Miss Novik is also a member of the Montgomery College faculty.

In addition to being a concert pianist, Miss Novik is also a member of the Montgomery College faculty.

NIH Television, Radio Program Schedule

Television

NIH REPORTS
WRC, Channel 4

February 8
Dr. Frank T. Falkner, associate director, Planning and Evaluation, NICHD Subject: Infant Mortality (Part 2)

February 15
Same Subject (Part 3)

Radio

DISCUSSION: NIH
WGNR, AM-570—FM Stereo
103.5—Friday evenings—About 9:15 p.m.

February 6
Dr. Benjamin T. Burton, associate director for Program and chief, Artificial Kidney Program, NIAMD Subject: Kidney Disease

February 13
Dr. Adrian Parsegian, DCRT and Dr. Barry Ninham, DCRT Subject: What Holds Cells Together

Interview takes place during intermission, Library of Congress Chamber Music Series.

NIH Golf Association Wants New Members

For its fifth season the NIH Golf Association is looking for new members. Those wishing to join may leave their names and phone numbers with the R&W office, Room 1A-18, Bldg. 31.

Last year NIHGA consisted of 12 teams totaling about 180 members. The distaff side has its own league.

Efforts will be made to assign new members to a team. Those registering late will be placed on a waiting list for team openings as they occur.

Weekly competitive nine-hole matches are held with a four-man team. The season is divided into halves. At the end of the season the winners meet the Sod-Busters in an 18-hole play-off for the league championship.

Three 18-hole outings are also held during the season.

'Open Season' Scheduled In March Under Federal Life Insurance Program

The Office of Personnel Management has announced that an "open season" under the Federal Employees Group Life Insurance Program is scheduled from March 1 through March 31.

During this month-long period, employees eligible for coverage can acquire regular life insurance, optional life insurance, or both, regardless of age and without evidence of good health.

The cost of employees' share of the regular life insurance will continue at 27½ cents per pay period for each $1000 of coverage.

Premium rates for the $10,000 optional life insurance coverage will be based on age group, and employees will pay the entire cost of this additional coverage.

The new bi-weekly cost to employees for the optional life insurance, by age group, is:

Under 35 $1.30
Ages 35-39 1.70
Ages 40-44 2.10
Ages 45-49 2.40
Ages 50-54 3.00
Ages 55-59 3.50
Age 60 and over 4.00

The new optional life insurance rates and any changes in enrollment during the open season become effective April 5.

More information and registration procedures for the open season will appear in the next issue of THE NIH RECORD.

An information booklet (BRI 41-192) detailing these changes in the Life Insurance Program will be distributed to all employees later this month.

Institutional Environment Seminar Begins March 9

A Seminar on Institutional Environment is being sponsored by the Environmental Services Branch, Division of Research Services, March 9 to 11 in Bldg. 1, Wilson Hall.

It will be held from 8:45 a.m. to 4:45 p.m.; on the last day the seminar will end at 12 noon.

Papers on engineering, biological hazards control and general and hospital sanitation will be presented by members of the Branch.

It will be of interest to all laboratory personnel.

Invitations to attend may be obtained through Vinson R. Ovtit, ES chief, Ext. 66035.
William Bowman Retires, Will Devote Full Time to Preaching and Pastoral Duties

Every other Sunday William Bowman Jr., an NIH offset press operator in the Printing and Reproduction Section, ODA, who retired on Friday, Jan. 23, travels to a small town and delivers a sermon in a Baptist church.

For Mr. Bowman is an ordained minister, and has been since 1940. His preaching and pastoral duties have kept him almost as busy as a minister in a metropolitan parish.

He preaches at the Olive Baptist Church in Roadsville, and the Mt. Pleasant Baptist Church in Orange—both towns are comfortable riding distances away from Washington on roads that meander through the Virginia countryside.

Church Bulletins

Mr. Bowman writes his own sermons—"a different message for each sermon," he writes, edits, and does his own make-up on church bulletins.

Both sermons and bulletins are so interesting that in Mr. Bowman's congregations backsliders are unknown for everyone wants to hear him preach and all are "constant readers."

Mr. Bowman graduated from the Washington Baptist Seminary in 1952 but for 2 years before that he carried out ministerial duties in the Tidewater Baptist Church in Washington, D. C.

