Diabetes Experts Will Review Current Treatment Concepts

Diabetes experts will discuss current concepts in the treatment of this disease at a day-long seminar in the ACRF Amphitheater on Saturday, Mar. 30.

The National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases and the American Diabetes Association are co-sponsoring the seminar, *Diabetes Update,* which is aimed at health professionals who care for patients with diabetes.

Speakers from NIH, Georgetown and George Washington Universities, and other university medical centers in the United States will discuss such topics as the effect of dietary carbohydrate on diabetic control and insulin delivery by implantable pump.

Six hours of continuing medical education credit is available for physicians who attend the session.

*Diabetes Update* will begin at 9 a.m. Saturday morning. Closing remarks are scheduled for 4:05. For further information, contact Charlotte Armstrong at 496-3583, or Nancy Wigle at 496-2596.

Breast Cancer Report

Excising Cancerous Lump Just as Effective As Removing Entire Breast, Study Indicates

A major clinical trial in breast cancer treatment indicates that less-disfiguring surgery followed by radiation is as effective as removal of the entire breast for many women with early-stage breast cancer. The study was supported by the National Cancer Institute.

Researchers from 89 institutions cooperating in the study concluded that removal of the cancerous lump and an adequate amount of normal surrounding tissue to ensure that the area is tumor free (segmental mastectomy)—plus radiation—is appropriate for treating breast cancer patients with tumors 4 centimeters or less in diameter (about 1 1/2 inches).

Findings of this National Surgical Adjuvant Breast Project (NSABP) study and 10-year results from their earlier trial comparing radical mastectomy to total mastectomy with and without radiation, are reported in the Mar. 14 issue of the *New England Journal of Medicine.*

“Recently these studies present scientific data that support the trends away from the mutilating, debilitating Halsted radical mastectomy that was standard treatment for almost a century, and toward breast-preserving surgical techniques,” said Dr. Bernard Fisher of the University of Pittsburgh, chairman of the NSABP.

“We have abandoned conventional concepts of breast cancer surgery, which were based on the belief that tumors spread in an orderly fashion, and that extensive surgery could improve survival. Our new knowledge of breast cancer biology will bring dramatic changes in medical practice for local disease control.”

Dr. Vincent T. DeVita Jr., Director of NCI, said, “The Institute’s investment in clinical trials is paying off. We are seeing radical departures from the way surgery for breast cancer was done in the past. These studies are powerful indicators that less surgery can be just as good as more surgery for many women. Results of these trials continue to provide momentum for improving the quality of life of cancer patients.”

He pointed out that surveys by the American College of Surgeons indicate the use of radical mastectomies has declined progressively from nearly 50 percent of women treated in 1972 to 3 percent of women treated in 1981. Data from NCI’s SEER (Surveillance, Epidemiology, and End Results) program indicate that only about 1 percent of breast cancer patients were treated by radical mastectomy in 1983.

“Clearly, patterns of medical practice have been influenced by the results of clinical trials,” Dr. Devita said.

Breast cancer occurs in 119,000 American women each year. If the tumor has not spread (See BREAST CANCER, Page 11)
NIH Winners in Technical Publications Contest Announced


A panel of experienced and practicing communications professionals acted as judges and selected different levels of winners in each category.

Writing, editing, graphics, and integration were among weighted criteria scored. Emphasis was placed on audience definition, fitting the targeted audience, and achieving stated purpose.

Winners of Awards of Distinction and of Excellence in each category have been entered automatically in the STC International Publications Competition or the International Technical Art Competition, where they will compete against other regional winners for International Awards to be presented at the next International Technical Communications Conference, which will be held May 19-22, 1985, in Houston, Tex.

The NIH winners of the 1984 Technical Publications Contest are as follows:

- **Publications**: Brochures: Award of Excellence to Constance Raab, NIAID, for *Living with Epidermolysis Bullosa*: Award of Achievement to James Fordham, NIAID, for *Prevention and Treatment of Kidney Stones*.
- **Promotional Materials**: Two Awards of Achievement to Ronald Cowen, DRR Research Resources Information Center, for *Animal Models for Studying an Ancient Disease*; and Donald McKinistry, DRR Research Resources Information Center, for *Monkeys with Leprosy: Models for Studying an Ancient Disease*; and Edward Haugh, NIH, for *Cancer Treatment Symposia: Patterns of Failure After Cancer Treatment*.
- **Art**: Award of Merit to Anne McCarthy, NCI, for *Diabetes Mellitus—Trans/NIH Research*.
- **Whole Periodicals**: Award of Achievement to Staff, *Journal of the National Cancer Institute, NCI*, for *Cancer Treatment Reports*; and Edward Post, DRR Research Resources, *Research Resources Reporter*.
- **Trade/News Articles**: Award of Excellence to Ron Cowen, DRR Research Resources Information Center, for *Viruses Identified as Possible Cause of Simian AIDS*; Greg Freiherr, DRR Research Resources Information Center, for *Fertilization of Monkeys to Allow Testing of Human Birth Defects*; and Maureen Gardner, NICHD, for *Medical Update on the Pill*.

Smithsonian Offers Walking Tours Of NIH and Naval Command Hospital

The Smithsonian Resident Associate Program is offering a walking tour of the National Naval Medical Command's hospital, the NIH Clinical Center, and the National Library of Medicine.

The tour will be offered by Smithsonian five times on the following Saturday mornings:

Mar. 30, Apr. 6, 13, 20 and 27 between 10 a.m. and noon.

Nontechical Tour

The nontechical tour is designed for laypeople and will be led by Marilyn H. Paul. It will focus on the history and development of the three institutions with special emphasis on architectural and planning concepts. To cover administrative expenses, the Smithsonian will charge participants a small fee: members—$6; nonmembers—$8.

The meeting place is at the Naval Medical Center Metro stop. The program will begin at the Naval Medical Center flagpole and the group will spend approximately 20 minutes on NMC grounds. They will proceed to the NLM where they will stay 30 minutes. The third segment will take about 45 minutes and will encompass the rest of the NIH campus including the CC.

Tickets are required and the fee is non-refundable. Smithsonian requests no infants or children.

DID YOU KNOW?

R&W is a nonprofit organization. All income after expenses is utilized for additional activities and donations to the Patient Emergency Fund.
Prenatal X-rays May Increase Childhood Cancers in Twins

Children who were x-rayed in the uterus may have a higher than normal risk of developing childhood cancer, including leukemia, according to a National Cancer Institute study of twins.

The study, published in the Feb. 28 issue of the New England Journal of Medicine, analyzed data from a twin population born in Connecticut.

The investigators studied twins because they were often x-rayed to verify suspected twinship or to determine fetal position rather than for medical conditions that might have independently increased the risk of developing childhood cancer.

The use of prenatal x-rays has now been largely replaced by ultrasound.

The authors of the study, "Prenatal X-Ray Exposure and Childhood Cancer in Twins," are Dr. Elizabeth Harvey and Dr. John Boice of NCI's Radiation Epidemiology Branch; Dr. Merton Honeyman of the Connecticut Twin Registry, and John Flannery, of the Connecticut Tumor Registry.

The findings suggest that prenatal x-rays may increase the risk of childhood cancer. Scientists concluded that the twins with childhood cancers, including leukemia, were more than twice as likely as disease-free twins to have been x-rayed in the uterus.

The researchers matched a roster of 32,000 twins born in Connecticut between 1930 and 1969 with records from the Connecticut Tumor Registry. They found 31 individual twins with childhood cancer among this group. Each twin with cancer was matched with four twin controls by sex, year of birth, and race.

