NCI Breast Cancer Task Force Raises Questions On Surgical Treatment

Last Monday (Sept. 30), scientists from many parts of the U.S. who are involved in cancer research attended a report to the Profession Meeting of the National Cancer Institute's Breast Cancer Task Force.

The Task Force and its participating researchers presented six topics at the all-day meeting in the Masur Auditorium. They were: epidemiology, virology, experimental biology, diagnosis, and treatment.

Intensive Research Undertaken

The report pointed out that because traditional surgical treatment of breast cancer has been questioned, intensive research by the Task Force has been undertaken to improve the diagnosis and treatment of the disease.

It was further explained that Task Force findings do not represent major breakthroughs and that more time and study are required for documenting long-term results.

But there is also evidence that "it should be possible to improve substantially both the cure and survival rates from cancer of the breast, and with less disfiguration than results from radical mastectomy."

Early Detection Important

Early detection — before the cancer has spread to other parts of the body — increases a patient's chance for long-term survival and cure.

Patients with non-cancerous axillary lymph nodes when breast cancer is diagnosed have a 75 percent, 5-year survival rate; 65 percent of these patients are alive after 10 years.

Screening Program Sponsored

Women with breast cancer in the axillary (armpit) nodes have about a 50 percent 5-year survival rate; about 25 percent will live 10 years.

NCI and the American Cancer Society are jointly sponsoring a breast cancer screening demonstration program which involves 27 projects. Up to 270,000 women, 35

(See TASK FORCE, Page 6)

NIH News

NIH Data Contributes to Approval of Drug Tegretol for Controlling Epilepsy; Used Abroad

Because of an anticonvulsant drug — Tegretol — which has just been made available, the control of epileptic seizures may soon be a reality for thousands of epilepsy sufferers who are unresponsive to standard drug therapy.

First Advance in 20 Years

This is the first new anticonvulsant drug that has been made available since 1960, and it is the first major advance in 20 years in the long-term treatment of grand mal and psychomotor epilepsy.

Tegretol, a trade name for the compound carbamazepine, has been used to treat epilepsy in other countries for over a decade, but has been authorized in the United States only for treating trigeminal neuralgia, a painful face ailment.

It has been proved effective in controlling complex partial (temporal lobe or psychomotor) and generalized tonic-clonic (grand mal) seizures and has now been approved for prescription use by the Food and Drug Administration.

CIBA-GEIGY pharmaceutical company, developer of the drug, was assisted in evaluating the agent by the National Institute of Neurological Diseases and Stroke.

NINDS provided three studies of Tegretol under research contract, and clinical data from one of the contracts were used in the application for approval.

It is the first time that a Federal health research agency and a drug manufacturer have cooperated in providing data for the evaluation of an epilepsy drug.

The effects will benefit most from carbamazepine will be those whose seizures are uncontrolled, or only partially controlled with standard drugs such as diphenylhydantoin (Dilantin), phenobarbital or primidone (Mysoline).

With improved or total control of seizures, these people will have a better chance for a normal life.

The NINDS studies which supported the approval of Tegretol are published in the Oct. 8, 1974 issue of Neurology.

(See TEGRETOL, Page 1)

Dr. Elizabeth F. Neufeld To Give Mider Lecture Tomorrow, Oct. 9, in CC

Before coming here, Dr. Neufeld conducted research and lectured at the University of California where she had received her Ph.D. She is considered a leading authority on human genetic diseases.

Dr. Elizabeth F. Neufeld, chief of the Section on Human Biochemical Genetics, National Institute of Arthritis, Metabolism, and Digestive Diseases, will present the Seventh Annual G. Burroughs Mider Lecture tomorrow (Wednesday, Oct. 9) at 8:15 p.m. in the Masur Auditorium.

Dr. Neufeld's address, Inherited Lysosomal Disorders Studied in Cell Culture, will present the work of her and her associates on a group of genetic diseases known as mucopolysaccharide storage disorders, of which the Hurler syndrome is the best known.

Uses Patients' Cells

The biochemical basis of these diseases was elucidated by using cultured cells derived from patients.

The successful clinical application of some of her findings has brought about prenatal diagnosis of the mucopolysaccharidoses. As an outgrowth of her work, new possibilities for enzyme replacement therapy may emerge.

Members of the scientific community and the press are invited to attend the Mider Lecture.
It Took Walter Magruder 3 Months After Retiring to Really Leave the Campus

If you heard that Walter H. Magruder, National Institute of Allergy and Infectious Diseases' executive officer, retired on June 28, but you thought you saw him recently in Bldg. 31 or walking around the grounds, you are right on both counts. "Walt" Magruder retired in June after 40 consecutive years of Federal service. However, he has remained on duty until a successor could be hired.

