

"Still  
The Second  
Best Thing  
About Payday"

# The NIH Record

## NIH Parking and Transportation Work Group Forms

Each year, it becomes more difficult for employees to find parking on campus. Although it's understandable that most NIH'ers would like to enjoy the freedom of having their own car on campus, the reality remains that there are simply not enough parking spaces to accommodate all of the cars. That parking on campus is a growing problem is easily recognizable. The solution is another matter. There are many issues related to parking that affect not just employees, but also visitors, patients, commuters, and the community at large.

To help deal with the issue of parking at NIH facilities, the Office of Research Services has established the parking and transportation work group (PTWG). Made up of members of ORS and a cross-section of employees from the ICDs, PTWG was created to generate and evaluate ideas and approaches to transportation and parking management at NIH, and to disseminate information and collect suggestions from employees across NIH.

A number of parking issues are currently being explored by PTWG, but there are severe limitations. Besides the environmental and aesthetic considerations as reasons why we can't, as some have suggested, "pave the campus" for more parking, the most compelling is that agreements between NIH, and county and state governments limit the number of parking spaces on campus to

(See **PARKING**, Page 6)

## Elders Discusses Reproductive Issues at Seminar

Reproductive life for women has changed and we need to recognize that change and deal with it, U.S. surgeon general Dr. Joycelyn Elders told more than 200 people at the recent Women's Health Seminar Series on reproductive and sexual issues.

"How can we provide better contraceptive health and research?" she asked.

Drinking, drugs, smoking, and sexually transmitted diseases (STDs) are social problems affecting women's reproductive health that need to be addressed, she said. STDs, for example, are increasing throughout society, and often are silent in women.

Elders recommended a primary preventive health care approach. She stressed the need for early childhood education and day care, more comprehensive health education in the schools between

(See **REPRODUCTIVE**, Page 2)



U.S. surgeon general Dr. Joycelyn Elders (r) answers a question from the audience at the opening seminar of the 1993-94 Women's Health Seminar Series, sponsored by the Office of Research on Women's Health. The other speakers include (from l) Drs. Charlotte Gardiner, Gary Hodgen and Deborah Holtzman.

## First Biodiversity Program Awards Made

The first awards under the International Cooperative Biodiversity Groups program were announced recently at a press conference on Capitol Hill organized by NIH, the National Science Foundation, and the U.S. Agency for International Development. Five groups, consisting of 20 diverse private and public institutions including pharmaceutical companies and environmental organizations in seven countries, are initial awardees in the program. They will collaborate on projects that address biodiversity conservation and the promotion of sustained economic activity through drug discovery from natural products.

Support for the program will total approximately \$2.5 million per year over the next 5 years, shared among NIH, NSF, and USAID. The Fogarty International Center both administers the

(See **BIODIVERSITY**, Page 2)

## NIH Celebrates African American History Month

February is set aside for the nation's annual observance of African American History. In keeping with the NIH 1994 theme, "Imhotep—the Father of Medicine," the Office of Equal Opportunity (OEO) Black Employment Program and the NIH Black employees advisory committee have planned several activities that will give all NIH employees an opportunity to explore the heritage and recognize the contributions of



Dr. Charlene Drew Jarvis

African Americans in medicine and science. This year's observance will consist of an opening program, a marrow donor awareness and recruitment drive, a Knowledge Is Power symposium on the Family and Medical Leave Act, and the annual luncheon.

The opening program will be held on Tuesday, Feb. 1. Dr. Charlene Drew Jarvis, councilmember of the District of Columbia and a former scientist and researcher at NIH, will be the keynote speaker. A native Washingtonian, Jarvis is a graduate of Theodore Roosevelt High School. She earned her B.S. degree at Oberlin College, her master of science degree at Howard University, and her doctorate in neuropsychology at the University of Maryland. She worked as a staff fellow from 1971 to 1976 in the Laboratory of Neuropsychology, NIMH, and as a research psychologist from 1976 to 1979 in the same lab.

From 1979 to the present, Jarvis has served as a D.C. councilmember. A 1991-92 member of Leadership Washington, she serves on many boards including the Pennsylvania Avenue Development Corp., the Economic Development Finance Corp., the United Negro College Fund, and the National Advisory Mental Health Council of NIMH.