X-ray exposure was higher among children with cancer compared to those without cancer. Among the 31 individual twins who developed cancer, 99 percent received prenatal x-ray exposure; among the matched twins without cancer, 26 percent had been exposed. Hospital records were found for all 31 cases and 88 percent (109 of 124) of the controls.

Both groups of mothers received the same amount of nonabdominal x-rays during pregnancy, suggesting that the data collection activities were not biased in favor of obtaining more information on the twins who developed cancer.

Researchers with no prior knowledge of each child's condition obtained data on x-ray exposure by searching hospital, prenatal, and delivery records. They also interviewed medical record personnel, obstetric and radiology staff, and birth physicians.

Twins usually received more x-ray exposure during the mother's pregnancy than single fetuses. A physician may x-ray the abdomen of a mother who is larger than usual at a certain stage of pregnancy to see if she is carrying twins or to determine the positions of the fetuses in the uterus.

Previous studies of prenatal x-ray exposure and childhood cancer have been questioned because mothers of single births may have been x-rayed during pregnancy for other medical reasons possibly related to an increased risk of cancer for her unborn child.

Fetuses received an average dose of 1 rad, a measure of an absorbed dose of ionizing radiation. For this study, only abdominal x-rays were considered exposure that could directly affect the fetus.

Except for a series of spinal x-rays performed on one mother during the first trimester, all x-rays were done in the third trimester.

The scientists unexpectedly found that low birth weight slightly increased the risk of childhood cancer or leukemia.

In the twins used for this study, 38 percent of the twins with cancer versus 25 percent of the twins without cancer weighed under 5 pounds at birth.

Low birth weight, associated with such maternal habits as alcohol and cigarette consumption, has not been identified before as a risk factor for childhood cancer and this finding could have been due to chance.

Although this study suggests that prenatal x-ray exposure can increase the risk of childhood cancer, a 1970 study in Japan of individuals who were exposed to atomic bomb radiation during fetal development did not find an increase in cancer deaths.

Studies of medically exposed populations have shown an association between prenatal x-ray and childhood cancer, including leukemia.

A collaborative study between NCI's Radiation Epidemiology Branch and the National Institute of Environmental Health in Stockholm, Sweden, will try to clarify the issues raised by NCI's Connecticut research. This larger study of a twin population in Sweden will soon be under way.

About 6,000 new cases of childhood cancer will be diagnosed in the United States in 1985. Although it is rare as a childhood disease, it is the chief cause of death from disease in children ages 3 to 14.—Carol Trotman □

Tournament Opens Golf Season

The R&W Golf League opens its 1985 season Tuesday, Apr. 16, with the "Betty Sanders Open" at Falls Road Golf Course. Rain date will be Thursday, Apr. 18. This is a chance for new players to establish their handicaps and for league members to prepare for the opening of league play on Apr. 29.

There will be prizes for long drive on the par fives and closest to the pin on the par threes as well as low gross and low net. Call Ken Brown, 496-5974 for further information. □

“Bring a Friend”: April Theme Of CC Blood Bank Drive

April will be “Bring a Friend Month” at the Clinical Center's Blood Bank in the Department of Transfusion Medicine.

Everyone bringing or referring a donor to the Blood Bank will become eligible to receive two tickets to Godspell, compliments of Ford's Theatre.

May will be “New Donor Month.” All donors who have never given blood at NIH will become eligible to receive two complimentary passes to Busch Gardens.

Make a date to donate by calling 496-1048. And bring a friend. □

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First Large-Scale Health Factors Study 
Of Elderly Black Americans Funded by NIA

The first large-scale research study to look at medical, social, economic, environmental, and behavioral influences on the health of aging black Americans recently began at the Duke University Medical Center in Durham, North Carolina. The 6-year, multimillion dollar study is being funded by the National Institute on Aging.

Similar population studies have examined the relationship between environment and health in the elderly, but none have included a significant proportion of elderly black participants. At least half of the 4,500 elderly people in the Duke study will be black.

Certain diseases and risk factors are more prevalent among blacks than among whites, and blacks have higher mortality rates than do whites. Cardiovascular disease, hypertension and obesity, for example, are more common in blacks than in whites. Also, blacks are generally less likely to eat well balanced meals or to obtain some types of health services.

A major aim of the new study is to uncover any socioeconomic, behavioral, or physical factors underlying illness, use of health services, and death among elderly blacks. "We are particularly interested in finding ways to prevent illness or disability in older people," said NIA epidemiologist Mary Farmer.

Researchers will gather information on the age, sex, marital status, religion, education, occupation, and income of study participants. They will ask about family and social ties, physical and psychological well-being, dietary habits, use of medications, smoking and drinking, and chronic health problems.

They will also take a close look at the communities in which the participants live, noting the availability of churches, schools, stores, social networks, and health care providers.

Finally, the investigators will focus on some of the special health problems faced by elderly blacks. These include the relationship between kidney disease and hypertension; the relationship of diabetes to weight and body type; the association of sickle cell trait with disease; senile dementia; cancerous and precancerous skin lesions.

Also the relationship of bone density to diet, exercise, and estrogen use; vision and hearing problems, and patients' perceptions of the attitudes of doctors and other health professionals.

This study will take place during the next 6 years, with information being gathered at various intervals along the way. The investigators will thus have an opportunity to analyze the effects of any changes in life style, health, and a variety of other factors.

NIA scientists hope that this study of aging black Americans will expand the findings of NIA collaborative population studies currently under way in Iowa, East Boston, and New Haven, Connecticut.

Brain Cancers Are the Most Common in Nervous System, Fast-Growing Glioma Is the Most Common Brain Cancer

The nervous system consists of two anatomical parts: the central nervous system, which includes the brain and the spinal cord, and the peripheral nervous system. Cancers of the nervous system are of many different types and are classified according to tumor cell type and location. Nine out of ten nervous system cancers are brain cancers and the most common type of brain cancer, accounting for more than half of all adult brain cancers, is glioma, a fast-growing cancer usually located in the upper part of the brain.

Brain cancers occur at varying rates according to sex, race and age. Overall, the incidence of brain and other nervous system cancers is 6.3 cases per 100,000 population per year among U.S. men, and 4.4 among women. The annual U.S. death rate from nervous system cancers is 4.9 per 100,000 for men and 3.2 for women.

Except for meningiomas, a benign tumor of the membranes that surround the brain and spinal cord, men have a higher rate than do women of all types of benign and malignant nervous system tumors. These differences in incidence suggests a possible hormonal factor in the development of nervous system tumors.

In the United States, brain cancers occur most often among whites. Among white men, they occur at a rate of 6.7 per 100,000 and among white women, 4.6.

Among blacks, they occur at a rate of 4.2 per 100,000 for men and 2.7 for women. Whites develop gliomas more often than do blacks, while blacks more often develop meningiomas.

Brain cancer is the second most common type of cancer in children after leukemia and occurs most often in children under 10. In adults, brain cancers occur most often among workers in particular industries. Children have a higher incidence of medulloblastoma, a cancer that affects the part of the brain connected to the spinal cord. It accounts for almost a quarter of all childhood brain cancers, but less than 2 percent of adult brain cancers.

Little is known about the causes of brain cancers, although studies have linked them with occupational, environmental, viral and genetic factors.

