

The NIH Record

Policy for Protection Of Human Subjects Nearing Completion

In December 1986, the Interagency Human Subjects Coordinating Committee convened an implementation workshop to discuss the Federal model policy for the protection of human subjects in research. The committee, chaired by Dr. Charles R. McCarthy, director, NIH Office for Protection from Research Risks, is nearing completion of the recommended policy based on the regulations of the Department of Health and Human Services.

Dr. James B. Wyngaarden, NIH Director, addressed the workshop and said, "Now come a series of key decisions that will make the difference in how well the policy works. As bureaucrats, we all acknowledge that policy can be formulated; and regulations promulgated; but the expertise; directives; procedures; documents; administrative systems; and horizontal and vertical, internal and external communications will determine the success or failure of an endeavor of this scope."

A goal of the committee is to develop a

(See **HUMAN SUBJECTS**, Page 8)

Lasers Save Sight



The laser is proving to be a valuable weapon in our Nation's fight against blinding eye disease. National Eye Institute clinical trials showing that treatment with a laser can save sight are described in a new exhibit featuring photographs of the inside of the human eye. The exhibit will be on display throughout the month of January as part of the NEI's observance of the NIH Centennial. It is located in the ACRF visitors waiting area on the first floor of the Clinical Center.

Dr. Berry To Speak at NIH, Jan. 16 In Honor of Dr. Martin Luther King, Jr.

NIH is sponsoring a program in commemoration of the birth, life, and legacy of Dr. Martin Luther King, Jr., on Friday, Jan. 16, 11:30 a.m. to 1:00 p.m., in the CC Masur Auditorium. The theme of this year's program will be "Keeping the Dream Alive."

The program will feature Dr. Mary Frances Berry, a commissioner on the U.S. Commission on Civil Rights, where she served as vice-chairperson from 1980 to 1982. She is a professor of history and law on the faculty of Howard University and a senior fellow in the Institute for the Study of Educational Policy.

Background Noted

Prior to joining the faculty of Howard University, she served as the Assistant Secretary for Education, Office of Education, in the Department of Health, Education and Welfare from 1977 to 1980. Dr. Berry has also served as a faculty member at Central Michigan University, Eastern Michigan University, University of Michigan, University of Maryland and the University of Colorado.

She has authored four books on constitutional history and civil rights law, and has been a recipient of the Roy Wilkins Civil Rights Award.

Following the keynote address, a local choir will provide musical entertainment.

The program is being sponsored by the NIH Division of Equal Opportunity and its 1987 Black History Planning Committee. For further information, contact James S. Alexander on 496-1584. □



Dr. Berry will be the keynote speaker at NIH's program honoring Dr. Martin Luther King, Jr. on Jan. 16.

Scientists Describe Approach to Produce Monoclonal Antibodies

A new approach for producing human monoclonal antibodies in the test tube was described by scientists from the National Institute of Dental Research in the Oct. 24 issue of *Science*. Monoclonal antibodies have gained worldwide attention as diagnostic tools and as a potential agent for treating disease.

Antibodies are made by B lymphocytes—white blood cells—which are readily available in human blood and which produce different types of antibodies. These substances, known as antigens, can be present on bacteria, toxins, viruses, tumor cells, proteins, or even normal cells. Each B lymphocyte makes only one type of antibody aimed at one antigen. Antibodies produced to the body's own tissues are called autoantibodies.

Scientists have long wanted to produce large quantities of antibodies in the test tube that would be free of other contaminating proteins. In particular, they wanted to produce monoclonal antibodies—antibodies derived from a single lymphocyte and identical copies of that lymphocyte produced by cloning. Such antibodies would be molecularly identical.

Ordinarily, B lymphocytes, that make anti-

(See **ANTIBODIES**, Page 8)

CFC Reaches 100% Of Dollar Goal

NIH has reached its 100 percent dollar goal and achieved over 63 percent employee participation for the 1987 Combined Federal Campaign! This landmark—never before achieved—occurred only 6 weeks after the start of the 1987 NIH CFC campaign in October.

Don Newman, HHS Under Secretary, and Dr. James B. Wyngaarden, NIH Director, will present CFC awards to many of the BIDs to acknowledge the enthusiastic support and dedication of the NIH CFC coordinators, deputy coordinators, keyworkers and many supporting units. A victory celebration will be held Thursday, Jan. 29, in the ACRF Amphitheater, Bldg. 10 at 11 a.m. A reception will follow immediately outside the amphitheater.

TRAINING TIPS

The NIH Training Center of the Division of Personnel Management offers the following:

Courses and Programs	Dates
<i>Management and Supervisory 496-6371</i>	
Effective Presentation Skills	1/20-22
Managing Stress	1/13&1/15
Introduction to Supervision	1/26-30
Positive Influence & Negotiation	2/11-13
Federal Budget Process	2/25-27
Report Writing	2/17-19
Why Can't They Hear Me?	2/4-5
Pragmatic Problem Solving	1/14

Office Skills 496-6211

Leadership Skills for Secretaries	1/14-16
Effective Writing for Secretaries	1/5-13
Proofreading and Editing	1/12-2/18
Medical Terminology II	4/7-6/11

Special Programs 496-6211

TDSP Orientation
Jan. 14 11:30-1:00 Bldg. 31/B2C07

Adult Education 496-6211

Training and Development Services Program
Continuous Availability

SHARE TRAINING: An online catalog is available by accessing WYLBUR. Enter SHARE TRAINING. First time users only, enter: x fr &agsAGS2.@@@share(setup) on file 37

OMS Has First Aid Kits Available For Hydrofluoric Acid Burns

Hydrofluoric Acid (HF) is extremely corrosive as a gas or liquid. Once it has contaminated the skin or mucous membranes, it acts by coagulating protein and can continue to cause damage as it diffuses into the tissues.

A new approach to worksite emergency first aid treatment for NIH users of HF is now available through the Occupational Medical Service.

Emergency first aid measures for HF at the worksite include: (1) Immediate washing of the affected areas with water for 5-10 minutes; (2) Application of a calcium gluconate gel to help in binding the fluoride ion to limit tissue damage (to be used only on skin and not in eyes). OMS has prepared first aid kits with 2.5% calcium gluconate gel and instructions for emergency treatment of HF burns.

After initiating the above first aid measures, employees accidentally exposed to HF should be seen promptly at the OMS Clinic (6th floor ACRF; hours: 8 a.m.-12:30 a.m. weekdays) or be transported to the Suburban Hospital emergency room (weekends, holidays) for further evaluation and treatment.

Those interested in stocking the HF burn kit should contact the OMS triage nurse, 496-4411. □



Dr. Anthony S. Fauci, NIAID Director (c), recently presented NIH Merit Awards to the group shown above. The awards were given "in recognition of significant scientific research or administrative support efforts which have contributed substantially to the accomplishment of NIAID's major mission." Seated, l to r are: Toni Sutherland, contracting officer in the Contract Management Branch, Extramural Activities Program (EAP); Jo Ann P. Stesney, assistant to the director, EAP; Dr. Fauci; Mary Ann Anerino, administrative officer in the Intramural Research Program (IRP); and Dr. Judith Massicot, former program officer in the Asthma and Allergy Branch of the Immunology, Allergic and Immunologic Diseases Program. Standing, l to r are: Dr. Darrel Gwinn, health service administrator in the Bacteriology and Virology Branch of the Microbiology and Infectious Diseases Program (MIDP); Minnie Kahn, former grants technical assistant in EAP's Program and Project Review Branch, now retired; and Patricia S. Randall, chief, Office of Research Reporting and Public Response. Not shown are Dr. David Klein, Development and Applications Branch, MIDP; and Sandra Elizabeth Higgins formerly with the Laboratory of Immunoregulation, IRP.

Series of Lectures Scheduled

The Medical Scientists Committee, affiliated with Amnesty International plans the following series of lectures:

Jan. 15. Professor Richard Claude. "Health Professionals' Contribution to Human Rights in the Philippines," based on a AAAS sponsored fact finding tour of July 1986.