The opening program will also feature Joseph Soh Ngwa, a master drummer from the central African country of Cameroon, who will

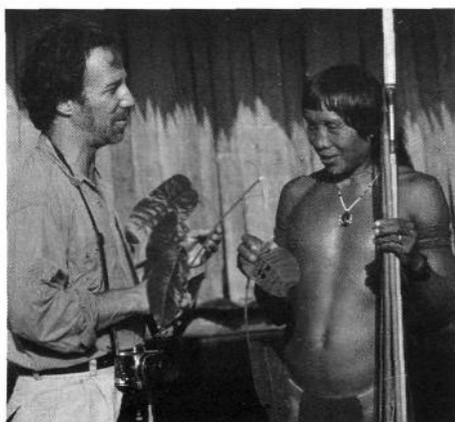
(See **OBSERVANCE**, Page 4)

**BIODIVERSITY***(Continued from Page 1)*

program on behalf of the sponsoring agencies and contributes to it along with NCI, NIAID, NIMH and NHLBI.

"All of us involved in this new interagency effort share a high degree of enthusiasm and expectation," said Dr. Philip E. Schambra, FIC director. "The program not only meets an urgent global challenge, it also presents a paradigm for sustainable development by supporting projects that promote sustained economic activity through the preservation of natural resources. It represents a creative solution to the complex problems of biodiversity loss and improved human health."

Projects include the selection and acquisition



*Dr. Mark Plotkin, an ethnobotanist with Conservation International, discusses medicinal uses of tropical plants with a Tirio Indian colleague in Suriname. The project is one of five being funded by an interagency program to address biodiversity conservation. (Photo: Russell Mittermeier, Conservation International)*

of natural products derived from biological diversity as potential therapeutic agents for diseases of concern to both developed and developing countries such as AIDS, cancer, parasitic diseases, and heart disease. Other important components include the examination of traditional medicine practices, development of long-term strategies to ensure sustainable harvesting, biodiversity inventories and surveys, training and infrastructure support for host-country institutions, and long-term funding for biodiversity conservation in the host countries.

Agreements have been negotiated among participating institutions so that economic benefits from these discoveries are equitably shared and accrue to local communities and indigenous peoples involved in the discovery of the natural product. Contributions from pharmaceutical companies include screening for therapeutic potential, training opportunities, equipment donations, financial support, and a percentage of royalties from the sales of products developed from this program.

The program is an outcome of an international conference convened by FIC in 1991, which brought together experts in diverse fields

from the United States and developing countries, and provided the catalyst for interagency efforts to develop a coordinated effort.—Jim Bryant □

**REPRODUCTIVE***(Continued from Page 1)*

kindergarten and 12th grade, and teaching young men to be more responsible.

"We've all got to be committed to opportunities to give women their reproductive freedom," she said.

Other speakers participating in the opening lectures for the 1993-94 Women's Health Seminar Series included Dr. Deborah Holtzman, sociologist for the Centers for Disease Control and Prevention; Dr. Gary Hodgen, a reproductive endocrinologist at Eastern Virginia Medical School; and Dr. Charlotte Gardiner, a technical officer at the United Nations Population Fund.

Holtzman supported Elders' statement that children are becoming sexually active at a younger age. Fifty percent of men and 32 percent of women are sexually active by age 16. Eighty-six percent of men and 75 percent of women are sexually active by age 19. Early sexual activity is important because the age of first sexual activity is an indication of how many sex partners one will have, according to Holtzman. A significantly high number of sexual partners can have a negative effect on a woman's health.

Following Holtzman, Hodgen discussed the different functions of the drug RU486 and its importance to women's as well as men's health. It can be used to induce labor, treat endometriosis, or treat meningioma, for example.

The seminar concluded with a discussion by Gardiner on how contraception is influenced by socioeconomic, cultural and political factors.

The Women's Health Seminar Series, sponsored by the Office of Research on Women's Health in collaboration with the advisory committee on women's health issues, will continue with discussions on "Women and HIV/AIDS" at 2 p.m. on Thursday, Feb. 23 in Lipsett Amphitheater, Bldg. 10. Other topics for the 1993-94 series include "Domestic Violence and Abuse of Women" on Mar. 23 and "Malignant and Benign Breast Diseases" on May 19. For more information on the series, call 2-1770.—Ellyn Pollack □