And he is probably the first pastor to preach on space—that man would land on the moon. Eleven years ago that was a topic not on everyone's tongue, but Mr. Bowman told his congregation it was a matter of time—and a short time at that—"that Americans would land on the moon.

Preached Space Sermons

His faith in that tenet was so strong that during the administrations of President Kennedy and President Johnson, Mr. Bowman wrote letters to each on the subject, and also sent them copies of his "space sermons." Both recipients sent personal replies with kind words about his sermons.

Mr. Bowman came to NIH in 1969, after wartime service—"I'll stay in the Washington area," he stated. "I want to fight some of the crime in the District, that's my goal."

Every year, for many years, Mr. Bowman has used part of his vacation to attend the Summer School for Town and Country Ministers, an inter-denominational meeting for white and Negro ministers, sponsored by the Virginia Council of Churches.

"Negro and white ministers meet, attend classes, hear lectures and we all eat together. We have the fellowship," he explained.

Mr. Bowman does not limit his preaching to his own co-religionists. Often, he is invited to speak before other denominations.

"I like to preach to other faiths and different denominations. When it comes to serving it irks me when I'm limited to one religion," the minister stated.

In looking forward to his full-time ministerial duties, the erudite Mr. Bowman quoted the Apostle Paul in his letter to the Philippians, "I forget those things that are behind and reach forth unto those things that are before . . ."

Forsyth Honors Late Dr. McCann

The Forsyth Dental Center in Boston has honored a former National Institute of Dental Research scientist, the late Dr. Harold McCann, dedicating its new research laboratory to him.

Agency Will Consider Reissuing Dr. Mountin's PHS Speeches, Writings

If sufficient interest is shown the Clearinghouse for Federal Scientific and Technical Information will consider reissuing the book of his writings and speeches which span 25 years of a 35-year career in Public Health Service.

In 1957 Dr. Mountin was named the first chief of a new NIH division—the Division of Public Health Methods—which conducted studies on sociological, economic, and educational factors in human health.

During World War II Dr. Mountin directed a nation-wide Emergency Health and Sanitation program. Later, he was a member of several international missions, including representing NIH on a United Nations mission to Japan.

His book, The Selected Papers of Joseph W. Mountin, M.D., was published in 1966 by a memorial committee.

If reissued it will sell for $6 a copy. For additional information call Mrs. Elizabeth Martens, BEET librarian, Ext. 60692.

Proceedings of Artificial Heart Program Published

A book, The Proceedings of the Artificial Heart Program Conference, has been published by the National Heart and Lung Institute. The 1,129-page, hard-cover publication contains the entire proceedings of the Artificial Heart Program Conference held June 9-13, 1969, in Washington, D.C.

These Proceedings include the full texts of the 52 papers presented at the Conference together with discussions following each presentation.

Twelve major subject areas are covered: Development of Materials for Use in Circulatory Assist Devices, Analysis of the Effects of Materials on Blood and Tissues, Blood Flow through Pumps and Valves, and Cardiac Control Parameters.

Also Oxygenator Development, Circulatory Assist Devices, Physiologic Effects of Circulatory Assist Devices in Animals, Instrumentation Applicable to Artificial Heart Development and Use, Percutaneous Leads, Biological Fuel Cells, Effects of Additional Endogenous Heat, and Implantable Energy Sources.


1969 Health Benefits Costs Itemized for Tax Purposes

For those itemizing deductions on income tax returns, the total 1969 health benefits enrollment costs of the three major plans are shown below:

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<th>Blue Cross (Service Benefit Plan)</th>
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<td>Self only</td>
<td>$103.38</td>
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<td>Self and Family</td>
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</tbody>
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The NIH RECORD February 3, 1970 Page 3
Test of Cells From Amniotic Fluid Aids Prenatal Detection of Pompe's Disease

Scientists have been able to diagnose Pompe's disease, another of the rare inherited metabolic disorders, in an unborn child. The diagnosis, made by examining cells from the amniotic fluid surrounding the fetus, represents a further step in the prenatal detection of inherited diseases.

Such diagnoses enable parents to make an informed decision on whether a pregnancy should be therapeutically terminated. This is legal only in States where abortions are permitted when there is substantial risk that the child will be born gravely defective.