So, following a farewell luncheon on Sept. 27 attended by many of his associates and friends, Mr. Magruder's retirement was complete. As he said, "I don't know what I'm going to do, but I'm looking forward to it."

Actually, Mr. Magruder has a lot of things to keep him busy, including fishing, golf, gardening, and refinishing antiques.

Vasta Elected to Office of ACS, Chemical Information Division

Bruno M. Vasta, chief of Toxicology Information Services in the National Library of Medicine's Specialized Information Services, has recently been voted chairman-elect of the American Chemical Society's Division of Chemical Information.

He took office at the ACS meetings in Atlantic City on Sept. 19. Mr. Vasta will serve in that office for one year until 1976 when he will become chairman of the Division.

A memorial service for Dr. Stohlman was held at the Georgetown Hospital Chapel on Sept. 21.

Vasta elected to office of ACS, Chemical Information Division

Friends may send donations to the Fred and Bernadette Stohlman Memorial Research Fund, Hematology Research Department, St. Elizabeth's Hospital, 736 Cambridge Street, Brighton, Mass. 02135.

Stohlman, Wife Victims Of Crash in Ionian Sea

Dr. Frederick Stohlman, Jr., who was a senior investigator at the National Institute of Arthritis, Metabolism, and Digestive Diseases between 1953 and 1963, and his wife, Bernadette, died Sept. 8 in a plane crash in the Ionian Sea off the coast of Greece.

Dr. and Mrs. Stohlman were en-route from Tel Aviv, where the prominent hematologist had presented papers at the congress of the International Society of Hematology, to another international conference in Naples.

Dr. Stohlman, 48, was world-renowned for his work in blood cell production.

Since 1965 he had been director of medicine and research at St. Elizabeth's Hospital, Brighton, Mass., and also professor of medicine at Tufts University School of Medicine.

Now that Mr. Magruder has left NIH there are plenty of things to keep him busy. To name a few; fishing, golf, gardening, and refinishing antiques.

The recent program in the Masur Auditorium during Asian-American Cultural Week featured Korean folk dancing and karate. Diminutive dancers from Woo Soon Lee's folk dancing group (1) perform the Korean basket dance. Karate students from the Jhoon Rhee Korean Karate studios (2) show the fine points of the art of self-defense. The qualified students demonstrate how to break a board in two with the thrust of a foot.
Metro Bus Offers New Cross-County Service; Stops at Clinical Center

A new Metro Bus route between the Beltway Plaza and Montgomery Mall, which stops at NIH, started Sept. 1 at the same time as the C-2 route between Wheaton Plaza and Montgomery Mall (see the NIH Record, Sept. 11).

On the J-2 cross-county route, direct service is provided between the Beltway Plaza, University of Maryland, Prince Georges' Plaza, Silver Spring, Rock Creek Forest, Bethesda, NIH, and Montgomery Mall.

The service operates hourly from 6 a.m. to 10 p.m., and is coordinated with the J-4 schedule to provide a 30-minute interval between Bethesda and Silver Spring on weekdays and Saturdays.

The new bus travels the following route: Greenbelt Road, Baltimore Boulevard, Campus Drive, Adelphi Road, Belcrest Road, East-West Highway, first entrance to Prince George's Plaza, and back to the East-West Highway.

Travels Circuitous Route

From there the bus goes via Belcrest Road to Queens Chapel Road, Hamilton Street, Ager Road, East-West Highway, Ethan Allen Avenue, Carroll Avenue, Philadelphia Avenue, Fenton Street, Sligo Avenue, Georgia Avenue, Wayne Avenue, Pershing Drive, Fenton Street, and back to Wayne Avenue.

The route continues to Pershing Drive, Fenton Street, Coleville Road, 16th Street, East-West Highway, Washington Avenue, Grubb Road, Terrace Drive, Freeman Drive, Meadowbrook Lane, East-West Highway, Old Georgetown Road, and makes a right to Center Drive to the Clinical Center.

NIH Stage Band Gives Concert

The NIH Stage Band will present a concert for Clinical Center patients and NIH employees on Oct. 10. The performance, sponsored by the CC Patient Activity Section, will begin at 7:30 p.m. in the Masur Auditorium.

The bus then returns to Old Georgetown Road, continues on Democracy Boulevard, first road- way west of Bells Mill Road, Rock Spring Drive, Fernwood Road, Democracy Boulevard, Westlake Drive to Montgomery Mall, to terminal stand at curb between Lerner's sign and mall entrance, and returns over the same route.