Feb. 19. Veronica De Negri. "Chile" (jointly sponsored by FAES).

Mar. 19. Dr. Lev Goldfarb, visiting scientist, former Refusnik. "Refusnik Scientists."

All lectures will be given in the Visitor Information Center Little Theater on Thursdays from 12:30 to 1:30 p.m. □

For additional information, contact Dr. Patricia McKinley, 496-9285.

R&W Singers Need Voices

The NIH/R&W Singers are recruiting singers for the spring season. Rehearsals are held Monday evenings at NIH. Interested singers may come to the first rehearsal, 7:30 p.m., Monday, Jan. 26 in Masur Auditorium or call Margaret Foster at 496-2749 for additional information. □

Premenstrual Study Planned

The Unit on Peptide Studies, Biological Psychiatry Branch, NIMH, is looking for subjects who would like to participate as patients or normal volunteers in a series of studies of premenstrual syndrome.

Participants needed are women between 20 and 45 years, in good health, and taking no medications including oral contraceptives. Evaluation of mood in relation to menstruation will be performed; the effects of menstrual cycle phase on various psychological and behavioral measures as well as on stress response may be examined. Volunteers will be paid.

Contact Gay Grover, 496-6565 or Peter Schmidt, 496-9675. □

Hormonal Study Planned

Healthy subjects between the ages of 21 and 65 years are needed for a National Institute of Mental Health study on the effects of light and medication on hormonal secretions. Subjects will receive medication on two mornings in the NIMH clinic and have blood samples and mood ratings done. Participants will be paid.

If you are interested in participating and are not currently taking any medications, call Dr. Adriana Dreizzen, 496-2141. □

Montgomery Co. Offers Ride Sharing Unit

A Ride Sharing Unit has been established through the Montgomery County Department of Transportation. This customized, personalized service is free to all Bethesda employees regardless of place of residence or current mode of transportation.

The Montgomery County Ride Sharing Unit features one main office in Rockville and two satellite offices, one in Silver Spring and the other in Bethesda. The office which serves NIH is located in Bethesda at 7815 Woodmont Ave. This office specifically facilitates ride sharing alternatives for Bethesda employees. They coordinate these alternatives by maintaining lists of persons interested in exploring their transportation options and then matches individuals who have similar interests and commuting patterns.

If interested, call the ride sharing representative, 656-5804, or receive more information at NIH on the following dates:

Thursday, Jan. 22, 10 a.m.—2 p.m. Bldg. 31, Rm. B1C19

Wednesday, Feb. 11, 9:30 a.m.—11 a.m. Westwood Bldg., Rm. CR-3

Wednesday, Feb. 11, 1 p.m.—2 p.m. Blair Bldg., Rm. CR-110

Wednesday, Feb. 18, 1 p.m.—2 p.m. Fed. Bldg., Rm. CR-119

Wednesday, Feb. 18, 2:30 p.m.—3:30 p.m. Landow Bldg., Rm. CR-C

Tuesday, Mar. 10, 10 a.m.—2 p.m. Bldg. 10, 10, area adjacent to Rm. 1C174. □

OPM Revises Federal Life Insurance Program

The Office of Personnel Management revised the Federal Employees Group Life Insurance (FEGLI) Program regulations regarding designations of beneficiary and retroactive cancellation of family (option C) life insurance. Specifically, the changes:

(1) End the current cancellation of an employee's Designation of Beneficiary when an employee transfers to another government agency. It prescribes that the designation form (SF-2823, Designation of Beneficiary) be forwarded to the gaining agency and remain in effect until changed;

(2) Permit retroactive cancellation of FEGLI family (option C) coverage to the last day of the pay period in which there ceased to be any family member eligible to benefit from such coverage.

These regulations became effective Nov. 17, 1986. Details on these new provisions on the FEGLI are available in your BID personnel office. □

Dr. Larson, CC's Chief of Nuclear Medicine, Named Winner of Hevesy Foundation Award

Dr. Steven M. Larson, chief of the Clinical Center's Nuclear Medicine Department, has been named winner of the prestigious Georg von Hevesy Lecture-Medal by the Hevesy Foundation of Nuclear Medicine. His use of radiolabeled monoclonal antibodies to diagnose and treat cancer earned him the award.

"It's a great honor and I'm very, very pleased," Dr. Larson said. "It reflects well on NIH, on my department, and on my colleagues."

Dr. Larson is the fourth American to win the Hevesy Lecture-Medal, which has only been awarded eight times. Other Hevesy winners from the U.S. include Nobel laureate Rosalyn S. Yalow, and Henry N. Wagner Jr., a distinguished researcher at Johns Hopkins University, and an NIH alumnus.

Announcement of the Hevesy Medal was made at the European Nuclear Medicine Congress in September. The lecture half of the Hevesy honor is to be given by Dr. Larson next August in Budapest, Hungary, at the congress' next meeting.

Dr. Larson learned of the award in a letter from Switzerland, home of the Hevesy Foundation. The letter cited not only his scientific work, but also his generous exchange of ideas with nuclear medicine professionals around the world.

Dr. Larson had no idea he was nominated for the Hevesy Award. "It's not something you seek," he said. "But the people who have gotten it in the past have been very distinguished, so I'm very happy. I look at it as recognition not only for myself but also for my colleagues and this institution. It's something good for us."

According to Dr. Larson, NIH's expertise in



Dr. Larson

monoclonal antibody technology is not matched anywhere else in the world.

"It's great to be a part of this team of NIH scientists," he said, mentioning his collaborations with many NCI and nuclear medicine clinicians and researchers. "I think the stature of NIH was a big factor in the Hevesy choice."

Dr. Larson will speak next August on applications of radiolabeled monoclonal antibodies to the diagnosis and therapy of malignant tumors. Not only is this technology effective for finding and treating tumors, said Dr. Larson, it is also helping revolutionize man's understanding of the biology of antibodies.

Although his main research interest is imaging tumors, Dr. Larson supervises the imaging component of a wide range of research focusing on heart problems and neurological illnesses including Alzheimer disease. □

NIMH Obesity Study Under Way Looking for Volunteers

NIMH is now seeking obese subjects to participate in a study of a new opiate antagonist. Opiate antagonists block the effects of endorphines, which are the body's natural pain killers and which may also be involved in appetite regulation.

Volunteers may be male or female, should be at least 35 percent over their ideal body weights, and must be in good medical condition (for example, no high blood pressure, or diabetes and not currently taking any medications).

For more information, call, Dr. Arlene Hegg, 496-1891. □

Females Needed for Mood Studies

The Clinical Psychobiology Branch, NIMH, is seeking healthy female, normal volunteers between 21 and 65 years of age for studies that will be conducted during the winter of 1986-1987. These studies will involve being in the hospital between approximately 6-8:30 a.m. and 7-9:30 p.m. each day for 1 week. During the study, blood and urine samples will be taken and mood ratings will be performed.

Studies will involve short clinic visits, as well as activities, procedures and a schedule to be followed at home. Participants will be paid.

For further information, call Dr. Rim Mughir, 496-0500 or 496-2141. □

Farmers Using Herbicides Show Higher Risk For Non-Hodgkin's Lymphomas But Not Other Cancers

A National Cancer Institute and University of Kansas study has found that Kansas farmworkers who used herbicides had a higher risk for developing non-Hodgkin's lymphomas than nonfarmers in the state. The farmers, however, did not have a higher than normal risk for soft-tissue sarcomas and Hodgkin's disease, as studies in Sweden had found. The *Journal of the American Medical Association* published the study results in recent issue.

The study did not detect any significant risk of non-Hodgkin's lymphomas among farmers who did not use the herbicides. Non-Hodgkin's lymphomas will account for an estimated 3 percent of all newly diagnosed cancers and cancer deaths in 1986.