DR. LEAKEY

(Continued from Page 1)

seum East Africa archaeological expedition on its way to Tanganyika (now Tanzania), the groundwork was laid for his fascinating career.

He led four fossil-hunting expeditions to Africa during the next 10 years. Then came Olduvai.

Olduvai was indeed a testing ground for Dr. Leakey, and his wife and scientific partner, Mary Leakey, persisted for nearly 30 years at Olduvai Gorge before their efforts paid off. Their first great find was Zinjanthropus.

Other Discoveries Noted

Their later great discoveries, in order, include fossils of: Procercus, a primitive ape that lived in Kenya some 25 million years ago; Kenya­pithecus africarius, a manlike creature that roamed eastern Africa 20 million years ago, and Kenya­pithecus wickeri, a relative of 14 million years longevity.

Also, Tanzania’s Homo habilis, two million years old, believed to be the earth’s first tool-maker, and Zinjanthropus, 1,750,000 years, a new member of the near-men called australopithecines.

Despite the wide-ranged interests and activities, Dr. Leakey has been termed a modern counterpart of Renaissance Man. In addition, being an anthropologist, he is a paleontologist, archaeologist, zoologist, anatomist, and author.

His many books include the well-known Adam’s Ancestors and an authoritative grammar on the Kinyawa language. His two major reports on Olduvai Gorge since 1951 have established a basis for a definitive record of his four decades of research.

Radiology, Washington University School of Medicine. Except for 2 years of private practice in Idaho, he continued at the institute until this year.

During this period, he also served as a consultant to a number of institutions, including the Ellis Fischel State Cancer Hospital and the University of Missouri College of Medicine.

Dr. Eichhorn Named to Editorial Advisory Board of Chemistry Journal

Dr. Gunther L. Eichhorn, Geron­tology Research Center, National Institute of Child Health and Human Development, has been named to the Editorial Advisory Board of Advances in Chemistry.

This journal, published by the 115,000-member American Chemical Society, reviews chemical literature.

Dr. Eichhorn, who is in the Labo­ratory of Molecular Aging, Office of the Associate Director for Intramural Research Programs, is known for his work on the biological effects of metal ions.

Before coming to NICHD’s Bal­timore-based Center, he was an associate professor of Chemistry at Louisiana State University, and later at Georgetown University.

Dr. Eichhorn earned his Ph.D. degree in chemistry from the University of Illinois.

He is also on the editorial board of the new journal, Bioorganic Chemistry.

Dr. William E. Powers
To Direct NCI Program For Radiation Activities

Dr. William E. Powers has been appointed program director for Radiation, Extramural Activities, National Cancer Institute.

Dr. Powers was formerly professor of Radiology at the Washington University School of Medicine, St. Louis.

The NCI supports therapy training programs, research centers, cooperative clinical investigations, research projects, and special fellowships in the radiation area.

Dr. Powers will assist radiation therapists in NCI programs, and will develop and expand other programs.

He received his M.D. degree from the University of Illinois College of Medicine.

In 1962 Dr. Powers joined the Edward Mallinckrodt Institute of Surgery, who is Baltimore-based in NICHD’s Gerontology Research Center, is known for his work on the biological effects of metal ions.

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Dr. Eichhorn earned his Ph.D. degree in chemistry from the University of Illinois.

He is also on the editorial board of the new journal, Bioorganic Chemistry.

The NIH Record Explains Courses and Seminars In Computer Training

The Spring 1970 Computer Training Courses and Seminars in Computer Training have been distributed to all users of the Computer Center Branch, and to all I/D Personnel Offices.

Twenty-three training courses and eight seminars are being offered. New courses include: Basic Job Control Language, Advanced Job Control Language, Fundamentals of the DCRT Element-Based Text Retrieval System, and File Structuring Concepts.

Seminars Listed

New seminars are: Introduction to Statistics, Application of Time Series Analysis to Discrete Phenomena, Symbolic Logic and its Application to Artificial Intelligence, and Nonsupervised Pattern Recognition.

Personnel planning to attend classes which begin in March should register as early as possible. Registration procedures are outlined in the brochure. Nomination forms should be signed by a supervisor and Personnel Officer.