Transfer connections are available at many points to other routes serving most of Montgomery County and the District of Columbia.

Hospital Team Studies Drug Injection To Treat Hereditary Crippling Disease

By Klaudia M. Cox

While standing in his crib at the State University Hospital in Brooklyn, Kyle Mulroy, who is 13 months old, suffered his fifth broken bone. Kyle was born with an hereditary crippling disease—osteogenesis imperfecta. His bones are so soft and porous that the pressure of body weight when he is standing can cause them to fracture.

Kyle is the youngest patient in the hospital's General Clinical Research Center—supported by the Division of Research Resources—who is receiving a synthetic version of calcitonin, a hormone produced by the thyroid gland.

Dr. Salvador Castells, head of the four-member research team studying the effectiveness of calcitonin injections as a treatment for osteogenesis imperfecta, thinks that this chemical is a potentially safe, effective treatment to arrest the disease and its devastating consequences.

"Bone tissue absorbs calcium from the blood stream to aid in calcification," Dr. Castells explained. "Then the calcium is resorbed into the blood stream.

Disease Explained

"In osteogenesis imperfecta, the absorption process seems to work correctly. What is irregular is the resorption process, which is speeded up."

The calcium doesn't remain in the bone long enough for calcification and growth to occur before it is resorbed by the blood, Dr. Castells further stated.

Calcitonin, the hormone which slows down the calcium resorption by the blood, is produced at a normal rate but is not as effective as it should be in the osteogenesis imperfecta victim. By giving excess doses of the synthetic calcitonin, the resorption process slows to a normal level.

In Dr. Castell's study, the hormone has increased positive calcium balance and reduced bone turnover in his patients. A notable effect of the drug therapy is the absence of adverse reactions, such as allergic responses or toxic effects.

In its severest form, osteogenesis imperfecta congenita, symptoms are present at birth. The pressure of the amniotic fluid and the birth process can cause a child to be born broken, twisted, and even fatally injured from fractures of the skull and other bones.

Other characteristics of the disease that may appear include dwarfism, deafness due to softness of the bones of the inner ear, and an abnormality which causes the whites of the eye to be blue.

If symptoms become apparent when a child begins to stand and walk, as with young Kyle, the disease is called osteogenesis imperfecta tarda.

Some children who have received calcitonin therapy seem to experienced a temporary growth spurt, break fewer bones, and show some increase in bone density.

If therapy continues to produce positive results, the standardized (See Drug Injection, Page 6)

Male Volunteers Needed For Heart Institute Study

The National Heart and Lung Institute requires male volunteers for a study to determine the relationship of urinary steroids to myocardial infarctions.

Those in the following three categories may apply: (1) normal volunteers aged 35 to 50; (2) volunteers who have had a myocardial infarction, and (3) volunteers who have coronary artery disease (angina) but have had no myocardial infarction.

Volunteers who have had a documented heart attack are particularly needed.

Participation in the study will involve 24-hour urine collections and one blood specimen for determining blood lipid pattern.

Volunteers may contact June Moon, Ext. 01556, or Dr. Angelo A. Licata, Ext. 66988.
CC Employees Honored At Awards Ceremony

More than 300 employees of the Clinical Center received awards at the Third Annual Honor Awards Ceremony in the Masur Auditorium on Sept. 11.

Dr. Robert S. Gordon, Jr., CC Director, addressed the assembly and commended the recipients for their achievements.

Over 100 individual and group superior performance awards for outstanding contributions to the patient care program were given by Dr. Gordon, associate director Dr. Philippe V. Cardon, and executive officer L. Earl Laurence.

EEO Achievements Cited

EEO awards for work in behalf of that program were received by Margaret E. Benson, Nursing Department; Clifford Mos, Office of Personnel Management; Dr. Paul J. Schmidt, chief of the Blood Bank Department, and Evelyn Walker, Social Work Department.

The year 1962 marked the beginning of Mr. Magruder’s career at NIH. At that time, he became the first budget officer of the National Microbiological Institute.

Three years later he joined the staff of the National Cancer Institute, serving as administrative officer of its Intramural Research and Chemotherapy programs. In 1966 he returned to NIAID.

It would appear to be difficult to leave Federal service after such a long and active career. But, Mr. Magruder is quite philosophical about his retirement. “Most of the people I’ve grown up with at NIH are leaving or have left, and I think it’s my turn now.”

Walter Magruder

(Continued from Page 1)

was a chief collections officer for that office.

Then in 1948 he moved to the Atomic Energy Commission, eventually serving as a program analyst in the Division of Biology and Medicine.