Farmers exposed to the herbicides for more than 20 days each year had six times the risk of developing non-Hodgkin's lymphoma compared to nonfarmers. Among these frequent users, those who mixed or applied the herbicides themselves had eight times the risk. These above-normal rates were associated with the use of phenoxy herbicides, especially, 2,4-dichlorophenoxyacetic acid (2,4-D). Phenoxy herbicides are frequently used on pastureland and in growing wheat, corn, sorghum, and rice.

Because of scientific and public concern about the chemicals, NCI conducted a population-based, case-control study of three cancers that earlier studies had linked to herbicide exposures. The NCI scientists, led by Dr. Sheila K. Hoar, chose Kansas because the farmers frequently use herbicides on wheat, the state's major crop, and because Kansas has a statewide cancer reporting system. Collaborating on the study were scientists from the University of Kansas, led by Drs. Frederick F. Holmes and Robert Robel from Kansas State University.

Dr. Hoar and her colleagues studied 424 male residents with soft-tissue sarcoma (133 cases), Hodgkin's disease (121), and non-Hodgkin's lymphoma (170) that had been newly diagnosed between 1976 and 1982.

The scientists also studied 948 controls from the general white male population of Kansas. In telephone interviews, the subjects or close relatives of deceased subjects were asked detailed questions about farming practices, including herbicide and insecticide use. For a sample of the subjects, the scientists also located herbicide and insecticide suppliers to corroborate exposure information given in the interviews.

The investigators found that, compared to nonfarmers, the farmers had about equal risk of developing soft-tissue sarcoma and a slightly

lower than expected risk of Hodgkin's disease. Even after detailed analyses, they found no consistent patterns of excess risk for either of these cancers associated with length of time working or living on a farm, the crop or the acreage farmed, or the duration or frequency of herbicide use.

For non-Hodgkin's lymphoma, the risk was slightly higher (about 30 percent) for all farmers compared to nonfarmers. The risk, however, increased significantly for farmers who used herbicides. Compared to nonusers, the risk increased to sixfold (600 percent) for farmers who were exposed to herbicides for more than 20 days per year. The level of risk was not related to the total years of herbicide use.

Farmers who began using the herbicides before 1946 had a greater than 70 percent higher risk for non-Hodgkin's lymphoma compared to farmers who began use in the 1950's and 1960's. Use of insecticides did not increase the risk for non-Hodgkin's lymphoma.

The farmers who did not use protective equipment (gloves, masks, etc.) while using herbicides had a 40 percent higher risk for non-Hodgkin's lymphoma than those who protected themselves. Similarly, farmers who used spray equipment that exposed them to more of the chemicals had an 80 percent higher risk than those who used safer application methods.

The scientists also investigated possible causes for the above-normal non-Hodgkin's lymphomas other than the herbicides. They assessed the more established factors such as immune-altering conditions and drugs and the family history of cancer. They also assessed speculative factors such as cigarette smoking, coffee consumption, and ionizing radiation. None of these was found to change the herbicide association.

The finding of excess non-Hodgkin's lymphoma associated with herbicide use in this study is consistent with earlier research done in Sweden and in some other U.S. states with heavy concentrations of agriculture.—Joyce Doherty □

R&W Has 'Capitals' Tickets

R&W has tickets to see the Capitals play at Capital Center on the following dates:

Winnipeg—Sunday, Feb. 1, 1:35 p.m.
Edmonton—Friday, Feb. 27, 8:05 p.m.
New York Rangers—Sunday, Mar. 1, 1:35 p.m.

For prices and other information call the R&W Activities Desk, 496-4600. □

MEDICINE AND THE JAPANESE:

The Historical Context, from Antiquity to the Present



For all NH and NLM Employees

Visitors are also welcome

A FILM SHOW

Lister Hill Auditorium
Building 38A

Friday
January 16, 1987

A 1-hour color film, "Medicine and the Japanese," narrated in English, will be shown in NLM's Lister Hill Auditorium, Bldg. 38A, on Friday, Jan. 16. There will be two showings, at noon and 1 p.m. The film depicts Japanese medicine in its historical context, from the ancient indigenous roots and early Chinese influences to the 17th-20th century impact of Western medical ideas. For further information, call 496-5405.

NINCDS Pamphlet Discusses Dizziness, Balance

Dizziness: Hope Through Research, a new pamphlet developed by the National Institute of Neurological and Communicative Disorders and Stroke, is now available through the NINCDS Office of Scientific and Health Reports.

Written in nontechnical language, the 27-page publication explains how the ear's vestibular system helps people maintain balance, and why conflicting signals to the balance system can make healthy people feel dizzy.

Also discussed are the different conditions that can cause dizziness, among them Ménière's disease, acoustic neuroma, anxiety, and low blood pressure. Tests and scans used to diagnose the source of dizziness are described, and a list of agencies that help people with dizziness and inner ear problems is included.

Today, people with serious dizziness problems can be helped by a variety of therapies—from medication to surgery to balancing exercises—that were developed and improved through research. In current studies, scientists are working to understand dizziness and its sources among the complex interactions of the ear's labyrinth, other sense organs, and the brain.

Single copies of *Dizziness* are available without charge from the Office of Scientific and Health Reports, NINCDS, Bldg. 31, Rm. 8A16, NIH, Bethesda, MD 20892; telephone: (301) 496-5751. □

Dr. Masters Leads NIDDK Briefing on Impotence

Dr. William Masters of the famed Masters and Johnson Institute in St. Louis joined other experts on male sexual dysfunction to conduct a news briefing at NIH Nov. 17.

The purpose of the briefing, attended by about 25 science writers, was to inform jour-

diseases and medications.

Impotence, one of the most common problems encountered in the practice of clinical urology, is reportedly present in 7 to 17 percent of men, according to various studies in recent years.



Responding to questions from science writers are (l to r): Drs. Morley, Vaughan, Masters and Krane. The briefing was recorded for broadcast by ABC, CBS, NBC, International News Network, Cox Broadcasting, Mutual Broadcasting, United Stations Radio Network, and the Physicians Radio Network.

nalists of important advances in the diagnosis and treatment of impotence (the failure of erection in the male). The briefing highlighted advances reported at the "Conference on the Scientific Basis of Sexual Dysfunction," cosponsored June 4-6 by the Division of Kidney, Urologic, and Hematologic Diseases and the National Kidney Foundation.

NIDDK Director Dr. Phillip Gorden, introducing speakers at the news briefing, lauded the results of the June conference. "This meeting brought out the tremendous progress in development of basic and clinical knowledge about impotence. A better understanding of the mechanisms involved in this disorder leads to a more optimistic view of treatment."

Dr. Masters spoke on the evolution of attitudes regarding impotence and described changes in sexual relationships and problems in the United States in recent decades. Three experts in the field of male sexual dysfunction accompanied Dr. Masters, presenting recent research advances in the diagnosis, treatment, and social and psychological understanding of impotence in the 1980's.

Dr. E. Darracott Vaughan, Jr., of the Cornell University Medical College in New York City spoke on the epidemiology of the problem. Dr. Robert J. Krane of the Boston University Medical School described modern treatment approaches. Dr. John Morley of the University of California, Los Angeles, discussed the association of impotence with systemic

Recent research has shown that impotence is caused by psychological factors far less often than has been thought. Dr. Morley emphasized that the great majority of cases of impotence are due to organic causes such as diabetes mellitus, thyroid dysfunction, and hypogonadism (decreased functioning of the testes). Medications such as diuretics and antihypertensive agents are thought to be responsible for impotence in up to 25 percent of cases, he said.

Diagnostic and therapeutic approaches are improving rapidly.

Dr. Krane described new approaches to impotence associated with disorders of blood flow to the penis. Physicians today are able to help many patients with this problem by prescribing a vascular smooth muscle cell relaxant called papavarine hydrochloride, which can be self-injected into the penis at home, producing an erection. In addition, venous reconstructive surgery can correct impotence resulting from the presence of an extra vein, an abnormal vein, or an abnormality of the erectile tissue in the penis.