It is requested that forms reach the CCB Technical Information Office, DCRT, Bldg. 12, Rm. 2235, by Feb. 15.

For those unable to attend classes which are given during the working day, CCB makes available a number of basic programming courses using self-teaching text.

Jerry E. Van Sant (r) receives a Special Achievement Award of $180 from Roy Frazier, head of the Glassware Unit, Laboratory AIDS Branch, DRS. Mr. Van Sant was cited for the manner in which he assumed additional responsibilities for an extended period as acting night shift supervisor.

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He received his M.D. degree from the University of Illinois College of Medicine.

In 1962 Dr. Powers joined the Edward Mallinckrodt Institute of Medicine.
RML Booklet Describes Rickettsias Research

From its beginning in a shack, the Rocky Mountain laboratory has grown into a modern research complex that has become a focal point for studies on infectious diseases. This laboratory, a part of the National Institute of Allergy and Infectious Diseases, and the largest unit in NIAID's intramural program, is the subject of a 10-page booklet. Entitled Rocky Mountain Laboratory: A Brief History of Its Growth and Research Activities, the booklet describes the study of diseases in nature—in particular, the rickettsias. Rickettsias are microscopically small, they live and multiply only in living tissue or body fluids containing tissue cells.

Grown into a modern research center, the Rocky Mountain Laboratory has become a focal point for studies on infectious diseases, particularly rickettsias. Rickettsias are microscopically small, living and multiplying only in living tissue or body fluids containing tissue cells. Transmitted to man by arthropods—mosquitoes, lice, fleas, mites, ticks, and sandflies—the organisms cause Rocky Mountain spotted fever, Q fever, and louse-transmitted diseases in nature. Directed by the Rocky Mountain Laboratory is research on Rocky Mountain spotted fever, Q fever, and louse-transmitted diseases. "The Story of Rocky Mountain Laboratories" is toward more fundamental control other infectious diseases.

The booklet describes the study of rickettsias and the work of the Rocky Mountain Laboratory. Entitled Rocky Mountain Laboratory: A Brief History of Its Growth and Research Activities, the booklet describes the study of diseases in nature—rickettsias. Rickettsias are microscopically small, living and multiplying only in living tissue or body fluids containing tissue cells. Transmitted to man by arthropods—mosquitoes, lice, fleas, mites, ticks, and sandflies—the organisms cause Rocky Mountain spotted fever, Q fever, and louse-transmitted diseases in nature. Directed by the Rocky Mountain Laboratory is research on Rocky Mountain spotted fever, Q fever, and louse-transmitted diseases.

Research Began in 1910

Research on Rocky Mountain Spotted Fever began in 1910 at what is now RML. A successful vaccine was eventually developed. Scientists are continuing spotted fever studies, however, the emphasis is toward more fundamental biological information in order to control other infectious diseases. Because of this research, RML has been designated by the World Health Organization as a Regional Reference Center for Human Rickettsias.

The 29-minute film may be obtained from NIAID's Information Office, Bldg. 31, Rm. 7A50, Bethesda, Md. 20014. A film on the research battle against spotted fever is also available for loan to civic and educational groups and television stations. "The Story of Rocky Mountain Spotted Fever" depicts early efforts to develop a vaccine and control this once highly fatal disease.

The 29-minute film may be obtained from the National Medical Audiovisual Center in Chambly, Ga.

Continued Need for Donors Reported by CC Blood Bank

The Clinical Center Blood Bank reports that 352 units of blood were received from NIH donors in December, and CC patients received 1,283 units of blood.

One donor, Dr. James E. Mosimann, UNRBT, joined the Georgia Donor Club. More blood is needed. Call the CC Blood Bank, Ext. 64505, for an appointment to donate blood.

Hardier Marine Worm Supplements Squid As Useful Tool in Neurological Research

The squid, prized by biophysicists for its giant nerve fiber, is being supplemented by cheaper, more hardy, marine worms in research at the National Institute of Neurological Diseases and Stroke.

The result is increased convenience and a saving in money and travel time.

One of the squid's giant-sized axons, a single nerve fiber one-fiftieth of an inch thick, can be easily manipulated and applied to neurological research.