Certain brain cancers appear to be more frequent among workers in particular industries. White men who worked in three oil refineries on the Texas Gulf Coast, for example, had a higher proportion of brain cancer deaths between 1943 and 1979 than did the general U.S. population.

Chemists, pharmaceutical workers, em­balmers, and workers in rubber manufactur­ing plants who are exposed to vinyl chloride also appear to have more brain cancer than the general population. Cattle and sheep ranchers, dairy farmers, and grain millers have also been found to have a greater proportion of brain cancer.

Brain cancers do not usually spread outside the central nervous system, but cancers from other sites may metastasize to the central nervous system. Breast cancer, for example, often spreads to the brain and spinal cord. Melanoma, and cancers of the kidney, and gastrointestinal tract may also metastasize to the brain.

For more information, call 1-800-4CANCER.
Annie Collins and Her ‘Special Sparkle’ Retire From NHLBI After 40 Years in Federal Service

Annie R. Collins, coordinator of Community Programs and Minority Concerns in the National Heart, Lung, and Blood Institute’s Health Education Branch since 1978, has retired after nearly 40 years of Federal service—36 of them with NIH.

Born in Surry County, Va. (“Never you mind when,” she cautions), Mrs. Collins earned her B.S. in chemistry at Morgan State in Baltimore. After graduation she started out as a research assistant at Johns Hopkins and the Army Chemical Center, then joined the NIH staff as a physical science aide with its clinical research unit at the USPHS Hospital in Baltimore.

In 1952, she transferred to the General Medicine Branch of NCI, where she worked as a biochemist until 1972, winning an Outstanding Performance Award along the way.

Subsequently, she worked for 2 years as a community relations specialist in the NIH Office of Personnel Management and then for 4 years as assistant program coordinator for the NHLBI High Blood Pressure Education Program before assuming the post that she held until her retirement.

Mrs. Collins coordinated a wide variety of activities directed at reducing and controlling the risk factors for cardiovascular and pulmonary diseases in minority populations. Her valuable contributions to the National High Blood Pressure Education Program earned her the NIH Director’s Award.

On campus, Mrs. Collins was an active participant in initiatives and programs concerned with equal employment opportunities and career enhancement opportunities for women in the NIH work force. Her many contributions earned her an award from the NIH Equal Employment Opportunity Council.

Off campus, she has taken part in numerous church, civic, and social activities concerned with bettering health, education, and housing in the community and with providing needed services to disadvantaged children and to the aged. Her outstanding service to the community earned her the HEW Volunteer Award in 1975.

A warm, outgoing woman with a fine sense of humor, Annie and her special sparkle will be missed by her coworkers and many friends at NIH. However, it is unlikely that her pace will slow down very much in retirement since, as most who know her would probably attest, when something worthwhile needs doing, she will be among the first to lend a hand toward getting it done.

Horseback Riding Weekend Planned for Apr. 27-28

R&W is planning a horseback riding weekend in West Virginia on Saturday, Apr. 27. Participants will meet at Cacapon State Park at 2 p.m. and begin a 3-hour trail ride up the Cacapon Mountain.

Dinner and breakfast will be served around a campfire at the top of the mountain. Open shelters will be available for sleeping with rest rooms nearby. Participants must wear hard-soled shoes and loose fitting clothing. Bring sleeping bag and personal gear.

Cost is $75, which does not include transportation, lunches or sleeping bags. Sign up at the R&W Activities Desk, Bldg. 31, Rm. B1W30.

Intensive English Class on Apr. 1

The Foundation for Advanced Education in the Sciences (FAES) will again offer an intensive course in Conversational English designed for speakers of languages other than English.

The class will meet Apr. 1 to 26, Monday through Thursday from 5:30 to 7 p.m.

Class tuition is $80 and a required textbook costs $9.95.

For further information, call 496-7976.

New NHLBI Program Provides Funds for Research Careers

The National Institute of Dental Research will make available $1.5 million during fiscal year 1985 for a new program to provide career development opportunities for dentists committed to pursuing a career in research.

Called the Dentist Scientist Award, the program provides participants the opportunity to undertake 5 years of intensive preparation for careers in oral health research. The course of study will include basic and clinical science components integrated with a supervised research experience.

Plans call for NIDR to provide support for 25 new participants each year. About 5 individual and 10 institutional program awards will be made this year, with each program award providing funds to support two persons annually.

By September 1989, the Institute expects to have 170 dentists at various stages in this research manpower development program, with funding at a level of $10 million. By then, about 25 graduates will be entering research each year.

NIDR now provides similar support for three awardees under the existing Physician Scientist Award Program which is open to dentists who will have completed at least 1 postgraduate year of clinical training by the time the award is made.

5 Years of Study

The Physician Scientist Award enables candidates to undertake up to 5 years of study in a basic science coupled with supervised research experience. The NIDR will continue to fund this program as well.

According to Dr. Harald Loe, NIDR Director, the Institute initiated the Dentist Scientist Award program to help alleviate the shortage of trained clinical investigators in the oral health field.

“While the decline in dentists supported annually for postdoctoral research training has been paralleled by declines among physicians and other health professionals entering research, young dentists have faced a unique problem in that advanced clinical training rarely provides compensation—and usually requires tuition payment,” Dr. Loe said.

Individual awards will be open to those with a dental degree who are U.S. citizens or non-citizen nationals of the U.S. Candidates must be nominated by a U.S. university, dental school, or comparable institution on the basis of their qualifications, interests, accomplishments, motivation, and potential for a research career.

Each Dentist Scientist Award is a 5-year nonrenewable grant. Candidates admitted to the program are expected to pursue 5 consecutive years of research career development on a fulltime basis. Compensation is based on the institution’s salary scale for an individual at an equivalent experience level.

Applications for the Dentist Scientist Award will be received by the NIH Division of Research Grants June 1 and Oct. 1.

For more information, contact Dr. Thomas M. Valega, special assistant for manpower development, Extramural Programs, NIH/NIDR, Westwood Bldg., Rm. 510, Bethesda, MD 20205, telephone (301) 496-7807.
Free Weight Loss Program Offered to NIH Employees

The Occupational Medical Service, in cooperation with the NIH Nutrition Coordinating Committee, is sponsoring a free 12-week weight reduction program for all NIH employees, starting Apr. 1.

The program will emphasize losing weight safely, using behavior modification techniques and nutritionally balanced diet. Employees will weigh themselves weekly at one of the locations listed below.

At the same time they will receive written material to assist them in learning new eating patterns to lose weight and keep it off. A variety of nutrition literature will also be provided.

Although employees will determine their individual diets, OMS staff will be available at the times and locations listed to review employee progress and provide counseling.

Sign-up sheets are available at the locations listed below. When you report to one of the OMS locations the first week of April, advise the staff that you are participating in the weight reduction program.

OMS recommends that you first check with your doctor before starting on a diet, particularly if you have a chronic medical problem (for example, diabetes mellitus, high blood pressure).

NINCS Advisory Council Adds Four New Members

Four new members have been appointed to the National Neurological and Communicative Disorders and Stroke Advisory Council.

Appointed for 4 year terms are: Dr. Charles D. Bluestone, director, department of otolaryngology, Children's Hospital of Pittsburgh; Deanie Lowe of Ormond Beach, Fla., a community volunteer concerned with problems of the hearing impaired; Dr. Isabelle Rapin, professor of neurology and pediatrics (neurology), Albert Einstein College of Medicine; and Dr. James T. Robertson, professor and chairman, department of neurosurgery, University of Tennessee Center for the Health Sciences.