Dr. Krane reported that new surgical and technological advances now have produced a third generation of penile prosthetic devices that are effective and reliable. In management of erectile dysfunction, Dr. Krane concluded, "the injection technique is more reasonable to offer the patient first. If he does not respond appropriately to the injection technique, we have the availability of the prostheses." □

NLM Literature Searches

These bibliographies are reprints of literature searches requested by individual physicians, scientists, and other health professionals, and are considered to be of wide interest. Single copies may be ordered by number and title from NLM at no charge. Send requests to: Literature Search Program, Reference Section, National Library of Medicine, 8600 Rockville Pike, Bethesda, MD 20894. The name and address of the requester, typed on a gummed label, must accompany all requests (no return postage necessary.) Please do not send requests on interlibrary loan forms.

- LS No. 85-13 *Peer review organization (PRO)*, January 1980 through June 1985; 267 citations from the MEDLINE and Health Planning and Administration database.
- LS No. 85-14 *Adjuvant chemotherapy for breast cancer*, January 1980 through August 1985; 403 citations in English.
- LS No. 85-15 *Malpractice—insurance, legislation, economics*, January 1983 through August 1985; 305 citations in English.
- LS No. 85-16 *Acquired immunodeficiency syndrome (AIDS)*, seventh update and supplement, May 1985 through August 1985; 747 citations, including addendum.
- LS No. 85-17 *Smoking and reproduction, pregnancy, the fetus, and the newborn*, January 1983 through October 1985; 202 citations.
- LS No. 85-18 *Health effects of smokeless tobacco use*, January 1966 through December 1985; 376 citations.
- LS No. 85-19 *Health maintenance organizations*, January 1980 through October 1985; 409 citations in English.
- LS No. 85-20 *Acquired immunodeficiency syndrome (AIDS)*, eighth update, September 1985 through December 1985; 577 citations.
- LS No. 85-21 *Theophylline pharmacodynamics*, January 1983 through October 1985; 352 citations in English.
- LS No. 86-1 *National Library of Medicine*, January 1975 through December 1985; 505 citations.
- LS No. 86-2 *Prevention of venous thrombosis and pulmonary embolism*, January 1984 through January 1986; 250 citations in English.
- LS No. 86-3 *Acquired immunodeficiency syndrome (AIDS)*, ninth update, January 1986 through March 1986; 478 citations.
- LS No. 86-4 *Integrated approach to the management of pain*, January 1984 through April 1986; 276 citations in English.
- LS No. 86-5 *Therapeutic plasmapheresis in neurological disorders*, January 1980 through April 1986; 371 citations.
- LS No. 86-6 *HTLV-III antibody testing: efficacy and impact on public health*, January 1984 through June 1986; 420 citations in English.
- LS No. 86-7 *Nursing diagnosis*, January 1984 through May 1986; 264 citations.
- LS No. 86-8 *Use of computer models in biomedical research*, January 1980 through May 1986; 390 citations.
- LS No. 86-9 *Acquired Immunodeficiency syndrome (AIDS)*, tenth update, April 1986 through June 1986; 552 citations.
- LS No. 86-10 *Infant apnea*, January 1981 through September 1986; 471 citations.
- LS No. 86-11 *Platelet transfusion therapy*, January 1981 through September 1986; 358 citations.
- LS No. 86-12 *Zoonoses*, January 1986 through September 1986; 277 citations.
- LS No. 86-13 *Acquired immunodeficiency syndrome (AIDS)*, eleventh update, July 1986 through September 1986; 680 citations.
- SBS No. 1986-3 *Space Medicine*, November 1986; 461 citations.

Emily Johnson Retires; 23 years With NIGMS

Emily E. Johnson retired recently after 23 years of government service, all of them with the National Institute of General Medical Sciences. For the last 6 of those years, she held three major positions concurrently: secretary to the NIGMS Director, secretary to the deputy director, and secretary to the National Advisory General Medical Sciences Council.

"Mrs. Johnson's role in the effective and efficient management of the activities of NIGMS cannot be overestimated," says Dr. Ruth L. Kirschstein, NIGMS Director. "She was respected and admired by all of the Institute staff. She was my close associate for 12 years. All of us will miss her more than we can express, not only as a colleague but as a helpful, cheerful, wonderful, loyal friend."

Mrs. Johnson joined NIGMS in 1963 as a part-time clerk-typist in the Office of the Director. In 1964, she became a full-



Mrs. Johnson

time employee and moved to the Institute's Research Training Grants Branch, where she assisted in the development of the Medical Scientist Training Program.

Desiring a change in 1972, she transferred to the NIGMS Budget Office, but after 2 years of working with numbers, she returned to the Office of the Director as secretary to the deputy director. In 1978, she assumed the duties of Advisory Council secretary, and in 1980, she became secretary to the NIGMS Director.

Born in Hagerstown, Ind., Mrs. Johnson received her B.A. degree in music education from DePauw University. After graduation, she taught music for a short time before marriage and motherhood intervened. In 1963, when her daughters were all teenagers, Mrs. Johnson began her government career at NIGMS.

While in the Institute, she received many awards for her outstanding abilities. These

include the HHS Secretary's Special Citation for Ten Outstanding Employees of the Year in 1984, the NIH Award of Merit in 1981, six quality increases, and several cash awards.

In retirement, Mrs. Johnson plans to take "a couple of months of complete rest" before helping her husband, Arthur, in his consultant business. She also hopes to do volunteer work, play golf, visit with her children and grandchildren, and enroll in an English literature course. □

BEIB Lends Instruments During Equipment Repairs

The Biomedical Engineering and Instrumentation Branch (BEIB), DRS, has begun a pilot program to minimize disruption of NIH laboratories during equipment repairs. BEIB's Research Instrumentation Section, in conjunction with the Scientific Equipment Rental Program, will provide your lab with a loaner instrument, if requested, while your instrument is being repaired.

BEIB does not charge for use of the loaner instrument, but does charge for checking it after return and for any necessary repairs.

Initially the program will be limited to the instruments listed below. If it proves successful, BEIB will enlarge the loaner pool to include most of the basic instruments repaired by the Research Instrumentation Section.

Loaner instruments available:

Water Baths

Precision Model 25 Shaker
LKB Model 2219 Recirculating

Centrifuges

Eppendorf Model 5415 Micro
Beckman Microfuge 12 Micro
Sorvall Model RT6000
(Refrigerated Tabletop)

Peristaltic Pumps

Pharmacia Model P-1
Pharmacia Model P-3
LKB Model 2132

Power Supplies

LKB Model 2197
Pharmacia Model 3000/150
Pharmacia Model 500/400
ISCO Model 494
LKB Model 2997 Microdrive 5

When you call BEIB (496-4131) for repair of an essential instrument in one of these categories, please state that you wish a loaner instrument and identify the kind needed. □



Kyoko Ozaki, a member of the International Women's Group, received a certificate of appreciation from Dr. Craig Wallace, FIC Director, for her role in preparing a new Japanese version of the Center's Handbook for Visiting Scientists.

Two FIC Scholars Arrive

Two internationally renowned scientists, Dr. Kare Berg of Norway and Dr. Antonio Borsellino of Italy, have arrived on the NIH campus in their roles as Fogarty Scholars.

Dr. Berg, particularly well-known for his clinical investigations of the genetics of lipoproteins and coronary heart disease, returned for his second term as a scholar. Professor of medicine at the University of Oslo, Norway, he is a leader of the European research community, and was the founding editor of *Clinical Genetics*.

During his first term as a scholar, he organized a 2-day workshop on "Strategies for Controlling Cancer Through Genetics."

Dr. Berg, nominated by Dr. John Mulvihill of NCI, will be at NIH until Feb. 15. He has an office at the Stone House and can be reached on 496-8733.