NIH Visiting Scientists Program Participants

8/28 — Dr. Kenny S. Crump, U.S.A., Environmental Biometry Branch. Sponsor: Dr. David Hoel, NIEMS, Research Triangle Park, N.C.

8/30 — Dr. Uriel Bachrach, Israel, Laboratory of Biological Genetics. Sponsor: Dr. Marshall Nirenberg, NHLI, Bg. 36, Rm. 1C27.

9/1 — Dr. Michael D. P. Boyle, United Kingdom, Biology Branch. Sponsor: Dr. Tibor Borsos, NCI, Bg. 37, Rm. 2B133.

9/1 — Dr. Dan Elilat, Israel, Laboratory of Chemical Biology. Sponsor: Dr. Alan Schechter, NIAMDD, Bg. 10, Rm. 9N321.

9/1 — Dr. James W. Hu, Taiwan, Neurobiology and Anesthesiology Branch. Sponsor: Dr. Ronald Dubner, NIDR, Bg. 30, Rm. 32.

9/1 — Dr. Michael A. Lett-Brown, United Kingdom, Biology Branch. Sponsor: Dr. Edward J. Leonard, NCI, Bg. 47, Rm. 4B56.

9/1 — Dr. Pushi Maruta, Japan, Laboratory of Biochemistry. Sponsor: Dr. Edward D. Korn, NHLI, Bg. 3, Rm. 318.

9/1 — Dr. Shahjahan Kabir, Bangladesh, Laboratory of Microbiology. Sponsor: Dr. Joost Oppenheimer, NIAMDD, Bg. 30, Rm. 322.

9/1 — Dr. Setsuo Kuroda, Japan, Laboratory of Biological Structure. Sponsor: Dr. Marie Nylen, NIDR, Bg. 30, Rm. 209.

9/1 — Dr. Chiharu Nakai, Japan, Laboratory of Biomedical Sciences. Sponsor: Dr. Walter H. Glinsmann, NICHD, Bg. 6, Rm. 312.

9/1 — Dr. Nobuo Nemoto, Japan, Chemistry Branch. Sponsor: Dr. Harry V. Gelboin, NCI, Bg. 37, Rm. 3E24.

9/1 — Dr. Anne-Marie Schmitt, Belgium, Immunology Branch. Sponsor: Dr. Gene Shearer, NCI, Bg. 19, Rm. 4B55.

9/1 — Dr. Gabriella Zsilla, Hungary, Laboratory of Preclinical Pharmacology. Sponsor: Dr. Erminio Costa, NIMH, St. Elizabeth’s Hospital.

Researcher From France

9/3 — Dr. Martine Canivet, France, Viral Leukemia and Lymphoma Branch. Sponsor: Dr. Robert Bassin, NCI, Bg. 41, Rm. 400.

9/3 — Dr. Erik Frandsen, Denmark, Laboratory of Chemical Pharmacology. Sponsor: Dr. James R. Gillette, NHLI, Bg. 10, Rm. 817.

9/3 — Uri Goldbourt, Israel, Biometrics Research Branch. Sponsor: Tavia Gordon, NHLI, Landow Bg., Rm. C814F.

9/3 — Dr. Thomas J. Pinnavaia, U.S.A., Laboratory of Chemical Pharmacology. Sponsor: Dr. Edward Becker, NIAMDD, Bg. 2, Rm. 109.

9/3 — Dr. Susumu Sato, Japan, Applied Neurologie Research Branch. Sponsor: Dr. J. Kiffin Penny, NINDS, Bg. 36, Rm. 5D08.

9/3 — Dr. Machiko Sakuragawa, Japan, Laboratory of Vision Research. Sponsor: Dr. Tochihiro Kuwabara, NEI, Bg. 6, Rm. 211.

9/3 — Dr. Andre Van Steirteghem, Belgium, Clinical Pathology Department. Sponsor: Dr. Donald S. Young, CC, Bg. 10, Rm. 4N309.

9/4 — Dr. Noritoshi Takeichi, Japan, Viral Biology Branch. Sponsor: Dr. Charles W. Boone, NCI, Bg. 37, Rm. 1C08.

Other Scientists Listed

9/4 — Dr. Vincent Zigas, Australia, Laboratory of Central Nervous System Studies. Sponsor: Dr. D. Carlton Gajdusek, NINDS, Bg. 36, Rm. 5B10.

9/6 — Dr. Jose Bubis, Israel, Laboratory of Neuropathology and Neuroanatomical Sciences. Sponsor: Dr. Igor Klatzo, NINDS, Bg. 36, Rm. 4D02.

9/8 — Dr. Michele Van Eerdewegh, Belgium, Adult Psychiatry Branch. Sponsor: Dr. William E. Bunney, NIMH, Bg. 10, Rm. 3N212.