**Normal Subjects Sought**

NIMH neuroimaging research project requires subjects between the ages of 18 and 45. Involves limited radiation exposure as part of single photon emission computed tomography (SPECT) procedures. Study includes screening evaluation, two SPECT scans and one MRI scan. Payment provided for participation. Located on the campus of St. Elizabeths Hospital in Washington, D.C. Ample parking available. If interested, call Dr. Eric Watsky, (202) 373-6112. □



*Dr. James Hill (c), NIAID deputy director, presents Equal Employment Opportunity Special Achievement Awards to NIAID employees Steven J. Berkowitz, chief of the Financial Management and Information Systems Branch, and Dr. Pamela M. McInnes, Bacterial Vaccines Program officer in the Division of Microbiology and Infectious Diseases.*

**Healthy Individuals Needed**

NIMH is seeking individuals in very good physical and emotional health ages 18 to 60. Interested persons should not experience any significant changes in mood or energy across the seasons. Women ages 35-45 are especially needed. Eligible participants will be paid and all information will remain confidential. Those who would like to take part in the program should call the seasonality studies section, 6-0500. □

**The NIH Record**

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**NIH Record Office**  
Bldg. 31, Room 2B-08  
Phone 6-2125  
Fax 2-1485

**Editor**  
Richard McManus

**Assistant Editor**  
Anne Barber

**Associate Editor**  
Carla Garnett

**Correspondents:**

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## New Animal Model for Osteoporosis Discovered

By Elia T. Ben-Ari

In a surprising turn of events, researchers discovered that the bones of mice they had genetically engineered for studies of the immune system bear striking similarity to the bones of people with osteoporosis. "The amount of bone mass lost in these mice [about 50 percent] would correspond to a severe case of osteoporosis in humans," says Dr. David B. Lewis of the University of Washington in Seattle, who led the NIAMS-supported study. These mice should be useful for developing and testing new treatments for osteoporosis.

Osteoporosis is a common disorder in which loss of bone mass results in fragile, easily fractured bones. Development of new therapies for osteoporosis has been hampered by the lack of a convenient animal model.

The dramatic bone loss in these mice, which occurs in their first few months of life, mimics forms of osteoporosis in which formation of new bone tissue is reduced. This includes the osteoporosis that is common in older people as well as osteoporosis that results from excessive use of cortisone-like drugs.

In work that led to this finding, Lewis and fellow UW immunologist Dr. Roger M. Perlmutter inserted a modified gene, or "transgene," into laboratory mice. The transgene was engineered so as to drive increased production of a chemical messenger called interleukin-4 (IL-4) in bone marrow cells. The researchers' original goal was to see how increased levels of IL-4 would affect development of immune-regulating white blood cells (T lymphocytes).

While examining these transgenic mice, Lewis says, "we noticed that their bones had a washed-out appearance and seemed less strong than usual." Following a hunch that these mice might serve as a useful model for studying bone disease, Lewis sought the collaboration of researchers expert in various aspects of bone biology. The combined efforts of investigators in radiology, pathology, and orthopaedics led to the conclusion that the mice had a bone disorder closely resembling osteoporosis.

Radiologists used a high-resolution x-ray method to confirm that the mice had a marked decrease in bone mass. Experts in bone biomechanics found that bones from the transgenic mice were significantly less stiff and more fragile than bones from normal mice. Finally, microscopic tissue analysis by pathologists revealed that the bones of these mice exhibited hallmarks of osteoporosis.

Bone is a dynamic tissue, constantly being renewed by a process in which old bone is removed (resorbed) and replaced with new bone. This process is carried out primarily by two types of cells: bone-eating cells called osteoclasts and bone-forming cells called osteoblasts. In osteoporosis, the normal balance between bone resorption and bone formation is disrupted; this can occur as the result of increased osteoclast activity, decreased osteoblast activity, or a combination of the two.

In the case of the IL-4 transgenic mice,

osteoporosis appears to develop primarily due to a profound decrease in bone-forming osteoblast activity. "This model may be helpful especially for studying both age-related osteoporosis and drug-induced osteoporosis, in which decreased osteoblast activity plays a major role," says Lewis. "These mice might be useful for finding ways to turn on osteoblasts, providing new ways to stimulate bone formation in people with osteoporosis."

This new animal model for osteoporosis has a number of advantages. The disease occurs in both male and female mice, and researchers do not have to wait for the animals to age before they develop severe disease. In addition, the genetic defect causing the disease is already known, since it was deliberately created by the researchers.