First NIH Visit

Arriving at NIH for the first time is Dr. Borsellino, professor of biophysics at the International School for Advanced Studies in Trieste, Italy. While here, he will be associated with Dr. Henry Wagner, chief of the Section on Neuronal Interaction, Laboratory of Neurophysiology and Neuroanatomical Sciences, NINCDS.

As a theoretical physicist, Dr. Borsellino first proposed equations that described the cross section pairs production of electrons in the field of another electron. His equations are well-known and are used today in nuclear physics.

Dr. Borsellino will have an office in the Stone House until April. He can be reached on 496-2091. □

Casey Kasem, 'American Top 40' Personality, Records NCI Antismoking Messages for Youth

The youth of America will be hearing about the dangers of smoking from Casey Kasem, the nation's favorite top 40 radio personality and a former chain smoker.

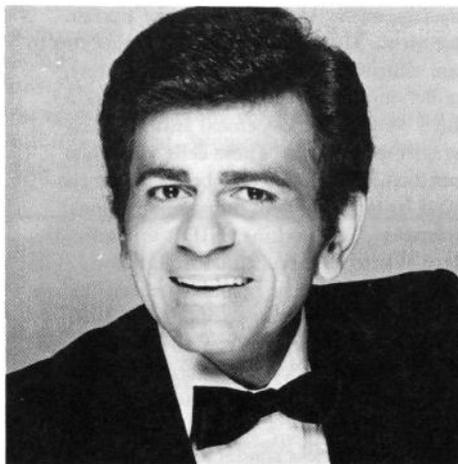
In radio messages produced by the National Cancer Institute, Mr. Kasem advises young listeners not to smoke. He also urges them to convince their parents to quit and describes his own lengthy battle with cigarettes.

"It's not easy to quit, but they can do it," Mr. Kasem relates. "I did, after 17 years of smoking up to five packs a day."

In January, tapes with the public service announcements will be sent to 3,500 youth-oriented radio stations. Mr. Kasem helped write the messages and supervised the master recordings in his Hollywood studio.

Casey Kasem and his syndicated radio program "American Top 40" have come to represent a common denominator of popular music for young Americans. His distinctive voice is heard every Sunday on almost 1,000 stations around the world. He has his own half-hour television show, "American Top 10," and is the voice for Shaggy on "Scooby Doo," letters and numbers on "Sesame Street," Robin in "Super Friends," Waldo on "Mister Magoo," and Mark on "Battle of the Planets."

His special interest in cancer prevention began when his mother, who was a heavy smoker, died of lung cancer in Detroit. In talks with her physician, Dr. Laurence Baker, Mr. Kasem and his wife Jean said they wanted to show their appreciation to Dr. Baker.



Mr. Kasem, radio personality of "American Top 40," records messages for NCI that will encourage young listeners to quit smoking.

The father of two young girls, Dr. Baker suggested instead that Mr. Kasem use his considerable influence with young people by making public statements about the dangers of smoking.

The broadcaster instantly agreed to help and Dr. Baker contacted NCI. The Casey Kasem announcements will be heard for 3 months. Listeners who want more information or help in quitting are asked to call the Cancer Information Service hotline, 1-800-4-CANCER. □

Research Directions In Osteoporosis

Osteoporosis will be the subject of a major scientific workshop to be held in Clinical Center Masur Auditorium on Feb. 9-11. The workshop, "Research Directions in Osteoporosis," will be sponsored by the NIAMS, NIA, NIDDK, and the National Osteoporosis Foundation.

A major health problem, osteoporosis, or "porous bone," affects an estimated 16 to 20 million Americans. In osteoporosis, bone mass decreases, causing bones to be more susceptible to fracture. This bone weakening disease afflicts as many as half of all women in the United States over 45 years of age and 90 percent of women over 75. The disease leads to an estimated 1.3 million bone fractures each year. Osteoporosis is the major underlying cause of bone fractures in postmenopausal women and older persons in general.

The workshop is being held to review the latest scientific information on osteoporosis, to assess the needs and directions for future investigations, and to develop plans for future research.

Topics Included

Dr. William A. Peck, Simon professor of medicine, Washington University School of Medicine, St. Louis, Mo., and Dr. B. Lawrence Riggs, professor of medicine, Mayo Clinic, Rochester, Minn., will cochair the workshop. Participants will discuss the following topics:

- Current knowledge about bone biology and bone remodeling as they relate to osteoporosis
- Risk factors influencing development of the disease
- Methods of diagnosis and bone mass measurement
- Relationship between bone homeostasis and calcium intake, absorption and excretion
- Several approaches to prevention and treatment.

Two full days of presentations, from 8:30 a.m. to 5 p.m., will be followed Feb. 11 at 10 a.m. by a summary session of the scientific workshop. Session leaders of Monday's and Tuesday's meetings will summarize and discuss the workshop proceedings for participants, attendees, and the public. This will be followed by a news conference.

For information about registration and attendance, call Ginny Absher, 231-5250. □

Modern Biotechnology Subject of NLM Seminar Series

The National Library of Medicine will sponsor during the next few months a series of seminars dealing with fundamental aspects of modern biotechnology.

Included will be discussions of basic genetic concepts and methods used to substantiate them, the principles and practices involved in human genetics, recent insights into protein structure/function relationships, the actual and potential accomplishments of current research in biotechnology, and public policy issues related to progress in the field.

The seminars will primarily address persons involved in the handling of biomedical information, who are not necessarily versed in details of current biology. The objective of the seminars is to provide an introduction to the science and language of biotechnology, while pointing out the contributions to be made to the discipline by the information specialist.

The first seminar will be held on Tuesday,

Jan. 20, at 1 p.m. in the Lister Hill Auditorium. Dr. Arthur Nienhuis, chief of the Clinical Hematology Branch of the National Heart, Lung, and Blood Institute, will speak on "Molecular Genetics: An Overview."

On Feb. 26, Dr. Helen Donis-Keller from Collaborative Research Inc., Bedford, Mass., will discuss "Fundamentals of Human Genetics." Future sessions will be announced. □

Volunteers Needed for Eye Study

The Child Psychiatry Branch, NIMH, and NEI, are seeking adults, ages 18-45, who were diagnosed by a physician as hyperactive in childhood, for an eye movement study. Good vision in both eyes (glasses okay) and good general health is required. Also, English must be native language. Volunteers will be compensated for their time. For further information call Ashley Hanahan, 496-9070. □

God could not be everywhere and therefore he made mothers.—Jewish proverb

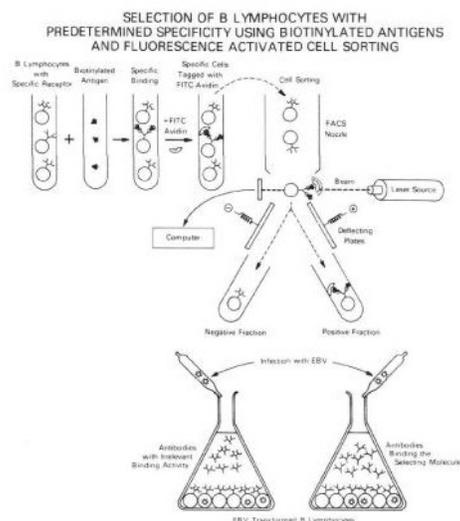
ANTIBODIES

(Continued from Page 1)

bodies, die when they are placed in a test tube. In 1975, however, Drs. George Kohler and Cesar Milstein overcame this problem by taking B lymphocytes from the spleen of mice previously injected with an antigen and then fusing the individual B lymphocytes with a tumor cell. The resulting hybrid cell—called a hybridoma—contained both antibody-producing genes and tumor genes. It grew continuously in culture and secreted large quantities of mouse monoclonal antibodies.

Because mouse proteins are foreign and would be immunologically rejected by humans, human monoclonal antibodies have long been desired for therapeutic purposes.