9/9 — Dr. Jean Guegan, France, Viral Leukemia and Lymphoma Branch. Sponsor: Dr. Dharam V. Kshatriia, NCI, Frederick Cancer Research Center, Ft. Detrick.

9/9 — Dr. Margarita Zeichner, Mexico, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George R. Martin, NIDR, Bg. 30, Rm. 412.

Zero Population Growth Defined

Zero Population Growth is reached when a population neither increases nor declines over a period of time—that is, when the number of births and immigrants is balanced by the number of deaths and immigrants.
Ethnic Minority Colleges Receive DRR Awards For Biomedical Research

The Division of Research Resources has awarded 15 new grants to ethnic minority colleges for biomedical research. These grants, totaling $1.8 million, were made under DRR's Minority Biomedical Support Program.

The MBS program now funds 66 minority institutions. Grantees include 51 Black schools, 17 Spanish-speaking, 2 native American Indian, two Hawaiian/Pacifician, one institution with a Black and Spanish-speaking enrollment, and one with a Black and American Indian enrollment.

Assists American Indians

Turtle Mountain Counseling and Rehabilitation Center, the first grantee on an American Indian reservation, was among the 15 new institutions to receive MBS funds. The Center, in Belcourt, N.D., is on one of the most densely populated Indian reservations in the United States.

Researchers at the Center and Turtle Mountain Community College are investigating alcoholic problems of the Plains-Ojibway Indians on the reservation.

These studies, which focus on the primary social, psychological, cultural, and medical factors associated with alcoholism, will also serve as a national pilot program to suggest preventive alcoholism techniques to other Indian tribes.

Science Seminar Scheduled

The MBS award to Benedict College in Columbia, S.C., will provide for a biomedical seminar to bring research scholars to the predominantly Black campus for lectures and meetings with the student trainees.

Other schools receiving new MBS grants include Talladega College in Alabama; Bethune-Cookman College in Daytona Beach; University of Hawaii in Honolulu; Kentucky State University in Frankfort; University of Maryland in Princess Anne; University of Puerto Rico in Mayaguez, and the College of the Virgin Islands.

MBS Participants Described

The MBS program now includes 499 faculty members, 868 undergraduates, and 147 graduate students. The undergraduates include 660 Blacks, 186 Spanish-speaking students, 27 American Indians, and 22 Hawaiian/Pacifician students. There are 118 Black, 25 Spanish-speaking, 1 American Indian, and 3 Hawaiian/Pacifian graduate students now participating in the program.

Larry Speiser, SHER’s Legal Counsel, to Speak At Meeting on Oct. 16

SHER, the Self Help for Equal Rights Committee, has invited Larry Speiser to speak at its weekly meeting on Wednesday, Oct. 16, noon to 1 p.m., in Bldg. 10, Dining Room 1.

Mr. Speiser, legal counsel for a class-action suit on behalf of women of NIH, will answer questions about what can be expected if the judgment is favorable.

To raise funds for legal fees, a rummage sale is being held Oct. 19-20 at the Pavillion, Gaithersburg Civic Center. Call Dr. E.A.B. Brown, Ext. 65193, for additional information.

It was announced at a recent SHER meeting that Rosalind Marimont had been appointed by Raymond J. Jackson, NIH EEO officer, to head a task force to ‘develop a methodology for setting numerical goals and time tables for improving equal employment opportunities at NIH.”

The financial assistance will allow students in the Northeastern Oklahoma Indian Health Careers Program to enter biomedical research careers and also offer similar opportunities for Black students.

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New Evidence May Explain How Genes ’Turn on’ and ‘Turn off’ in Living Cells

New evidence that may explain how genes “turn on” and “turn off” in living cells has been described by Dr. Robert T. Simpson, chief of the Section on Developmental Biochemistry, Laboratory of Nutrition and Endocrinology, National Institute of Arthritis, Metabolism, and Digestive Diseases.

Dr. Simpson’s findings suggest that genes (composed primarily of the hereditary chemical DNA) are actually turned on and able to operate when histone (protein) bonds attached to the DNA are loosened.

By contrast, when histones are tightly attached to the genetic material, the DNA becomes folded or “supercoiled” and virtually paralyzed, and it is unable to generate the life functions of which it is capable.

Scientists have known for some years that each living cell contains hundreds, often thousands of genes that are, most of the time, biologically doing nothing.

Some genes may turn on only once in the lifetime of a cell or organism, providing the critical blueprint needed for a specific chemical product, then remain completely inactive.

Since all life processes are controlled by gene activity and regulation, an understanding of gene mechanisms is a major scientific priority.