Dr. Bluestone is an authority on otitis media, the most common childhood middle ear disease. As founder and head of the nation's largest otitis media clinical research center, he directs a broad research program aimed at finding better methods of diagnosis, treatment, and prevention.

Putting their heads together to review instructions are new NINCS Advisory Council members: (standing) Drs. Isabelle Rapin and James T. Robertson; (seated) Mrs. Deanie Lowe and Dr. Charles D. Bluestone.

His team conducts investigations ranging from basic biochemical studies in chinchillas to clinical trials examining the effectiveness of drug and surgical treatments in children.

In a 1982 study involving more than 600 infants and children, Dr. Bluestone and his colleagues reported that the standard use of decongestant and antihistamine therapy was no more effective than a placebo in treating otitis media with effusion.

He is a professor of otolaryngology at the University of Pittsburgh School of Medicine. He was previously director of the otolaryngology department at Boston City Hospital. He serves on the editorial boards of leading journals in his field and belongs to 16 professional and scientific societies. He received his M.D. from the University of Pittsburgh in 1953.

Mrs. Lowe is known in Florida for successful establishing a special telephone network for approximately 2,000 deaf people in Volusia County. Largely through her efforts, these people can now have access to emergency services, public libraries, the community college, and employment and rehabilitation agencies.

She has also been instrumental in persuading the state of Florida to pass legislation affecting the deaf: one bill she championed created the Florida Council for the Hearing Impaired, which oversees public services, health care, and educational opportunities for the deaf; another bill authorizes a screening program for detection and treatment of hearing impairments in infants.

Mrs. Lowe has received many honors, including the 1983 Golden Hand Award from the National Association of the Deaf.

Dr. Rapin, a leader in the field of behavioral neurology, studies the nervous system's involvement in learning and communication. Much of her research has centered on children with hearing loss and language disabilities, concerns she explored in her book "Children with Brain Dysfunction: Neurology, Cognition, Language, and Behavior.

Board certified in neurology as well as in neurology with special competence in child neurology, she has held important posts in professional societies. She is a former secretary general of the International Child Neurology Association and a past vice president of the American Neurological Association. She also belongs to the Child Neurology Society and the International Neuropsychology Society.

Dr. Robertson, an internationally known neurosurgeon, was among the first to specialize in studies of cerebrovascular disease and brain tumors. At the University of Tennessee, he directs one of 31 North American centers participating in an NINCDS-supported study to evaluate the effectiveness of extracranial/intracranial bypass surgery in stroke-prone patients. He has also studied the role of prostaglandins in the generation of blood vessel spasms after stroke.

Among the more than 70 scientific articles he has published are several reporting new surgical and metabolic therapies for brain tumors. He previously served the NINCDS on long-range planning committees and on a technical merit review committee that examined proposals for stroke clinical research centers.

A fellow of the American College of Surgeons, Dr. Robertson received his M.D. from the University of Tennessee in 1954. He has helped shape modern neurosurgery as secretary of the American Academy of Neurological Surgery, president of the Congress of Neurological Surgeons, and associate examiner on the American Board of Neurological Surgery.

The Council is an advisory group for the National Institute of Neurological and Communicative Disorders and Stroke. Members meet three times each year to review the applications of scientists seeking financial support for research and research training in disorders of the brain and nervous system, including disorders of speech, language, and hearing.

Visit Historic Monticello

R&W is planning a bus trip to visit Thomas Jefferson's home, Monticello, in Charlottesville, Va., on Apr. 27. Buses will leave Bldg. 31C at 8 a.m. and leave for the return trip at 4 p.m.

Also included is historic Michie Tavern, one of the oldest homesteads remaining in Virginia. The tavern contains one of the largest and finest collections of prerevolutionary furniture and artifacts.

Enjoy a buffet featuring typical dishes of the Colonial period, served in the 200-year-old converted slave house called 'The Ordinary.'

The last stop on the trip will be Ash Lawn, home of President James Monroe.

Cost for the trip is $29.50, including buffet luncheon and admission to all areas.

Ski Club Party Planned

The R&W Ski Club will hold an "End of the Season" party on Thursday, Apr. 4, from 7:30 to 11 p.m., at the FAES house (Old Georgetown Rd. and Cedar Lane). All members are invited to bring their slides or prints of this year's ski trips. Upcoming 1986 ski trips will be discussed and refreshments will be served.

Cost for members is $1; nonmembers $2. For further information contact Bob Bingaman, 496-5151.
Dr. Geo. Woolley, Genetics Researcher/Administrator, Retires From NIGMS After Long Scientific Career

Dr. George W. Woolley, health scientist administrator in the Genetics Program of the National Institute of General Medical Sciences, recently retired after 18 years of government service, all of them with NIGMS.

Dr. Woolley actually had two separate careers—one as a research scientist receiving grants and one with NIGMS administering them. In the former role, he pioneered research in endocrine cancer, general experimental chemotherapy, and genetics.

Dr. Fred Bergmann, director of the NIGMS Genetics Program, noted that, "Dr. Woolley's long career has spanned the rise of modern genomics from its modest beginning in the 1930s to the present."

Born in Osborne, Kans., Dr. Woolley received his B.S. degree from Iowa State University and his M.S. and Ph.D. degrees in genetics from the University of Wisconsin.

In 1936, he joined the Roscoe B. Jackson Memorial Laboratory as a research associate. From 1937 to 1949, Dr. Woolley was a member of the board of directors of the Jackson Laboratory; for 4 of those years, he served as the board's vice president.

In 1947, after a forest fire destroyed the laboratory in Bar Harbor, Me., Dr. Woolley took the position of assistant director and scientific administrator to help in the facility's restoration.

In 1948, while still on the staff of Jackson Laboratory, Dr. Woolley joined the Sloan-Kettering Institute for Cancer Research as a visiting associate.

He became a member of Sloan-Kettering in 1949 and continued his affiliation with the institution through 1986; during that time, he served successively as head of the Division of Steroid Biology, the Division of Human Tumor Experimental Chemistry, and the Division of Tumor Biology.

From 1951 to 1966, he was also chairman of the postdoctoral program and professor of biology in the Sloan-Kettering Division of the Graduate School of Medical Sciences at Cornell University Medical College.

During the 1960s, Dr. Woolley was a member of the Foreign Scholar Program Advisory Committee for New York. He also served on two committees of the Union International Contre le Cancer, Geneva: as chairman of the Committee on Introduction of New Species for Carcinogenicity Testing and as a member of the Expert Panel on Carcinogenicity, Cancer Research Commission.

In addition, he has been a member of the board of directors, American Association for Cancer Research, and a member of the Section on Biology, Committee on Growth, National Research Council.

Dr. Woolley is the author of more than 100 scientific papers. He holds membership in many professional societies, including the Genetics Society of America, the American Genetics Association, the American Society of Human Genetics, the American Association for Cancer Research, and the American Association of Anatomists.

He is a fellow of the New York Academy of Sciences and the American Association for the Advancement of Science.

Dr. Woolley's friends and coworkers honored him at a retirement party, where he was presented with a wallet and money so that he and his wife, Anne, could continue to enjoy evenings at the opera.

Orioles Tickets Available at R&W

R&W has available two box seats (located in the front row close to the dugout) for every home game to see the Baltimore Orioles. Because of the large demand for these tickets each member will be able to purchase one set of tickets only. After Apr. 1, you will be able to buy additional tickets for all games that are left on the schedule.