In *Science*, the NIDR researchers describe their approach for making human monoclonal



antibodies. The approach takes advantage of specific receptors for antigens that are expressed on the surface of different B lymphocytes in normal individuals. In addition, B lymphocytes capable of making antibodies to a specific antigen of interest can be separated from other B lymphocytes by using the selected antigen as a probe.

To do this, a team headed by Drs. Abner L. Notkins and Paolo Casali went through a two-step procedure. First, they took a purified antigen and chemically labeled it. They then incubated the labeled antigen with B lymphocytes obtained from the blood of an individual. The labeled antigen only bound to those B lymphocytes that had a specific antibody receptor on its surface for that antigen.

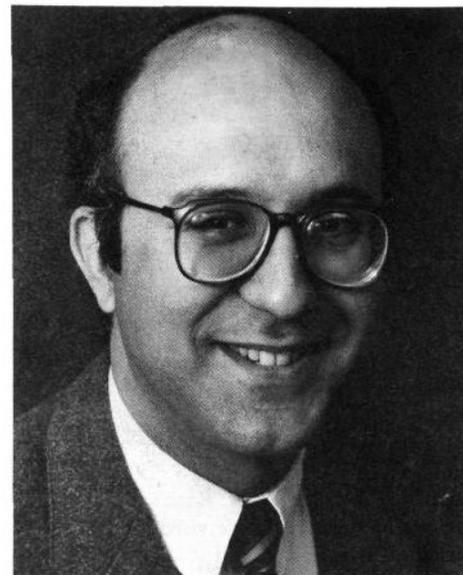
In some cases, the antigen only bound to one lymphocyte in a thousand. By use of a high technology machine known as a fluorescein-activated cell sorter which employs a laser

beam, the researchers were able to isolate the B lymphocytes that bound the labeled antigen from those that did not.

The second step on the procedure involved infecting the isolated cell with the Epstein-Barr virus. This virus causes B lymphocytes to grow continuously in culture. Fortunately, the B lymphocytes also produced antibodies which were pure monoclonal antibodies to the selected antigen. These cells were then cloned and cell lines were obtained that produced large amounts of human monoclonal antibodies. Dr. Notkins, NIDR scientific director, likens these continuously growing cells to small factories that manufacture antibodies.

Using this approach, antibodies to both foreign and autoantigens can now be prepared from the B lymphocytes of normal unimmunized people as well as patients with various diseases.

This research was conducted by Drs. Casali, Minoru Nakamura, and Notkins of the NIDR Laboratory of Oral Medicine, Dr. Giorgio Inghirami of the National Institute of Diabetes and Digestive and Kidney Diseases, and Dr. Terry F. Davies of the Mount Sinai Medical School. □



Dr. Simeon I. Taylor, chief, Biochemistry and Molecular Pathophysiology Section, Diabetes Branch, NIDDK, received the 1986 Young Investigator Award given by the American Federation for Clinical Research in recognition of "studies on the mechanism of insulin action and for investigations on the mechanisms of insulin resistance in diabetic patients." Insulin resistance is a clinical condition in which normal amounts of insulin produce inadequate physiological responses. This award is presented annually to outstanding young clinical scientists (under age 41) for original research in clinical and laboratory medicine. Dr. Taylor's current research focuses on the function of insulin receptors in persons with genetic forms of extreme insulin resistance.

Blood Samples Wanted From Pregnant Women

Are you pregnant? If so, will you make a special delivery? That's what the Department of Transfusion Medicine's HLA Laboratory will be asking during the next 2 months.

This month, the lab launches a 2-month campaign in search of pregnant women who are willing to give a small blood sample to be screened for HLA antibodies. These antibodies are used to match patients and donors for organ transplants and platelet transfusions. Since the antibody is not readily available commercially, the lab relies on samples from pregnant women who may develop these antibodies during pregnancy.

The HLA lab stresses early planning where giving blood is concerned, because the body's titer of HLA antibody may decrease as soon as 3 months after pregnancy. Blood samples from all ethnic groups are needed but samples from Asian and black women are of particular importance, due to the small amount of HLA available for these groups.

Having blood tested for HLA antibody will not harm or help the donor or the donor's baby—but could greatly benefit patients who require HLA typing.

Women interested in donating should call 496-8852 between 8 a.m. and 4 p.m., Monday through Friday, to schedule an appointment. □

HUMAN SUBJECTS

(Continued from Page 1)

uniform policy among all the Federal departments and agencies. The committee, chartered by the President's Science Advisor, Office of Science and Technology Policy, has completed review of public comments on the proposed policy published in the *Federal Register* last June.

The Final Model Federal Policy and Notice of Proposed Rulemaking will be published in the *Federal Register* soon.

Last October, Dr. Robert E. Windom, Assistant Secretary for Health, opened the Interagency Human Subjects Coordinating Committee meeting held at NIH. He expressed his satisfaction that the Department, led by OPRR, has established a well-tested system for providing protections for human research subjects and indicated his pleasure that HHS is taking a coordinating role in extending such protections to research conducted or supported by other Federal departments and agencies. □

Women's Advisory Committee Observes Tenth Anniversary

The Division of Equal Opportunity, will celebrate the tenth anniversary of the NIH Women's Advisory Committee, on Thursday, Jan. 15, in Wilson Hall, Bldg. 1, at noon.

Jessalyn L. Pendarvis, director, Division of Equal Opportunity, the keynote speaker, will discuss "Affirmative Action." Opening remarks will be made by Dr. William F. Raub, NIH Deputy Director.

The Women's Advisory Committee, established in 1976, advises the NIH Federal Women's Program manager in the Division of Equal Opportunity on matters concerning equal opportunity and affirmative action for women, thereby providing a communication channel between employees and management.

The committee develops recommendations on systems, policies, and procedures which impact on women; identifies barriers to equal employment for women, and develops recommendations for initiatives to eliminate the barriers.

Membership is comprised of representatives and alternatives from NIH Bureaus, Institutes, and Divisions. It meets on the first Wednesday of every month from 9 to 11 a.m. Subcommittees meet on the third Wednesday of every month to develop recommendations and work on committee initiatives.

Two committee-recommended activities—a speaker series for 1987 and an informal

network of individuals who can be contacted for career advice—will be announced at the anniversary observance.

Sign language interpretation will be provided at the program. If accommodations for other handicapping conditions are needed, call the Federal Women's Program on 496-2112. □

NIMH Seeks Volunteers

The Clinical Psychobiology Branch, NIMH, is seeking healthy male/female normal volunteers between the ages of 21 and 65 years for studies that will be conducted during this winter.

Some of these studies will involve a hospital stay of several days during which time procedures such as metabolic testing, blood sampling over a 24-hour period, and mood ratings will be performed. Other studies will involve short clinic visits, as well as activities, procedures, and schedules to be followed at home. Participants will be paid.

If you are able to follow straight forward directions and schedules, are not presently taking any prescription or nonprescription medications, and are interested in participating in one or more of our studies, call Patti Schultz, 496-2141. □

Dr. Miriam Kelty Named NIA Associate Director

Dr. Miriam Kelty was recently appointed associate director of the National Institute of Aging's Office of Extramural Affairs.

In her new position she will supervise scientific review, committee management, and grants and contracts management. She will advise the NIA Director, program staff, and the research community on all matters involving the Institute's extramural programs.



Dr. Kelty

Dr. Kelty comes to NIA from the Division of Research Grants, where she served as chief of the Behavioral and Neurosciences Review Section and assistant chief of the Referral and Review Branch. She has worked at NIH since 1974, when she served on the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.

Prior to that, she served as an administrative officer for scientific affairs with the American Psychological Association. She was a psychologist on the staff of the National Institute of Mental Health, first as an intramural scientist and later as an administrator.

Dr. Kelty's major research interest is in psychophysiological relationships, particularly hormones and behavior. She received her Ph.D. from Rutgers University in psychology and psychobiology. She was a PHS postdoctoral fellow at Clark University and the Harvard University School of Public Health, where she did research on sleep and on eating behavior and the menstrual cycle.