Lewis and colleagues are working to find out how an increase in IL-4 levels in bone marrow cells causes bone loss in the transgenic mice. Although a number of chemical messengers have been found to play a role in the regulation of bone resorption and formation, the role of IL-4 in bone is not well understood. The researchers hope that by studying what causes bone loss in these mice, they will shed light on the disease processes of osteoporosis. In addition, Lewis says, "these transgenic mice may facilitate the evaluation of new potential therapies to prevent or ameliorate bone loss." □

## National Oral Health Information Clearinghouse Opens

A dentist is asked to treat a child with a genetic disorder that affects tooth development, or an adult with diabetes complicated by severe gum disease. Where can the dentist find information on treatment? How can the patient or family obtain information about appropriate oral health care?

For the first time, there is a central resource for these "special care" patients and the practitioners who treat them: the National Oral Health Information Clearinghouse (NOHIC), a new service of NIDR.

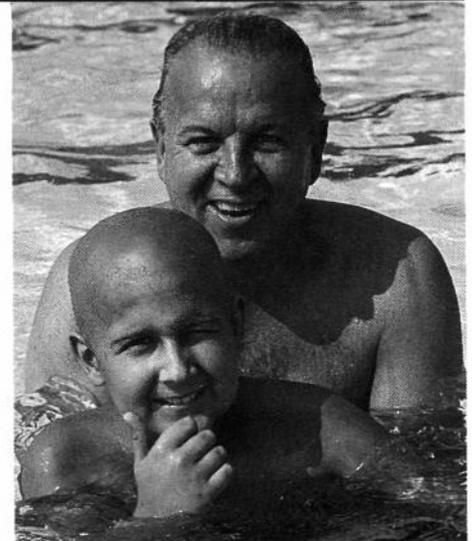
Special care patients are those who have medical or disabling conditions that lead to oral health problems. Their treatment needs often lie outside the realm of traditional dental care. Special care patients include:

- People with genetic disorders or systemic diseases that affect oral health. Cleft lip and/or palate, for example, are among the most common birth defects and pose major treatment challenges for practitioners.

- People whose medical treatments cause oral problems, such as mouth sores or dry mouth that often result from chemotherapy or radiation therapy for head and neck cancers, or from a variety of medications.

- People with mental or physical disabilities, like severe arthritis, that make good oral hygiene practices difficult.

The growing number of special care patients in the general population poses problems for both patient and practitioner. For patients, the problem is twofold: they not only need oral



*The Children's Oncology Camps of America (COCA) recently selected Randy Schools for its annual "Spirit of COCA Award." The honor is presented to a volunteer who has helped advance camping programs for children with cancer. Schools, who manages the R&W at NIH, was recognized for his work with Camp Fantastic, based in Winchester, Va. Shown here with camper Josh Soth, he was involved in the original planning of the summer camp program and recently served as president of Special Love, Inc., which sponsors Camp Fantastic.*

health care information related to their condition, but they must also be able to find health professionals who are trained to help them. For practitioners, the problem is lack of readily accessible, comprehensive information about providing oral health care to special patients. The clearinghouse was created in response to this need for a central bank of information for both special care patients and their health care providers.

Requesters can write NOHIC for free materials, information, and referral to other helpful resources at the following address:

National Oral Health Information Clearinghouse, Box NOHIC, 9000 Rockville Pike, Bethesda, MD 20892; or call 2-7364. □

## Normal Volunteers Required

Female volunteers ages 30-42 are needed to participate as age and sex-matched normal controls for chronic fatigue syndrome studies. Volunteers must be in good health, not take medications on a regular basis, be free of chronic medical or psychiatric conditions, not be at high risk for acquiring the AIDS virus, have no alcohol or drug dependency or be pregnant, and be able to adhere to a minimally restricted diet. Also, applicants must be able to donate blood and urine samples for routine and research tests. Compensation will be provided. If interested, obtain an application from the Clinical Center Normal Volunteer Office, Bldg. 10, Rm. 1C121. Confidentiality of provided information is assured. □

## OBSERVANCE KICKS OFF FEB. 1 (Continued from Page 1)

perform a ritual communal fellowship celebration; Shirley C. Denise McCoy, actress, poet and writer; and the NIH Blacks In Government Choir.

The marrow donor awareness and recruitment drive, cosponsored by the NIH Black Employment Program, NHLBI, and the NIH Marrow Donor Program, will be held on Monday, Feb. 14 in Masur Auditorium from 10 a.m. to 2 p.m. This year's recruitment drive will be dedicated to Alicia Nelson, who needs a matching donor. She is the niece of Patricia Young, an NHLBI employee.