Tickets will be available at the Activities Desk, Bldg. 31, on Mar. 27 at 9 a.m. for $35.00 each. For further information call 496-4600.

Task Force Will Report On Birth-Related Brain Disorders

Clinical test results from two babies, each born after a long and unusually difficult labor, showed that both infants had suffered a lack of oxygen during delivery. Like most infants born after difficult labor and delivery, one of these babies will probably develop normally. The other infant, though, may suffer a neurologic handicap such as cerebral palsy, epilepsy or mental retardation.

Physicians have long believed that problems during birth that reduce the brain's supply of oxygen can place an infant at high risk for developing a neurologic disability. Yet, recent evidence shows that the neurologic health of any two babies who experience similarly difficult births may differ dramatically.

Why the difference? To identify factors that may account for the puzzling differences in the futures of these two infants, the National Institute of Child Health and Human Development and the National Institute of Neurological and Communicative Disorders and Stroke convened a group to review the current knowledge of pregnancy- and birth-related causes of neurologic disability in infants and children.

Findings Report

Their findings will appear in the report, Prenatal and Perinatal Factors Associated with Brain Disorders, to be released Apr. 8.

Recent advances in obstetric interventions such as the use of steroid hormones to treat respiratory distress in newborn, the use of cesarean birth for some breech and low birth weight babies, and the reduced use of obstetric forceps, have dramatically reduced the number of neurologic disabilities once blamed on physical injury that occurred during difficult labor and birth. Still, neurologic handicaps associated with neurologic dysfunction, are likely to develop neurologic handicap, and discuss ways to improve the outlook for newborns at high risk. Finally, they will identify directions for research in these areas.

The group—comprised of experts in pediatrics, epidemiology—will present its findings at a half-day conference to begin at 8:30 a.m. on Apr. 8, 1985 in Lister Hill Auditorium.

The conference will be open to everyone interested in attending; no advance registration is necessary. Copies of the report will be distributed at the conference. For more information phone 496-5133.—Leslie Fink

Don’t Leave Hot Plate Unattended.

Fire/Rescue Emergency Dial 116

Home is the place, when you have to go there, they have to take you in.—Robert Frost
Former Management Interns
Now Contract Specialists

Former NIH management interns Mary McGarvey and Elizabeth Moore are now contract specialists in the Research Contracts Branch (RCB) of NCI.

The management intern program, a year-long training ground for future managers, was initiated in 1956 and is directed by NIH’s Division of Personnel Management and administrative training committee. Applicants are recruited HHS-wide from all job classifications and are selected according to their educational background and leadership potential.

Ms. McGarvey holds a B.S. in biology from Shepherd College in West Virginia and is currently enrolled in a master’s program in general administration with a health track at the University of Maryland. She worked as a biologist at NCI, NINCS, and NIDR before entering the intern program. “It was a fascinating, terrific year,” she says.

Ms. Moore was a supervisory pharmacist at St. Elizabeth’s Hospital (part of the ADAMHA) before being selected for the management internship program.

She received her B.S. in pharmacy from the University of Georgia and an M.S. in administrative science from Johns Hopkins University. She says, “The program is very flexible and allows each individual to work independently in areas of primary interest.”

Ms. Moore completed special projects in budget, NICHOD, personnel, NICI, research contracts, NICI, and grants management, NEI. She also had a 2-week orientation in the Office for Protection from Research Risks.

Ms. McGarvey worked in the areas of general administration, NICI; grants and contracts, NHLBI; legislation, Office of the Assistant Secretary of Health; program planning, Office of the Director; and budget, NEI.

Both interns and assignment supervisors evaluate each segment of the training and various members of the administrative training committee act as mentors for each intern. The mentors and interns meet weekly.

Says John Campbell, chief of NCI’s Research Contract Branch: “The intern program provides exposure to various areas of the government and invaluable management experience for qualified personnel. Both women have great potential and enthusiasm for their work,” contract specialists, both Ms. Moore and Ms. McGarvey will be working closely with technical program staff. “Their science and management backgrounds will be a great asset in translating technical requirements into a business format,” says Mr. Campbell.

For more information about the NIH management intern program, contact Cynthia Howell at 496-6371, Bldg. 31, Rm. B2C31.