She is active in the field of health behavior research and in science policy, both within and outside of the Federal Government. She is a fellow of the American Association for the Advancement of Science and the American Psychological Association, in which she served as president of both the division of psychologists in public service and the division of population and environmental psychology, and as the secretary of the division of health psychology. □

USUHS Needs Volunteers

The Uniformed Services University of the Health Sciences is seeking male and female volunteers for a study entitled "Components of Effective Learning." If you are interested, call Lisa at 295-3263. □



The Women's Advisory Committee executive board includes (seated l to r): Valerie Trammell, executive secretary; Cherie Nichols, chairperson; Alberta Sandel, vice-chairperson. Standing (l to r) are Anna Perrone, education subcommittee chairperson; Catherine Quigley, public relations subcommittee cochairperson; Barbara Iba, Federal Women's Program manager; Dr. Jeanne Ketley, organizing subcommittee cochairperson. Absent were Dr. Paulette Gray, organizing subcommittee cochairperson and Mary Ann Gritz, public relations subcommittee cochairperson.

How To Donate Bone Marrow for Transplantation

Even though we can't live without it, most of us never see our bone marrow. It occupies the hollows of our larger bones, manufacturing new blood cells that go out into our bodies to sustain life and fend off disease.

If you could see bone marrow, you would never believe it was an organ. It looks like a liquid and is a mixture of young developing blood cells and mature cells awaiting release into circulation.

Every year, about 10,000 people whose blood is diseased require a bone marrow transplant. Up to now, 60 percent of those who have needed this therapy have not gotten it—they haven't had an HLA-matched relative. But new techniques make it possible for nonrelatives to donate bone marrow, a therapy that improves a sick person's survival chances from between zero and 15 percent to 45-70 percent.

There is about 1 chance in 20,000 that a given donor's HLA type would match that of a given patient. The challenge to the newly created National Bone Marrow Donor Registry is to find that needle in the haystack.

If NIH decides to participate in the NBMDR, Bernice Loiacono of the NIH Plateletpheresis Center would be the principal matchmaker.

"Funds for the registry are extremely limited, so we will only be contacting donors who have already been HLA-typed," she said. "That means we'll only be recruiting from previous apheresis donors, of whom about 1,600 are active."

Eligible donors will be between the age of legal consent and 55, and must be in excellent health. Ms. Loiacono estimates that 20 percent of the names of the NIH donor file will be ineligible for one reason or another, and asks that anyone who knows their HLA type call her (496-4321) if they are interested in donating bone marrow.

Should NIH agree to participate in the registry, the donor recruitment process will begin in mid-December. The NBMDR hopes to have enough information to begin conducting file searches by March 1987.

The procedure for becoming a donor is strict and scrupulous. All potential donors in the current computer file will receive a letter and a brochure called "The Chance of a Lifetime." That will be followed up with a phone call explaining more about the need for a national registry. Potential donors will then be asked if they want to know more about the program.

"If they are still interested at this point, they get a second brochure called 'Questions and Answers About Bone Marrow Transplants,'" said Ms. Loiacono. Part of that mailing is the



Ms. Loiacono will be in charge of matching donors and recipients if NIH participates in the registry.

first of several consent forms to be signed by a potential donor. The candidate must sign that form and return it in order for NIH to release any information to the registry.

Once a donor has gone this far, the registry gets a code from NIH indicating the donor's HLA type and donor center—no names or other personal data are ever released into the registry computer. That code now stands a chance of being 1 of the 20 HLA matches that the registry will select for each recipient; that many are needed because the screening procedure becomes even more stringent at this point.

Additional blood tests for the 20 possible candidates would be done at the donor centers where they registered. A person registered at NIH would probably come to the Clinical Center for this workup, at which time they would be informed that a recipient might need their marrow. The test more strictly analyzes a donor's white cells is delivered to the transplant the list of potential donors is narrowed to two candidates.

These two candidates then undergo even more sophisticated blood tests called MLCs, or mixed leukocyte cultures. A sample of the donor's white cells is delivered to the transplant center and mixed with the recipient's blood.

"They try to predict potential reactions or rejection," said Ms. Loiacono. "If the donor passes, educational discussions are held to inform the donor of details of the procedure." A physician from the donor center would discuss risks and benefits with the donor and any friend or relative the donor chooses to bring along. In

addition, a donor advocate—an uninvolved third party—would be available at the donor's request for advice and counsel.

"We really want people to arrive at their decision with the most information and the least pressure," Ms. Loiacono said.

Assuming a donor is compatible in the MLC test and chooses to go on with the process, the next step is a series of physicals conducted by both a physician from the transplant team and a third-party physician. The patient to receive the marrow is not told there is a potential donor on hand until all of this has been done.

After the potential donor has undergone careful medical screening and finally decided to donate, the recipient is "conditioned" in the isolation unit of the transplant center's intensive care unit. In order to receive healthy marrow, the patient's own marrow must be killed. For the patient, this procedure is a point of no return—he or she must get marrow to survive.

The donor, meanwhile, has the right to withdraw up to the point at which he or she undergoes general anesthesia. This admittedly risky procedure is needed to deaden the nerves in the donor's pelvic region, from which up to 1,000 cc (or less than 5 percent of the body's total) of marrow is removed.

Harvesting healthy bone marrow takes a team of surgeons about an hour. Four to eight small incisions are made over the posterior pelvic area, and 20-30 extractions are made through those incisions. Within a few weeks, the donor's system naturally replaces the donated marrow. Should a donor feel the ill effect of losing blood volume postharvest, transfusions are available, often using blood the donor donated for him or herself prior to the harvest. This is called autologous transfusion.

Most donors get over the soreness within several days. "I talked with several donors who gave on a Friday and were back to work on Monday," said Ms. Loiacono.

The recipient gets the fresh marrow by intravenous catheter almost immediately after it is harvested. Still in ICU isolation, the patient is carefully monitored for signs that the new marrow has taken hold or "engrafted." It can take from 2 to 3 months for the body to start producing white cells.

Four dangers threaten to complicate the patient's condition at this point. Infections are very common since the host's immune system is compromised. These are typically treated with antibiotics. Graft rejection can occur if the patient's body rejects the donor's cells. Graft-versus-host disease may also occur if the donor's cells reject the patient's body. In the worst case, the patient may relapse. □

Bone Marrow Donors May Be Sought To Participate in National Registry

If you are an NIH platelet donor in good standing, chances are you will soon be among the first to hear of a new program to recruit bone marrow donors.

Though NIH is not yet fully committed to the project, a nationwide registry of potential bone marrow donors is being created to take advantage of advances in medicine that allow very sick patients to receive HLA-matched bone marrow from nonrelatives.

Up to now, patients with aplastic anemia, certain kinds of leukemia, and a number of congenital immune deficiency disorders could receive therapeutic bone marrow transplants only from a relative whose human leukocyte antigens (HLAs) were identical.

Since 1968, more than 5,000 of these transplants have been performed, according to the Red Cross. But advances in immunology that were completely unforeseen a decade ago now make it possible for an unrelated, though HLA-matched, donor to give his or her marrow to a patient with a poor prognosis.

Navy Awards Contract

"Experience with unrelated donors has just begun," said Dr. Harvey G. Klein, chief of the Clinical Center's Department of Transfusion Medicine (DTM) and a leader in NIH involvement in the National Bone Marrow Donor Registry, which is being developed under a \$3.5 million Navy Department contract. "It is still not standard therapy. The state of the science is where related transplant therapy was 15 years ago. It is much riskier for the patient than is a related transplant and chances of success are much smaller."

NIH is a member of one of three organizations that won a Navy contract to create a 75,000-name nationwide registry. In fact, when the contract award was recently announced at the headquarters of the American Red Cross, Dr. Klein was on hand not as a representative of NIH but of the American Association of Blood Banks, which has about 2,000 institutional members besides the DTM. The other two groups that will share the contract are the Council of Community Blood Banks and the Red Cross.