For his studies, Dr. Simpson employed chromatin, or DNA linked to histone protein, as well as protein-free DNA.

Both the chromatin-DNA and the protein-free DNA were chemically extracted by Dr. Simpson from cells of the thymus glands of calves.

Evidence of whether or not the DNA’s were genetically active, or turned on, was provided by their ability to produce a sister chemical, RNA, after adding a “priming” enzyme.

Dr. Simpson found that, contrived with the protein-free DNA, folded chromatin-DNA had only one-tenth to one-twentieth the number of sites for the enzyme to act, limiting its ability to be genetically active.

He then separated the chromatin-DNA into two fractions, one believed to contain the genetically turned on DNA, the other, the turned off portion.

By utilizing a combination of two separation techniques, Dr. Simpson was able to isolate chromatin-DNA samples containing as few as 2 percent and as many as 47 percent of the number of active gene sites found on protein-free DNA.

By further studying these chromatin-DNA samples with markedly differing genetic activity, he hopes to learn more about the regulation of gene activity.


‘Open Season’ Will Permit Changes in Health Benefits

The Federal Employees Health Benefits Program is holding an “Open Season” from Nov. 15 through Nov. 30.

During this period eligible employees may enroll.

Also, employees who are enrolled may change their plan or convert from one plan to another at any time during the enrollment period.

Information on registration procedures, new contract coverage, and effective dates will appear in the Nov. 6 issue of the NIH Record.

Drug Injection

(Continued from Page 3)

The dosage of two units of synthetic calcitonin per kilogram of body weight injected 3 times a week will continue until each patient reaches puberty, when the bones seem to strengthen, possibly because of the increased supply of sex hormones in the body.

Although this hereditary disease may continue in later life, the center’s researchers hope that early therapy may prevent crippling deformities in adulthood.

Patient Care Monograph Issued

The Clinical Center has issued a monograph entitled A NEW DIMENSION IN THE CARE OF HOSPITAL PATIENTS UNDER STRESS.

This publication reports the results of a multidisciplinary study of 16 patients conducted by the Nursing Department.

For copies of the monograph, write to: CC Nursing Department, Bldg. 10, Room 18-225, NIH, Bethesda, Md. 20014.
Health Departments in 12 States Funded to Test For Cancer of Cervix

The National Cancer Institute's Cancer Control program has awarded almost $10 million to 12 state health departments for a 3-year program to screen low-income women for cancer of the uterus cervix.

The health departments will make 1,194,000 screenings during the 3 years. About 306,800 screenings will be made the first year.

Award: 1-Year Contracts

Eight additional state health departments have one-year NCI contracts, totaling $240,308, to plan cervical cancer screening programs. The health departments of all states and U.S. territories may apply for NCI funding to plan or implement cervical cancer screening programs.

This year, about 59,500 American women will develop cancer of the cervix, the narrow lower portion of the uterus, or womb. An estimated 7,800 women will die from the disease.

"If this cancer is detected at an early stage, the likelihood of patient survival is greatly improved," said Dr. Diane J. Fink, associate director for Cancer Control.

A simple Pap test can detect cervical cancer while the disease is still localized. The test results may also indicate need for additional tests for more advanced forms of cervical cancer.

Test Results Told

Women participating in the screening programs will be advised if their Pap test results are suspicious or positive for cancer and urged to return for retesting and definitive diagnosis. Biopsy (further study of bits of tissue from the suspicious area), dilation and curettage of the uterus, and other diagnostic procedures will be used.

When a definitive diagnosis of cancer is made, the state health departments contracting with NCI must see that treatment and continuing care are available.

State health departments are implementing this program in various ways. In Michigan, materials to recruit women for screening are being prepared in Spanish and English.

Mobile Units Used

Mobile testing units are being used in Connecticut. The Michigan Health Department is cooperating in Nebraska. In a number of states, the program is being subcontracted to county health departments, private medical foundations, and medical schools or hospitals with manpower and facilities.

NCI-funded screening programs are beginning in the following states: Connecticut, Kentucky, Louisiana, Michigan, Mississippi, and Nebraska.

Also, New York, Ohio, Oklahoma, South Carolina, Tennessee, and Texas.

One-year planning contracts have been awarded by NCI to the health departments of the following states: Arizona, California, Missouri, Nevada, Maine, Minnesota, Washington, and Wyoming.

NIDR Awards Contract for Study on Release Of Fluoride in Mouth to Fight Tooth Decay

A project to develop a system of prolonged release of fluoride in the mouth as a means of fighting tooth decay is being initiated under a $37,848 one-year contract by the National Institute of Dental Research with Polysciences, Inc., of Warrington, Pa.