VISITING SCIENTISTS

1/18 Dr. Maria J.J. Andries, Belgium. Sponsor: Dr. George W. Lucier, Biometry and Risk Assessment Program, NIEHS, Research Triangle Park, N.C.
1/18 Dr. Anastasios Halkias, Greece. Sponsor: Dr. Merlyn M. Rodrigues, Laboratory of Ophthalmic Pathology, NEI, Bldg. 10, Rm. 10N112.
1/18 Dr. Toshiaki Watanabe, Japan. Sponsor: Dr. Robert Pratt, Experimental Teratogenesis Section, NIEHS, Research Triangle Park, N.C.
1/21 Dr. Mitsuura Kawaguchi, Japan. Sponsor: Dr. J. Terrell Holfield, Clinical Investigations and Patient Care Branch, NIDR, Bldg. 10, Rm. 1A01.
1/21 Dr. Katsunori Saitoh, Japan. Sponsor: Dr. Donald I. McRee, Laboratory of Behavioral and Neurological Toxicology, NIEHS, Research Triangle Park, N.C.
1/22 Dr. Alessandro Cama, Italy. Sponsor: Dr. Philip Gorden, Diabetes Branch, NIAID, Bldg. 10, Rm. 9N222.
1/22 Dr. Carlo Ferrarese, Italy. Sponsor: Dr. Erminio Costa, Laboratory of Preclinical Pharmacology, NIMH, W3E, St. Elizabeth’s Hospital.
1/22 Dr. Masayuki Miyazaki, Japan. Sponsor: Dr. Clarence J. Gibbs, Laboratory of Central Nervous System Studies, NINCS, Bldg. 36, Rm. 4A17.
1/22 Dr. Miriam Postan, Argentina. Sponsor: Dr. Juan Cordoba, Laboratory of Parasitic Diseases, NIAID, Bldg. 5, Rm. 113.
1/24 Dr. Jan S. Milecki, Poland. Sponsor: Dr. Josef Pitka, Laboratory of Cellular and Molecular Biology, NIA, Gerontology Research Center, Baltimore.
1/26 Dr. Flora de Pablo, Spain. Sponsor: Dr. Robert Simpson, Laboratory of Cellular and Developmental Biology, NIAID, Bldg. 6, Rm. B1-28.
1/26 Dr. Tadeusz Klopotowski, Poland. Sponsor: Dr. Max Gottesman, Laboratory of Molecular Biology, NICI, Bldg. 37, Rm. 4C28.
1/26 Dr. Bernadetta Nardelli, Italy. Sponsor: Dr. Maehaql G. Mage, Laboratory of Biochemistry, NCI, Bldg. 37, Rm. 4C28.
1/29 Dr. Raymond Dumont, Switzerland. Sponsor: Dr. Arnold Brossi, Laboratory of Chemistry, NIAID, Bldg. 9, Rm. 135.
1/29 Dr. Michael Unser, West Germany. Sponsor: Dr. Murray Eden, Biomedical and Engineering and Instrumentation Branch, DRS, Bldg. 13, Rm. 3W13.
1/30 Dr. Giorgio Fassina, Italy. Sponsor: Dr. Bruce Weintraub, Clinical Endocrinology Branch, NIAID, Bldg. 10, Rm. 1A01.
2/1 Dr. Sandep Jain, India. Sponsor: Dr. Muriel I. Kaiser-Kupfer, Ophthalmic Genetics and Pediatrics Ophthalmology, NEI, Bldg. 10, Rm. 12S235.
2/1 Dr. Shuji Kitagawa, Japan. Sponsor: Dr. Ira Pastan, Laboratory of Molecular Biology, NCI, Bldg. 37, Rm. 4B27.
2/1 Dr. Hyun-Sook Lee, Korea. Sponsor: Dr. Reed Wickner, Laboratory of Biochemical Pharmacology, NIAID, Bldg. 4, Rm. 103.
2/1 Dr. Marek Lisowski, Poland. Sponsor: Dr. Hiroshi Taniuchi, Laboratory of Chemical Biology, NIAID, Bldg. 10, Rm. 9N313.
2/1 Dr. Donald E.R. Meyers, Australia. Sponsor: Dr. Robert E. Burke, Laboratory of Neural Control, NINCS, Bldg. 36, Rm. 5A29.
2/1 Dr. Kevan Roberts, United Kingdom. Sponsor: Dr. S.A. Rosenberg, Surgery Branch, NCI, Bldg. 10, Rm. 2B42.
2/1 Dr. Sachihiro Yamada, Japan. Sponsor: Dr. John Ortskold, Natural Immunity Section, NCI, FCFR, Bldg. 50, Rm. 10N112.
2/1 Dr. Zhang You-xun, China. Sponsor: Dr. John L. Swanson, Laboratory of Microbial Structure and Function, NIAID, Hamilton, Mont.
2/3 Dr. Roberto DiLauro, Italy. Sponsor: Dr. Maxine Singer, Laboratory of Biochemistry, NCI, Bldg. 37, Rm. 4E28.
2/4 Dr. Mark Bassette, Australia. Sponsor: Dr. E.A. Jones, Digestive Diseases Branch, NIAID, Bldg. 10, Rm. 4D52.
2/5 Dr. Tamiko Takemura, Japan. Sponsor: Dr. Victor Ferrans, Pathology Branch, NHLBI, Bldg. 10, Rm. 7N208.
2/6 Dr. Michael Kirschlink, West Germany. Sponsor: Dr. Tibor Borsos, Laboratory of Immunobiology, NCI, FCFR, Bldg. 50, Rm. 12-71, Freedenck, Md.
2/6 Dr. C. Birger Trottors, Sweden. Sponsor: Dr. Ronald Sekura, Laboratory of Developmental and Molecular Immunology, NICHOD, Bldg. 10, Rm. 8N315.
2/12 Dr. James Martin Staddon, United Kingdom. Sponsor: Dr. Richard Hansford, GRC, Baltimore.
2/13 Dr. D. Dvorak, Laboratory of Adaptive Immunity, NHLBI, Bldg. 10, Rm. 10N262.
2/15 Dr. Gunhild Kestermann, West Germany. Sponsor: Dr. Stephen J. Suomi, Laboratory of Comparative Ethology, NICHOD, Bldg. 31, Rm. B2B15.
2/15 Dr. Alexander Kiss, Czechoslovakia. Sponsor: Dr. Steven Paul, Clinical Neurosciences Branch, NIMH, Bldg. 10, Rm. 4N214.
2/19 Dr. Kryzysztof Bankiewicz, Poland. Sponsor: Dr. Irwin J. Kopin, Surgical Neurology Branch, NINCS, Bldg. 10, Rm. 5N214.
2/19 Dr. Ales Merta, Czechoslovakia. Sponsor: Dr. Giulio Cantoni, Laboratory of General and Comparative Biochemistry, NIMH, Bldg. 36, Rm. 3D06.
2/19 Mrs. Michiyo Mizuuchi, Japan. Sponsor: Dr. Martin Gellert, Laboratory of Molecular Biology, NIAID, Bldg. 2, Rm. 322.
2/19 Dr. Gabriele Panza, Italy. Sponsor: Dr. Walter Lovenberg, Hypertension-Endocrine Branch, NHLBI, Bldg. 10, Rm. 7N262.
2/19 Dr. David Shinar, Israel. Sponsor: Dr. Selma Kunitz, Biometry and Field Studies Branch, NINCS, Bldg. 10, Rm. 5N214.
2/19 Dr. Chang Sulie, China. Sponsor: Dr. Martin Flavin, Laboratory of Cell Biology, NHLBI, Bldg. 3, Rm. 125.
2/20 Dr. Wang Jiafang, China. Sponsor: Dr. Mathew Rechter, Laboratory of Biochemical Pharmacology, NIAID, Bldg. 4, Rm. B1-14.

NIH Tennis Club Sponsors

The NIH Tennis Club will sponsor two teams in this year’s Greater Washington Tennis Association Interclub League.

The teams will play singles and doubles matches on Sunday mornings, beginning June 2, and extending through mid-August, at local clubs and schools as well as the NIH courts.

Tennis club membership applications are available at the R&W Activities Desk, Bldg. 31 Rm. B1W30. Dues are $1.

For further information call Herb Dorsey, after 6 p.m., at 530-0378.
Bladder and Kidney Cancer Rank 6th and 11th: Cigarette Smoking Big Risk Factor in Both

Urinary tract cancers account for 9 percent of the new cancer cases diagnosed each year in men and 4 percent in women. The two most common cancers of the urinary tract are bladder cancer and kidney cancer. The estimated 38,500 cases of bladder cancer that Americans developed in 1983 made it the 6th most common cancer in this country. Kidney cancer, estimated to occur in 18,200 Americans in 1983, ranks 11th in cancer incidence.

Bladder Cancer

In the United States, bladder cancer is primarily a disease of white men over age 65. The incidence of 27 cases per 100,000 population among white men is twice that of bladder cancer among nonwhite men. There is little racial difference in the rate among women, who develop bladder cancer less than a third as often as men do.

From the late 1940s to the early 1970s, bladder cancer declined 21 percent for white men and 29 percent among women, while at the same time it increased 24 percent for white men and doubled for nonwhite men.

Bladder cancer occurs most often in the United States and Europe, while low rates prevail in Asia. The most important known risk factor for bladder cancer is cigarette smoking. Cigarette smokers develop bladder cancer two to three times more often than nonsmokers, and areas in the U.S. where cigarette sales are high also have high death rates for bladder cancer.

Although early studies showed a possible link between bladder cancer and coffee drinking, recent studies based on large numbers of individuals found little or no increase in bladder cancer incidence among coffee drinkers compared with those who do not drink coffee.

Other factors that may contribute to the development of bladder cancer are bladder infection with the parasitic fluke Schistosoma haematobium, treatment with the anticancer drug chlorambucil or cyclophosphamide and long-term use of pain killers containing the drug phenacetin.

Kidney Cancer

About 85 percent of the kidney cancers diagnosed in this country are renal cell cancers. Cancer of the renal pelvis, the inner part of the kidney connected to the ureter, accounts for most of the remaining 15 percent.

The current rate for renal cell cancer among white men, 9.4 cases per 100,000 population, is nearly the same as for black men, 8.7 per 100,000. Renal cell cancer occurs twice as often in men as it does in women, and develops most often in people of either sex over age 60.

Worldwide, the incidence of kidney cancer is high in North America and low in Asia. Smoking is estimated to be responsible for about 40 percent of the bladder cancers among men and 29 percent among women. As early as 1895, workers in the dyestuffs and leather industry also had an increased risk of developing bladder cancer.