Dr. Pinkerson Appointed Assistant Branch Chief

Dr. Alan L. Pinkerson has been appointed assistant chief of the Myocardial Infarction Branch, National Heart and Lung Institute. Dr. Pinkerson, who has been on the senior staff of that Branch, will act as assistant to Chief, Dr. Peter Frommer.

Dr. Pinkerson will be involved in the planning, review and administration of the Branch program. He will be responsible for 3 of the Branch's 9 Myocardial Infarction Research Units and for the collaborative efforts at all 9 MIRU's.

Concentrate on Care

MIRU's are centers at which scientists from many disciplines focus their skills on improving all phases in the care of heart attack patients.

From 1962-1964 Dr. Pinkerson held a postdoctoral fellowship in cardiovascular physiology at Georgetown University where he conducted studies on the reflex control mechanisms of the heart, pharmacodynamics of the heart, and pressure pulse analysis. From 1965-1967 he was a clinical investigator at the Washington Veterans Administration Hospital. Immediately prior to joining the staff of NIH, Dr. Pinkerson had been attending physician and cardiologist with the Group Health Association of Washington, D. C.

Dr. Pinkerson received his A.B. from Harvard and his M.D. from Boston University.

The squid's giant-sized axon has been an important research subject ever since 1942 when Drs. Kenneth S. Cole and H. J. Curtis used it to make the first direct reading of the voltage difference (potential) between the inside and outside of a nerve membrane.

The size of the squid axon—100 times larger than human nerve cells—made possible the insertion of one electrode into its core, while another rested on the nerve's external surface.

Because of its usefulness in helping reveal the electrical and chemical processes involved in nerve impulse transmission, the North Atlantic squid, and his larger Chilean cousin, have become treasured by neurological scientists the world over.

NINDS's Laboratory of Biophysics, headed by Dr. Cole from (See MARINE WORMS, Page 6)

English Parasitologist Arrives on Reservation As a Fogarty Scholar

Professor F. C. C. Garnham, an eminent parasitologist from the Imperial College of Science, Ascot, England, arrived at NIH recently to begin 6 months' residence as a Fogarty Scholar.

Professor Garnham will devote a portion of his time in the laboratories of the National Institute of Allergy and Infectious Diseases working on the last remaining unknown feature of the life history of Plasmodium, the parasite causing malaria.

Will Conduct Seminars

He will also write and conduct several seminars during his stay. Professor Garnham has worked in tropical medicine and parasitology for more than 40 years.

He was with the Colonial Medical Service in East Africa, and later became a Reader in the Department of Parasitology at the London School of Hygiene and Tropical Medicine. He retired in 1965 as professor and head of the Department.

Professor Garnham has received the Darling Medal and Prize, the Companion of St. Michael and St. George, the Bernhard Noch Medal, the Gasper Viana Medal, and the Manson Medal. He is also a Fellow of the Royal Society.

In 1967 Professor Garnham was elected president of the Royal Society of Tropical Medicine and Hygiene. He is also serving on the World Health Organization Expert Panels on Malaria, Plague, and Parasitic Diseases.

This massive work, Malaria Parasites and Other Hemoparasites, published in 1966 has already become the standard in its field.

The last case of smallpox in the United States occurred 20 years ago. Yet the USA spends over $20 million a year just to maintain a state of preparedness against the disease.—WHO Facts.

Biologist Allen Spencer (top) and electronic engineer Leonard Binstock look over a tank full of marine worms from New Brunswick. The worms, "Myxicola infundibulum," have a giant nerve fiber (axon) which is useful in studying the electrical properties of nerve membranes.

The squid, prized by biophysicists for its giant nerve fiber, is being supplemented by cheaper, more hardy, marine worms in research at the National Institute of Neurological Diseases and Stroke.

The result is increased convenience and a saving in money and travel time.

Both the worm (Myxicola infundibulum) and the squid are useful because they contain a giant-sized axon, a single nerve fiber one-fiftieth of an inch thick, which can be easily manipulated and applied to neurological research.

The worms are more desirable, however, because they live much longer (3 months versus a few days for squid in captivity) and are cheaper to obtain.

Useful in Research

Although now in short supply, Myxicola can be studied in any laboratory, even those far inland, and may be useful in training students in neurological research.