Thousands of Americans are stricken each year with leukemia, aplastic anemia and other fatal blood diseases. For many, their only chance of survival is a bone marrow transplant. Due to the unique characteristics of an individual's bone marrow, the best chance for success rests between donors and patients who share the same racial or ethnic ancestry.

Volunteers of all races are desperately needed; however, as NIH observes African American History Month, an appeal is especially made to African Americans to become registered donors.

According to Jalil Mutakabbir, Black Employment Program manager, the sponsors of the program have set a goal of 250 African American donors for the February 1994 recruitment drive. Certificates will be given to all who become registered donors, and plaques will be given to the Black employees advisory committee representative, the EEO officer and the director of the top three ICDs with more than 10 African American donors.

You can make a difference. African Americans are needed to save African Americans. Nationwide, there are more than 600 African Americans who need a marrow transplant. Currently, more than 650,000 people have volunteered to be potential marrow donors; however, only 4 percent are African Americans.

Guest speakers for the program will be African American bone marrow donors, two bone marrow recipients, an African American who is seeking a donor, and a parent and her young daughter who is presently in remission but not out of danger. Entertainment will be provided by a host of NIH employees.

The Knowledge Is Power symposium on the Family and Medical Leave Act, cosponsored by the Black Employment Program and the Federal Women's Program manager, OEO, will

be held on Tuesday, Feb. 22 from 10 a.m. to noon in Masur Auditorium. The Family and Medical Leave Act of 1993 (FMLA), which became effective on Aug. 5, 1993, was enacted to allow employees to take reasonable amounts of leave for medical reasons, for the birth or adoption/foster care of a child, and for the care of a child, spouse, or parent who has a serious health condition. The FMLA is intended to balance the demands of the workplace and the needs of families, to promote the stability and economic security of families, and to promote the national interest in preserving family integrity.

The annual African American History observance luncheon will be held on Feb. 28 at the Howard Inn in Washington, D.C. Dr. Barbara Justice of New York City, founder of the African-African American Research Institute on AIDS, will be the keynote speaker;



*Master drummer Joseph Soh Ngwa will perform a ritual communal fellowship celebration during NIH's African American History observance.*

she devotes her energy and skill to the advancement of her people.

Growing up in a high-achieving family with a father who was a successful businessman, politician and ardent Garveyite, Justice was expected to be an independent, progressive high achiever. Her premed studies were started at Columbia University and completed at Connecticut College for Women. By 1977, she was a graduate of Howard University School of Medicine. She accepted a surgical internship and served as chief resident at Harlem Hospital Center. Additionally, Justice holds fellowships in surgical oncology at Howard University Medical School, and in trauma surgery at Jamaica Hospital, Jamaica, N.Y. She is credited with being one of the few African American females to have trained in

*Dr. Barbara Justice, founder of the African-African American Research Institute on AIDS, will speak at the annual luncheon.*



surgical oncology and trauma surgery.

The cost of the luncheon is \$20. Bus transportation will be provided by NIH. For more information about the activities or for reasonable accommodation, contact the Black Employment Program manager, 2-3663. □

## IL-12 Could Help Fight AIDS

NCI scientists have succeeded in restoring normal immune responses to cultured cells from HIV-infected donors. The scientists used a natural blood substance, interleukin-12 (IL-12), which will be tested in asymptomatic HIV-positive individuals within the next several months.

T lymphocytes from many HIV-infected people do not show normal immune reactions when they are exposed to antigens such as influenza virus. By adding the immune regulator IL-12 to cultures of these cells, the NCI scientists and their colleagues were able to augment the cells' immune reactions.

"In the test tube, this is the most powerful immune response modulator we have seen," said Dr. Gene M. Shearer of the Experimental Immunology Branch.

IL-12 was identified in 1991 by scientists at the Wistar Institute, Philadelphia, and Hoffman-La Roche, Inc., Nutley, N.J. It is an interleukin—one of a class of proteins produced by lymphocytes that transmit signals to regulate growth of immune cells.

The investigators tested white blood cells from HIV-negative and HIV-positive individuals by exposing cultures of the cells to several antigens, including influenza virus and synthetic versions of HIV envelope peptides. Cells from HIV-negative donors reacted to antigens with T cell proliferation, interleukin-2 (IL-2) production, and interferon-gamma (IFN-gamma) production. (These cells did not react to HIV envelope peptides, however, because of the donors' lack of previous exposure to HIV.)