The possible risk of bladder cancer associated with widely used artificial sweeteners received much attention when the Food and Drug Administration removed cyclamates from the market in 1969. It was later reported that the sweetener saccharin caused bladder cancer in male laboratory rats when the animals were exposed to the chemical before birth.

But, recent epidemiological studies show that, overall, people who use artificial sweeteners do not appear to have a higher incidence of bladder cancer than nonsusers.

As with bladder cancer, cigarette smoking is the most important known risk factor for kidney cancer. Smokers are twice as likely to develop kidney cancer as nonsmokers. One estimate is that 30 percent of kidney cancers in men and 24 percent in women are caused by cigarette smoking.

Risk Factors Among Women

Among women, obesity, or factors associated with it, appears to be a risk factor for kidney cancer. Because adipose (fat) tissue can convert other hormones into estrogen, obese women may have high levels of this hormone and the higher-than-expected incidence of kidney cancer among obese women could be due to excess estrogen levels.

There have been few studies of occupational risk factors for kidney cancer. Workers exposed to insulation fibers such as asbestos and workers in the petroleum industry show an elevated rate of kidney cancer.

Although cancer of the renal pelvis is a fairly rare form of kidney cancer, one study reported that approximately 82 percent of the cases among men and 61 percent among women could be prevented if people stopped smoking.

Other factors that may increase the risk of cancer of the renal pelvis are the long-term use of pain relievers containing phenacetin or acetaminophen.

For more information, call 1-800-4 CANCER, □
Sexually active women should be tested at least once a year for a disease called chlamydia, a medical expert said at a major symposium on infectious diseases cosponsored by the National Institute of Allergy and Infectious Diseases and Hoffman-La Roche, Inc.

While chlamydia is not a well-known disease, 3 to 5 million new infections are diagnosed annually in the U.S., which makes it more common than gonorrhea and syphilis combined, said Dr. H. Hunter Handsfield.

Dr. Handsfield, director of the Sexually Transmitted Disease Program at the Seattle-King County Department of Public Health, said that chlamydial infections often cause no symptoms and women may have normal physical exams—until complications develop.

The complications of chlamydial infections include pelvic inflammatory disease, infertility, miscarriage, premature labor and infections of newborns.

Because there may be no symptoms, Dr. Handsfield said, "most chlamydial infections in women are not diagnosed unless a laboratory test for chlamydia is done." He said most studies show that 5 to 20 percent of women ages 15 to 35 attending prenatal family planning or adolescent health care clinics have been found to be infected with the disease.

The highest risk group is sexually active adolescents, he added.

Dr. Handsfield was part of a medical panel of experts who spoke on sexually transmitted diseases at a symposium entitled, "The Volatile World of Man and Microbes."

Chlamydia is one of the most important health problems facing Americans today, Dr. Handsfield said. While the infection can occur in both men and women, its complications are more frequent, more severe and longer lasting in women.

There are up to a million cases of pelvic inflammatory disease per year in the U.S. he added, of which up to half are caused by chlamydia. Ten to 20 percent of all such cases, he said, result in infertility due to tubal obstruction.

In men, the infection most commonly causes urethritis, an apparently mild infection of the urine passage, he said.

Many health authorities, Dr. Handsfield said, advise sexually active women to be tested for chlamydia at least once a year, especially those under 35.

Until recently, he added, detection of this infection had been expensive and tests offered by only a few labs. Recent advances have resulted in chlamydia tests becoming more widely available at reasonable cost, noted Dr. Handsfield. Once diagnosed, these infections can be treated with tetracycline or other antibiotics.

Other panel discussions focused on the problems, their needs, and their views of how we can work more closely together.

Dr. Loe affirmed that the NIDR stands ready to assist any dental school interested in enhancing its research capability. He noted that a greater number of dental schools are seeking and have been successful in obtaining NIDR support over the last decade.

NIDR staff provided an overview of the Institute's Intramural Research Program, Extramural Program, and Epidemiology and Oral Disease Prevention Program.

Grant mechanisms were discussed, as well as opportunities at the NIDR for training and career development for university dental faculty, graduates, and students.

The Directors of the National Institute of General Medical Sciences and the Division of Research Resources and the chief of the International Award Branch of the Fogarty International Center outlined opportunities for support from their respective organizations.

According to Dr. Harald Loe, NIDR Director, the meeting helped communicate to dental schools and research institutions "that we have opportunities for them to become involved in NIDR and NIH-supported research.

"Not only did the deans gain a better appreciation of our resources, interests, and priorities, but we learned from them about their problems, their needs, and their views of how we can work more closely together."

The third annual Marjorie Guthrie Lecture in Genetics will be presented Tuesday, Apr. 2, at 8:15 p.m. in NIH's Masur Auditorium. Dr. Joseph B. Martin, Julianne Dorn professor of neurology at Harvard Medical School, will present the lecture entitled "Recent Studies of Huntington's Disease." The public is invited to attend.

Additional products review information is available by calling 258-2341.
Dr. Bennett, who joined NIAID in 1981, was recently honored for his dedication and contribution to minority concerns in medical education by the Association of American Medical Colleges.

Dr. William E. Bennett, chief of Research Manpower Development Staff, NIAID, was recently presented the GSA-MSA Award (Group on Student Affairs and Minority Affairs Section) by the Association of American Medical Colleges at its 95th annual meeting in Chicago.

He was honored for "his many years of dedication and contribution to minority concerns in medical education." The GSA-MSA awards are given annually to individuals who have made significant contributions to medical education in the U.S.

Dr. Bennett began his government career as chief, Immunopathology Section, Fort Detrick, and in 1980 came to NIH as a grants associate. He later joined the Health Resources Administration as chief of educational development and international activities and as chief of institutional resources.

In the latter position, he engaged in development of curricula for medical students as well as in opening of new medical schools—among which was the School of Medicine at Morehouse College in Atlanta, Ga.

In honor of his contributions toward improving the health manpower and services of the Nation, Dr. Bennett received an honorary degree of doctor of science from Morehouse College in 1980.

Earlier, Dr. Bennett was selected by the Public Health Service to receive its Special Recognition Award for his role in improving equity in health care for the American people.

Training Services Program Holds Open House, Mar. 29

The NIH Training and Development Services Program will hold an Open House on Friday, Mar. 29, from 3:15 to 5 p.m., in Bldg. 31, Rm. B2C17.

A tour of classrooms, office space, and learning lab will be provided.

The training and development services program began in January 1985. It provides courses through Montgomery College to eligible NIH employees to increase job performance skills.

For further information call 496-6211.

BREAST CANCER

(Continued from Page 1)

out of the breast, it can be treated by surgery and radiation therapy. When the cancer has spread outside the breast, chemotherapy or other systemic treatments are added.

Because breast cancer is a chronic disease that can recur many years after the initial tumor is found, long-term followup is important for breast cancer patients and for evaluating results of clinical trials.

The NSABP's segmental mastectomy study, begun in 1976, analyzed 1,843 patients with early (stage I and II) breast cancers that were 4 centimeters or less in size. For a patient to be eligible it was required that the breast be large enough and the tumor be so located that after removal, the cosmetic result would be acceptable.

The 1,843 patients were randomly assigned to one of three treatment groups:

- Total mastectomy (complete removal of the breast).
- Segmental mastectomy (removal of the cancerous lump and a margin of surrounding tissue free of tumor).
- Segmental mastectomy followed by external radiation to the breast.

In all three groups, the underarm lymph nodes were removed to determine if cancer cells had spread there. If they contained cancer, the women received chemotherapy (melphalan and fluorouracil).