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NINDS's Laboratory of Biophysics, headed by Dr. Cole from (See MARINE WORMS, Page 6)
The top-hatted gent dressed as a wedding guest is demanding his favorite tonic in no uncertain terms. In the early 20th century that potent medicine was drawn across the body. Upon his death in 1924, the American Medical Association in its Journal dubbed Abrams “the Dean of all 20th Century Charlatans.”

“arid 5-FU, compound that temporarily controls some forms of cancer,” was sponsored last week in Washington, D.C., by the National Cancer Institute’s Chemistry Program. It was the result of a series of meetings to communicate the latest research findings on cancer drugs to practicing physicians.

5-FU or 5-fluorouracil is an antimetabolite or modified metabolite which is essentially accepted as an nutrient by cells, particularly cancer cells, subsequently blocking their growth. Its temporary usefulness in some cases of gastrointestinal cancer and breast cancer, and its toxicity, have been recognized since the mid-50’s.

**Drug Treatment Defined**

Speakers reviewed their long experience with 5-FU and defined its present place in the treatment of those common cancers.

The conference presented findings by Dr. George Higgins on longer, symptom-free periods achieved in cancer of the large intestine when 5-FU is given after surgery, contrasted with results achieved by surgical treatment alone. Dr. Higgins is with the VA Hospital in Washington, D.C.

A giant nerve fiber has been extracted from one of the Myxicola worms, and Leonard Binstock inserts a cannula into the axon to replace cellular material with known chemical substances in preparation for studying the electrical properties of the nerve fiber. Dr. Robert E. Taylor, head of the NINDS Laboratory of Biophysics, observes the work.

Artists to choose chemicals which work at a specific site to treat localized neurological disorders. Such knowledge could also facilitate selection of drugs which could block unwanted or excess electrical activity being transmitted throughout the body.

Leonard Binstock, head of the biophysics laboratory’s Section on Instrumentation, first conceived of Myxicola for this kind of research. “I read about the worm in an introduction to a book on squid depressant proteins and I finally found a Canadian firm which supplied Myxicola, and they now send us about 5 dozen worms a month.”

Investigators at many other institutions, including the University of Maryland, University of Iowa, and the Johns Hopkins University, are also now using the Myxicola.

“Our main finding,” says Mr. Binstock, “is that there will be a rush for worms and our supplier will run out of them. But we expect other suppliers will begin collecting them.”

“The amazing thing is,” Mr. Binstock continued, “the worm has been around but nobody knew about the suitability of the large central nerve fiber (except to the authors of the book) or else they didn’t consider its possible use. I found it because I was looking for an alternative for the squid nerve fibers which would be available to work on in the laboratory here.”
NIAMD Studies Section
In Phoenix Expands its Epidemiological Research

Studies that have yielded several unexpected findings about arthritis, diabetes, and gallbladder diseases are being upgraded through the establishment of a new Southwestern Field Studies Section in the National Institute of Arthritis and Metabolic Diseases.

This Section, announced by NIAMD Director Dr. G. Donald Whedon, replaces the Clinical Field Studies Unit within the Epidemiology and Field Studies Branch, and will provide for modest expansion of epidemiological research.

Studies Indian Health

Dr. Thomas A. Burch has been named section chief, and Dr. Peter H. Bennett, associate chief. The section is headquartered in Phoenix, Ariz., and conducts its research among the Indians living in the area, especially the Pima Indians of the Gila River Reservation.

The investigations throw light on the causes of a number of diseases prevalent in the U.S. population, and at the same time aid Indian health problems.

The tribes cooperating in the research represent stable populations on which much basic health data already has been assembled.

Earlier Ideas Shattered

Earlier studies among the Blackfeet, living in a cold, mountainous area of Montana, and the Pimas, who inhabit a dry, desert area, shattered the notion that rheumatoid arthritis (the widespread, crippling form of the disorder) is more common in a cold climate.

On the contrary, the Pimas were found to have more rheumatoid arthritis than the Blackfeet. It was suggested that there may be two types of arthritis—acquired and inherited.

As Dr. Burch and staff began to assemble additional health data on the Pimas, they further discovered that this tribe has the highest prevalence of diabetes ever reported for any population—a rate 15 times that of the U.S. population in general.