Recent studies done at NIDR with animals shows that the greatest protection against decay comes from frequent exposure to low levels of fluoride dissolved in the mouth rather than from the incorporation of high levels of fluoride into the teeth.

Different methods of releasing fluoride will be studied over a 12-month period. Scientists will try to find a biologically suitable system which will supply fluoride in the mouth at a constant, predetermined rate for a period of at least 6 months without maintenance or adjustment.

The specific methods to be explored include incorporating a safe fluoride salt into a matrix of some soft, rubbery, plastic polymer; covering such a salt with a plastic membrane that permits it to dissolve only at a constant, slow rate; developing a fluorophosphate compound that will break down in the moisture of the mouth and release fluoride gradually, or covering such a compound with a membrane to insure slow release.

Also, the scientists will try adding fluoride to a gel and containing the mixture with a plastic membrane to control dispersal.

The contract calls for the establishment of the most promising system or systems in vivo, using a suitable animal model system for at least 30 days.

The investigations will attempt to determine if a system of releasing fluoride over a period of 6 months is feasible for human use.

Eastern Cooperative Oncology Group

A summary of the 2-year Breast Cancer Task Force Report "indicates that less than radical surgery is acceptable for the treatment of primary breast cancer."

The summary ended with the encouraging note that "the advances in the treatment of early and advanced breast cancer, coupled with progress in earlier detection and diagnosis, should lead to significant improvements in cure rates and survival."

The report did not include results from other studies conducted by NCI and other groups.

Task Force Report on Primary Therapy and Natural History of Breast Cancer

Dr. Fisher, acting chief of NEI's Office of Biometry and Epidemiology, was recently elected a Fellow of the American Statistical Association; he has been a member for almost 22 years. Out of 10,500 members in the organization, 665 are Fellows. Mr. Ederer, who also heads OBE's Section on Clinical Trials and Natural History Studies, was honored for "outstanding contributions in promoting the application of rigorous statistical methods in clinical trials and in the dissemination of statistical acumen to medical investigators."

States Funded to Test For Cancer of Cervix

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Charles Goldstein Heads NLM Lister Hill Center
Computer Technology Br.

Charles M. Goldstein has been appointed chief of the Computer Technology Branch, Lister Hill Center. The Center is a component of the National Library of Medicine. The branch is responsible for developing computer-based information systems for health science applications.

Before coming to NLM, Mr. Goldstein was with Informatics, where he was technical director for Data Management Systems.

Served With NASA

Prior to that position he served with NASA's Lewis Research Center in Cleveland where his work included plasma physics and gaseous electronics research. His last position there was chief of the Scientific Computing Branch.

Mr. Goldstein earned a B.S. in aeronautical and an M.S. in mechanical engineering, both from Purdue University. Under a Fulbright Scholarship, he studied mathematics and physics in Germany for 2 years.

Mr. Goldstein has been involved in problems relating to the impact of computer technology on both information transfer and administrative management. He is the author of numerous scientific papers on these subjects.

NEI Vision Research Lab Holds Seminar Series

Because of increasing interest in the role of the pigment epithelium in eye disorders, the National Eye Institute's Laboratory of Vision Research recently initiated a series of six informal seminars entitled Renaissance of the Retinal Pigment Epithelium.

The luncheon meetings were held in late September and early October.

Within the past few years researchers have directed major attention to a single cell layer of the retina called the pigment epithelium. This narrow band lies between the sensory portion of the retina (the light-sensitive tissue at the back of the eye) and the underlying blood vessel-rich tissue, the choroid.

New Techniques Used

The NEI scientists pointed out that, until recently, studies of retinal degenerative conditions were directed primarily toward the neural portion of the retina. However, as a result of new techniques, investigators have discovered that the pigment epithelium plays a vital role in the visual process.

Efforts are now being made to elucidate the key part played by this narrow layer in normal retinal function and in the development of certain retinal diseases.

Early Diagnosis of Multiple Myeloma Now Possible With Improved Technique

An improved method for early diagnosis of multiple myeloma, a malignant tumor of the bone marrow plasma cells, has been developed by two physicians at the University Hospitals of Cleveland.

Using electron microscopic techniques, Dr. George M. Bernier, director of medical oncology, and Dr. Richard C. Graham, Jr., head of the Division of Infectious Disease, have developed a method that allows physicians to differentiate more accurately between a non-malignant tumor of plasma cells and a malignant tumor.

Analysis of bone marrow cells from 65 patients was involved in the study, which was supported in part by the Division of Research Resources.