In the two segmental mastectomy groups, if the surrounding tissue was not tumor-free at initial surgery, these patients received a total mastectomy at once. (Ten percent of patients fell in this group.) If cancer recurred in the operated breast, a total mastectomy was then performed.

There was a 28 percent local breast tissue recurrence rate in the group receiving segmental mastectomy alone, and 8 percent recurrence in the group receiving segmental mastectomy plus radiation. (Recurrences of tumor in the chest wall and operative scar, but not in remaining breast tissue, were classified as local treatment failures.)

For purposes of this study, it was necessary to count local recurrences in the breast tissue itself as cosmetic, not treatment, failures in order to make parallel comparisons with the total mastectomy group.

The 1,843 patients in the study have now been analyzed with average followup of 39 months.

Major findings of the study include:

- Preservation of the breast with or without radiation has not resulted in an increased recurrence of cancer in the area of the breast or elsewhere, or reduced patients' survival at 5 years. These findings will continue to be followed over time.
- External radiation inhibits recurrence of tumors in the breast with segmental mastectomy; 92.3 percent of patients with segmental mastectomy and radiation remain free of tumor in the breast at 5 years compared to 72.1 percent of those receiving no radiation.

In patients with positive lymph nodes, 97.9 percent of those without radiation remained tumor free, although both received the same chemotherapy.

Fewer tumors recurred in the breast after segmental mastectomy and radiation in patients with positive lymph nodes who got chemotherapy than in negative-node patients who did not receive chemotherapy. This suggests the two therapies may be additive or synergistic.

This latest study was the outgrowth of an earlier NSABP trial (also reported in the New England Journal of Medicine Mar. 18 and supported by NCI) that compared treatment with radical mastectomy to total mastectomy with and without radiation.

The earlier landmark study began in 1971 amid a medical controversy over whether radical mastectomy or total mastectomy resulted in better survival rates.

Basic findings of the earlier study were:

- With patients who had the signs of cancer in the lymph nodes, treatment results did not significantly differ whether the patient was treated by radical mastectomy, total mastectomy alone, or by total mastectomy plus radiation to the chest and lymph nodes. Patient survival rate over 2 years was 57 percent for all three groups.
- There were also no significant differences of outcome when the patient had cancer-positive lymph nodes, whether radical mastectomy or total mastectomy with radiation to chest and nodes was used. The survival rate in both groups was 38 percent.

Barbershop Chorus Concert

The "Knights of Harmony," Barbershop Harmony Singers, Bowie, Md., will present its 14th annual show on Friday, Apr. 12 and Saturday, Apr. 13 in the Queen Anne's auditorium at Prince George's Community College in Largo, Md. The theme will be Vaudeville Knights.

Admission prices will be $5.50 for general admission (reg. price $6) and $3.50 for seniors and students (reg. price $4).

Tickets are available at the R&W Activities Desk, Bldg. 31 and the Westwood R&W Gift Shop.
Can Vitamins Prevent Malformations of Brain and Spine?

NICHD-Initiated Study of NTD Will Search for Answer

By Patricia Blessing

Can vitamin supplements taken around the time of conception reduce a woman's risk of having a child with a neural tube defect (NTD)? To find out, the National Institute of Child Health and Human Development has initiated a study to be conducted by Dr. Joe Leigh Simpson at Northwestern University Medical School in Chicago, and Dr. George Cunningham at the California Public Health Foundation in Berkeley. The researchers expect about 1,500 women from the two states to participate in the 3-year study.

NTDs occur about once in every 1,000 births in the United States. Infants born with NTDs suffer serious malformations of their brain and spinal cord. About half of these infants do not survive the newborn period and of those that do, most suffer some paralysis and many are mentally retarded.

Several years ago, researchers in the United Kingdom suggested that women taking vitamins around conception may decrease their risk of having a second child with an NTD. To see if vitamin use could also lower the risk of women having a first child with an NTD, the U.S. investigators will use hospital birth records to locate new mothers of infants born with NTDs. They will then see "whether women who had NTD babies were less likely to use vitamins than women who did not have NTD babies," according to Dr. James Mills, NICHD's project officer for the study.

Vitamins at Conception

The researchers will compare vitamin use around the time of conception in mothers of children with NTDs to two other groups of women. One group will consist of mothers of infants with another type of birth defect not linked with vitamin use such as a congenital heart defect or a kidney defect. The second group will consist of women who delivered a normal child. To find out about the women's vitamin use, the researchers will interview women by telephone within 4 months after the end of pregnancy. The women will be asked if they took vitamin supplements during the first month of pregnancy.

Because of the carry-over effect of many vitamins, the women will also be asked about their vitamin intake and dietary habits several months before they became pregnant. The researchers will examine other factors associated with NTDs such as the women's social class, whether they were concerned about their health when pregnant, and their family history of NTDs. Women who already have a child with an NTD face a greater risk of the defect occurring in another pregnancy. But more than 90 percent of infants with NTD are born to mothers who have not previously had an affected child.

Three Types of Defects

During the first weeks of gestation, a structure called the neural plate folds to form the neural tube. The neural plate is like the seed of the developing central nervous system, forming the foundation for the brain and spinal cord. Normally, the neural tube closes by the fourth week of embryonic development. If the tube fails to close, three types of defects can occur: anencephaly, spina bifida, or encephalocele.

If the top of the tube fails to close, the infant is born with anencephaly, a condition where almost all of the brain is missing. About half of NTDs result in anencephaly and these babies cannot survive.

Failure to close farther down the tube causes spina bifida, a condition in which part of the baby's spinal cord may be exposed. Encephalocele occurs when part of the brain protrudes through the infant's skull.

The location of the opening along the spinal tract and the amount of damage incurred by the brain or spinal cord dictates the extent of physical and mental handicaps facing a child with an NTD.

Rarely these children have only minor physical problems. More commonly, they have no bladder or bowel control and many are paralyzed below the waist. Many of these children develop hydrocephalus, a condition in which fluid accumulates within the brain, often resulting in mental retardation.

"This study will tell us if there is a link between vitamin use and NTDs," said Dr. Mills. "If vitamins do offer some protection, then many NTDs may be preventable."

NIGMS-Supported Scientists Get Nat'l Medals of Science

Three researchers who have been supported by the NIGMS—Drs. Paul Berg and Richard Zare of Stanford University and Dr. Roald Hoffmann of Cornell University—were among the 19 scientists recently awarded the National Medal of Science by President Ronald Reagan. Drs. Berg and Zare are also currently supported by the National Cancer Institute.

Dr. Berg, who won the 1980 Nobel Prize in chemistry, is especially noted for his pioneering work in recombinant DNA techniques. This technology, in which DNA from one species can be spliced into the DNA of another, is now being used both to manufacture useful products like human insulin and to study many aspects of genetics.

Another Nobel Prize winner in chemistry (1961), Dr. Hoffmann is noted for his theoretical studies which have led to practical rules for understanding an entire set of chemical reactions. Dr. Zare is known for his use of laser technology to study simple chemical reactions. His research has helped form a theoretical basis for understanding these reactions.

The National Medal of Science, first given by President Kennedy in 1962, has been awarded nearly every year since. Scientists honored by this award—there can be up to 20 given each year—receive a large bronze medal, a miniature medal in the form of a gold lapel pin, and a certificate signed by the President. The awards are presented in a ceremony at the White House. []

A good scare is worth more to a man than good advice.—E. W. Howe

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