According to Dr. Klein, NIH has the country's largest listing of tissue-typed blood donors—about 12,000 names on a computerized list. The list started in the 1970's when platelet collection became a major industry in support of aggressive new National Cancer Institute therapies. If NIH were to become fully involved in the project, most of those donors would eventually be asked if they would be

willing to donate marrow.

"If we participate fully, we would still hold on to our computerized file of donors—we wouldn't give it away," said Dr. Klein, an open advocate of the rights of the donor. "A request to the central registry (to be located in Minneapolis-St. Paul) would result in a file search for an unrelated match."

The search would be conducted on a geographic basis. For instance, if the patient were located in Seattle, a search of the NIH file might be a last priority. But if an NIH name were picked, DTM would act only as an intermediary, contacting the potential donor on behalf of the national registry.

"Our donors know us and trust us to use confidential information responsibly," Dr. Klein said. "By acting as intermediaries, we can avoid the situation where a leukemia patient calls up the potential donor on the phone and says, 'Donate for me or I'll die.'"

Blood Routinely Typed

Indeed, an ethical and noncoercive approach to donor recruitment is Dr. Klein's highest priority. An NIH donor would never be pressured to donate by the national registry, let alone a patient in need. All inquiries would originate with the local blood bank, be it the NIH or one of more than 50 donor centers (including the D.C. Red Cross) to be established around the country.

"Basically, we hope to get the financial resources to contact our blood donors (whose blood is routinely HLA-typed—at about \$150 a sample for baseline analysis), explain what bone marrow transplantation is, and see if they're willing to do it," Dr. Klein said. "But we're early in the process. A total commitment has not yet been made."

DTM authorities have been aware of the government's intent to create a national bone marrow registry for about 2 years, though serious discussion of the subject has only taken place in the past 8 months. So far, NIH has taken four steps, said Dr. Klein.

A candidate for the position of donor recruiter has been identified and trained; the cost of adding names to the registry, in terms of manpower and money, has been estimated; the compatibility of computers at NIH and at the national registry in Minnesota has been explored; and the supervisor of the CC HLA lab has attended meetings.

"Our department is extremely enthusiastic about participating in the registry," Dr. Klein said. "It's a natural extension of our mission, and there is the potential for saving lives."

The actual transplant procedures would not take place at NIH, at least as far as program managers can now tell. "Tertiary care centers (for instance, Johns Hopkins University or the University of Virginia) would do it," said Dr. Klein. "NIH would just be sharing information. We have no commitment to doing procedures, storing marrow, or shipping it."

In addition to the lifesaving potential of bone marrow transplantation, much medical knowledge stands to be gained by this therapy.

"Transplant biology has advanced at a tremendous rate," said Dr. Kelin. "We had no inkling of (unrelated donors) 10 years ago. We've learned an enormous amount about human immunology through the bone marrow transplant model using related donors."

Even though this therapy has generated much new knowledge, Dr. Kelin cautions, "We're not doing it for that purpose—we're doing it to cure patients." □

Schedule 'Bullets' for 1987

R&W has tickets available to see the Bullets at Capital Center on the following dates:

Los Angeles Lakers—Sunday, Jan. 18, 2:30 p.m.

Chicago—Saturday, Mar. 14, 7:30 p.m.

Boston Celtics—Thursday, Mar. 26, 7:20 p.m.

Detroit—Sunday, Apr. 12, 1 p.m.

Philadelphia—Sunday, Apr. 19, 1 p.m.

For ticket prices and other information call the R&W Activities Desk, 496-4600. □



Barbara Weldon, a writer-editor with NIDDK, was recently named "Woman of the Year" by the Kensington Chapter of Business and Professional Women (BPW). Ms. Weldon, who is chapter vice president, was honored "in appreciation for her exceptional qualities of leadership and integrity and her distinguished achievements for the betterment of her community."

Dr. T. Tjossem Retires After 21 Years at NICHD

Guests were surprised at the recent retirement luncheon for NICHD's Dr. Theodore D. Tjossem, chief of the Mental Retardation and Developmental Disabilities Branch in the Center for Research for Mothers and Children.

After accepting accolades and best wishes from his colleagues, Dr. Tjossem turned the tables and presented gifts to several of his former coworkers and colleagues.

The largest of these was a gift of \$2,000 to the National Down Syndrome Congress for



Dr. Tjossem

"sustained advocacy in support of NICHD programs and for research expanding life's opportunities for persons with Down syndrome." Diane M. Crutcher, executive director of the organization accepted the award.

Dr. Tjossem came to NICHD in 1965—a few years after the Institute was created—to direct the mental retardation program's activities in the behavioral sciences.

Later that year, he headed the Institute's Mental Retardation Research Centers program in which he oversaw the establishment of the centers across the Nation.

In 1966, Dr. Tjossem was named acting director of the NICHD's mental retardation program. A year later, he became chief

of the Mental Retardation and Developmental Disabilities Branch where he remained until his retirement.

Prior to joining NICHD, he spent 1 year as special assistant for mental retardation and chief psychologist for the U.S. Children's Bureau in what was then the Department of Health, Education and Welfare.

Associated with the University of Washington School of Medicine in Seattle for almost 13 years, Dr. Tjossem started there in 1951 as associate psychologist in the Child Health Center.

In 1957, he was selected as assistant director of the clinic for child study in the department of pediatrics. He earned his Ph.D. in clinical and child psychology from the university in 1959. He was assistant professor of psychiatry and pediatrics there from 1960 to 1964.

Awards Noted

The author of numerous publications in the field of mental retardation and developmental disabilities, Dr. Tjossem is the recipient of several awards, including the 1982 Research Award from the American Association on Mental Deficiency for his commitment to mental retardation research and forging the NICHD Mental Retardation Research Centers "into some of the world's most effective tools of research."

He also received the 1985 Career Research Scientist Award from the American Academy on Mental Retardation for outstanding research contributions, and the Exceptional Meritorious Service Award from the National Down Syndrome Congress. □

Toastmasters Club Receives Award for Excellence

The NIH R&W Toastmasters Club received recognition as an "Excellent Club" at the recent fall conference of the Toastmasters International in Arlington, Va. Past club president Neal Meyerson, NCI, accepted the award.

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'Viral Oncology' Topic of Symposium

The third annual Wallace P. Rowe Symposium on Animal Virology will be held Feb. 2-3 in the Lister Hill Auditorium, Bldg. 38A. The topic of this year's symposium is "Viral Oncology."

Sponsored by the National Institute of Allergy and Infectious Diseases, the symposium honors the late Dr. Rowe, who was an internationally recognized authority on animal virology. Dr. Rowe was chief of the Laboratory of Viral Diseases at NIAID from 1968 until his death in 1983. A feature of the symposium is the presentation of the annual Wallace P. Rowe Award for Excellence in Virologic Research to an outstanding young virologist.

The speakers on the first day of the symposium include Drs. John Coffin, Tufts University School of Medicine; Christine Kozak, NIAID; Stephen Goff, Columbia University; Charles Sherr, St. Jude's Children's Research Hospital; Cornelia Bargmann, Whitehead Institute; Michael Cole, Princeton University; John Kreider, Pennsylvania State College of Medicine; and Harald zur Hausen, Heidelberg, West Germany.

The second day's speakers include Drs. David Livingston, Dana-Farber Cancer Institute; Thomas Benjamin, Harvard Medical School; Palmer Beasley, San Francisco General Hospital; William Rutter, University of California, San Francisco; Thomas Shenk, Princeton University; Elliott Kieff, University of Chicago School of Medicine; and M.A. Epstein, University of Oxford.

Call 496-3006 for information. □

Gilbert Wright, NHLBI, received recognition as editor of the Area 51 Toastmasters newsletter (second place).

The Toastmasters Club meets every Friday at noon in Bldg. 31, Rm. B2C05. Visitors are welcome. □

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