Seek Underlying Reasons

Subsequently, diseases of the gallbladder, including inflammatory conditions and gallstones, were found several times more common among the Pimas than other groups.

The researchers now are seeking to determine the underlying reasons for these extraordinarily high occurrences of arthritic and metabolic diseases. The answers may lead to control and prevention of some of mankind's most painful and debilitating disorders.

Two Remedies for Tooth Loss Revealed: Transplants or Bone and Plastic Teeth

Two studies with different approaches to the same problem— toot h replacement— were reported at a recent meeting of the American Association for the Advancement of Science in Boston.

Both investigations were supported by the National Institute of Dental Research. One report revealed the success of bone and plastic tooth replacements in baboons, the other progress in prolonging tooth transplantation. Although natural teeth are rejected more slowly than most tissues, they rarely last more than 4 years. After an initial period of apparent acceptance, their roots slowly resorb and disappear so they loosen and fall out.

In contrast, some of the plastic teeth have given good service as long as 10 years without causing inflammation, abscesses, or any signs of toxicity.

However, gum tissues do not attach to plastic teeth in the exact same way as to normal teeth. Therefore, Dr. Hodosh has tried to improve attachment in a variety of ways.

Dr. Hodosh believes the addition of treated, grafted, anorganic bone seems to give the best results.

A maxillary left first bicuspid tooth replica polymer implant in a Papio baboon was placed 5½ months prior to the implantation of the second maxillary left bicuspid implant.

After 10 years of research, Dr. Milton Hodosh, dental scientist at Brown University, predicted that bone and plastic replacements will make distress over loss of a tooth a thing of the past.

Following another avenue of study, Dr. Leonard B. Shulman, an assistant clinical professor at the Harvard School of Dental Medicine, is attempting to increase tooth transplant survival time.

Dr. Hodosh molded teeth of an inert plastic (polyethylene) with 20 percent of specially treated, grained bone, inserted them into empty sockets and fastened them to adjacent teeth. In a few weeks the gums healed normally.

In a few months connective tissue fibers in the jaw replaced the treated bone and the plastic teeth became attached almost as firmly as the originals.

Basic Hospital Library Exhibit Set Up by NLM

The National Library of Medicine has prepared an exhibit of textbooks, reference books, and journals suitable for a basic hospital library.

The literature, occupying a minimum of space, and costing a relatively small amount, is effective for most of the bibliographic needs of hospital physicians in diagnosing clinical problems.

On Thursday, Feb. 5, the exhibit, entitled "A Basic Hospital Library," will be shown to D.C. hospital library supervisors at a workshop sponsored by the D.C. Regional Medical Program.

On Feb. 6-9, the exhibit will be shown at the Congress on Medical Education in Chicago. Eventually, it will be made available to Regional Medical Libraries, Regional Medical Programs, and other groups.

Dr. James M. Stengle, chief of the NHLI National Blood Resource Program, has been designated secretary-treasurer of the International Society on Thrombosis and Haemostasis. The recently formed Society for scientists and physicians interested in these areas will encourage research. It will meet for the first time July 29 to Aug. 1 in Montreux, Switzerland.

Dr. Shulman thinks that, despite eventual rejection, tooth transplants would be practical if they could be made to last for an average of 8 years instead of the 4-year average survival expected today.

To enable the body to accept the transplant for a longer period, he is altering the donor tooth. He is also conducting studies to determine whether tissue typing might slow down the rejection reaction.

Methods for suppressing the body's immune reaction are not being considered because their serious side effects are not justified for tooth transplants.

In laboratory tests, Dr. Shulman reported, practically all the soft tissue on the tooth's surface can be removed by soaking the tooth first in one enzyme (hyaluronidase) and then in another (collagenase). This process does not appear to damage the cementum, the hard tissue coating the tooth root.

The pulp also is removed by standard dental procedures just after the tooth is extracted. Before it is transplanted, Dr. Shulman immerses the tooth in a strong fluoride solution to increase its resistance to dissolution by the rejection process.

In time, however, the tooth is dissolved or resorbed, Dr. Shulman used monkeys at the New England Primate Center in Southborough, Mass., supported by the Division of Research Resources, BERM.