Affects the Middle-Aged

Multiple myeloma, which affects people nearing 50 and over, is basically a tumor of an antibody-producing cell—the plasma cell. The patient complains of neuralgic pains; later, painful swellings appear on the ribs and skull, and spontaneous fractures may occur.

In the past, there has been no agreement among specialists that the plasma cells which proliferate in multiple myeloma are recognizably abnormal.

The investigators are hopeful that their findings will permit definitive treatment to be started in some patients earlier than was previously possible.

Currently, Drs. Bernier and Graham are examining the changes which come about through treatment, and hope to determine whether they can predict responsiveness to treatment.

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Dr. Frederick L. Stone Joins Boston University Med. Center

Dr. Frederick L. Stone, former Director of the National Institute of General Medical Sciences and—more recently—deputy director of the Health Services Administration, HEW, is now deputy director of the Boston University Medical Center.

In addition to working with Dr. Richard H. Egdahl, BUMC Director, in directing the Medical Center's financial and operational activities and program development, Dr. Stone will serve as the University's associate vice president for health affairs.

Dr. Delappe Is Chief Of Parasitology Branch, NIAID Extramural Area

Dr. Irving P. Delappe has been appointed chief of the Parasitology and Medical Entomology Branch in the National Institute of Allergy and Infectious Diseases' Extramural Programs.

He succeeds Dr. Wilford S. Bailey, who has returned to Auburn University as professor of pathology and parasitology.

In addition to administering NIAID's research grant and training program in parasitology, Dr. Delappe will be planning and directing two special emphasis program areas. One, the biological regulation of vectors is concerned with investigations on the control of arthropods that transmit disease.

Program Explained

The other program focuses on studies in immunity to animal parasites with the view to eventual development of vaccines for the prevention of parasitic diseases.

Dr. Delappe will also remain chief of the Biochemistry and Physiology Branch where he has served since his appointment in 1965. He will continue to coordinate a special emphasis grants program on the mechanisms of resistance to antimicrobial agents.

As chief of this branch, Dr. Delappe has made a significant contribution through his promotion of basic research on antiviral substances.

Information on the underlying regulation mechanisms responsible for viral replication is of particular interest since one of the program goals of the Branch is the development of antiviral agents tailored to attack replication at vulnerable points.

Dr. Delappe joined NIH in 1960 as a scientist administrator in the Division of Research Grants and moved to NIAID in 1962.
First Contributions to CFC Tabulated; Fogarty Center Surpasses Its Quota

Early contributions to the NIH Combined Federal Campaign have been tabulated for the first reporting period—as of Sept. 27, $10,495 has been donated. This amount was contributed by 228 employees, averaging $46 per person.

The Fogarty International Center was first to surpass its quota, reporting 129 percent, and an average gift of $47.

OD averaged $105, while NICHD's average was $65, and NINDS and NIAID both averaged $63.

With the theme, "NIH ... Caring Comes Naturally," the CFC opened here Sept. 19. On the preceding day, Dr. Milo Leavitt, Director of the Fogarty International Center and CFC vice chairman, addressed the first meeting of NIH coordinators.

"Equalizing or surpassing last year's NIH goal is no small task. Last year, NIH contributed more money, over $207,000, than any other agency in the Department of Health, Education, and Welfare.

"We topped our goal and finished with 115 percent, and an average contribution of almost $30 per person," he said.

Dr. Leavitt also emphasized that the success of this year's drive depends to a large extent on all of the NIH coordinators and keypeople.

Dr. Robert S. Stone, NIH Director and CFC chairman, reminded the group that the CFC is the only campaign of its kind conducted during the year for Federal employees.

"In a large sense, our chosen daily work here reflects the concept of caring for and about people. Our support of basic biomedical research is indicative of the concern that we have for the Nation's health and well-being," he said.

Holds Training Session

George Presson, FIC executive officer and NIH coordinator for CFC, explained to the gathering that the traditional CFC "kick-off" rally has been replaced this year with training sessions for small groups which hopefully will be more effective and allow more direct, personal communication.

Mr. Presson asked coordinators to stress the advantages of the payroll deduction plan to keymen and campaign contributors.

"This is the easiest, least painful way of giving. The contribution is automatically deducted and does not start until next January. The money is not missed as much as a lump sum would be, and the employee's paycheck serves as a tax receipt," he said.

Goal Raised Slightly

NIH's goal for this year, $187,000, has been raised slightly over last year's, $179,309.

"We accomplished such a fine record last year because of the hard work and dedication of our coordinators and keypeople, and the charity of our employees.

"This year, I feel confident that NIH, in the same spirit of giving and caring about our fellow human beings, will once again surpass its goal," added Dr. Leavitt.