Division of Nursing Issues Books

Two books focusing on nursing manpower were recently issued by the Division of Nursing, BERM. They are: Source Book for Community Planning for Nursing in South Dakota ($21), and Planning for Nursing in the District of Columbia Metropolitan Area ($1).
Dr. Julius Axelrod Wins Modern Medicine Award

Dr. Julius Axelrod, chief of the Section on Pharmacology, Laboratory of Clinical Science, National Institute of Mental Health, has been named one of the 10 recipients of the 1970 Modern Medicine Award for Distinguished Achievement.

Dr. Axelrod was honored "For an elucidation of intermediary metabolism of catecholamines important to sympathetic nervous activity in health and disease."

Known internationally for his research contributions, Dr. Axelrod's primary interest in recent years has focused on the biochemistry of the sympathetic nervous system and the pineal gland.

Brenda Swanson Chosen For Training Program

Brenda Swanson, a library technician at the National Library of Medicine, will attend the spring semester of the University of Maryland School of Library Services. She was selected for this program by NLM's Training Committee and a committee of the University's Student Recruitment Project.

The aim of this Project is to improve library education opportunities, especially for minority group students. Mrs. Swanson's training, supported by NLM, will be on a part-time basis.

NLM is the first Federal agency to develop such a program with the University of Maryland. The library plans to send an employee to the University's summer session, and several employees to its fall term.

Mrs. Swanson, who is with the Technical Services Division of Library Operations, joined NLM in 1964. She received her B.A. degree in Sociology from North Carolina College.

Proverbs: To Keep Molars Intact Don't Sweet Snack

 Smile Power

DENTAL HEALTH WEEK

Feb. 1-7 has been proclaimed National Children's Dental Health Week. NIDR joins the American Dental Association in urging you to ensure your children's "smile power." Teach them to care for their teeth.

"Young is when you have bubble gum in your pocket and the whole world in front of you; middle-aged is when you have the whole world in your pocket and only a little bit of bubble gum; old is when you have neither the world nor the gum."

Teeth Should Last a Lifetime

"Your teeth were meant to last a lifetime—and they will, if you take care of them. Research conducted by the National Institute of Dental Research seeks new and improved ways to help you do this."

So try to discourage sipping of sweets by offering good substitutes—like fruit, potato chips, or nuts. Offer sweets to children as dessert at mealtime—when you are assured they will be able to brush their teeth afterwards.

George Warner Presides Over Nursing Workshop

George W. Warner, chief of the Student Loan and Scholarship Branch, Division of Hospital and Health-Related Educational Services, BEMT, presided over a recent Workshop on Federal Support for Hospital Schools of Nursing, held in Cleveland.

Sponsored by the Cleveland Area League for Nursing, the workshop reviewed provisions of the Nursing Student Loan and Nursing Scholarship Programs. This was followed by a general discussion on applications for Fiscal 1971. These programs assist full-time students to achieve nursing careers by providing long-term, low-interest loans and by awarding scholarships to students with financial need.

Approximately 80 participants, representing 45 hospital schools of nursing, took part in the workshop.

Dr. Shimkin's Updated Book Discusses Cancer Research Developments

"Cancer is a solvable problem," cancer expert and author, Dr. Michael B. Shimkin believes. It is "solvable by a human thought and action process that we call scientific research, and within the capabilities of human intelligence in the 20th century."

A revised up-dated edition of Dr. Shimkin's book, Science and Cancer, first issued in 1964, has been published by the National Cancer Institute.

Discussed are the following new developments in cancer research:

- The use of interferon inducers against transplanted cancers in animals, the recovery of a DNA-type virus from African children with Burkitt's lymphoma, and the use of asparaginase and other drugs in treating childhood leukemia.

- The cancer-causing nature of cycasins, a product of a South Pacific palm nut, in intestinal bacteria.

- Like the previous volume, the new edition is addressed primarily to the layman who has had a high school course in biology.

The book discusses such subjects as basic cell structure, diagnosis, chemotherapy, and future expectations.

Dr. Shimkin, formerly associate director of NCI, is an Institute consultant. He is presently professor of Community Medicine and Oncology at the University of California at San Diego.

Copies of Science and Cancer (PHS Publication No. 1162, Rev. 1959) may be purchased singly for $1.25 or at a discount for quantities over one hundred from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.