Cells from HIV-positive individuals did not respond fully to any of the test antigens unless IL-12 was added. In the presence of IL-12, the cultures reacted normally to challenge with the antigens, showing T cell proliferation, IL-2 production, and IFN-gamma production. The immune responses of cells from HIV-negative donors were normal whether or not IL-12 was added. □



*Shirley C. Denise McCoy, actress, poet and writer, is featured in this year's kickoff event on Feb. 1.*

## Current Research Focusing on Antigen Identification

### Contraceptive Development Is Focus of NICHD Meeting

By Robert Bock

Researchers funded by the National Institute of Child Health and Human Development met recently to describe their progress in the development of contraceptive vaccines for men and women. Other researchers described their attempts to develop a contraceptive vaginal ring, and vaginal compounds that protect against the AIDS virus.

"Since the advent of oral contraceptives, few new contraceptives have been introduced to the U.S. market," said Dr. Nancy J. Alexander, chief of the Contraceptive Development Branch of NICHD's Center for Population Research. "Because most women have diverse requirements during their reproductive lives, the availability of a variety of methods is important."

Much of the presentations involved research on antigens of sperm and eggs, she said. Briefly, antigens are molecules that can be recognized by the immune system. Specifically, the researchers hope that, once injected into the body, these antigens will spur the development of antibodies. Antibodies are immune system molecules that bind to antigens, targeting them for eventual destruction by the cells of the immune system. Antibodies that recognize antigens on sperm and eggs theoretically have the potential to prevent fertilization from taking place.

Much of the research has been on identifying possible antigens on the sperm head, Alexander explained. Key proteins for vaccine research have been those involved directly with the sperm's binding to the egg or with fertilization.

Such studies have already begun in female baboons and have resulted in high levels of antibodies against specific sperm antigens, she said. Other trials of different antigens will be conducted in monkeys next year. Although most of the animals become infertile, Alexander explained that a few still retain their fertility, apparently because they fail to manufacture the appropriate antibodies. Researchers at the centers hope to overcome this problem by developing a polyvaccine—a vaccine containing several different sperm antigens.

"The idea is that if several proteins are used, more individuals will develop an immune response," she said.

Alexander also noted that it is important to test possible contraceptive antigens thoroughly, to make sure that they do not provoke an immune response to other organs in the body. This can happen if the antigen bears a chemical resemblance to molecules on other tissues.

Scientists from NICHD's three contraceptive development centers are studying ovarian antigens to make sure that immunizing animals with them would not result in an immune response against the animals' own tissues, she said. In one attempt, she added, a vaccine containing an ovarian protein has been

designed that is contraceptive but does not cause an immune response against other tissues.

Alexander noted that another problem contraceptive researchers face is that many contraceptive vaccines provoke an immune response for only short periods of time. NICHD-funded researchers have genetically spliced sperm and egg antigens onto the surface of nondisease causing strains of salmonella bacteria. Currently, the researchers have produced high levels of antibodies in animals for long periods of time and have completed human safety testing of the nondisease causing salmonella strains.

Other researchers have developed a contraceptive vaccine for men against the key reproductive hormone, luteinizing hormone releasing hormone (LHRH). The researchers have completed animal studies on the vaccine's safety and effectiveness and are now ready to test the vaccine in healthy human male

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*"Because most women have diverse requirements during their reproductive lives, the availability of a variety of methods is important."*

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—Dr. Nancy J. Alexander  
NICHD's Center for  
Population Research

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volunteers. So far, the researchers have found the vaccine to be effective at lowering LHRH in four men castrated as a treatment for prostate cancer.

In addition to studies of contraceptive vaccines, NICHD investigators are also developing a contraceptive ring that can be inserted in the vagina, Alexander said. Preliminary clinical trials indicate that, although the device delivers one-third less hormone than conventional oral contraceptives, it is every bit as effective and is nearly free of side effects. The device requires no action after insertion and does not interfere with the spontaneity of an unfolding sexual event. Additional trials are planned to confirm the device's safety, effectiveness, and acceptability. Another project involves the development of a spermicide that will protect men and women from the AIDS virus. Several compounds have been identified that may slow the spread of sexually transmitted diseases, including HIV, but do not irritate the reproductive tract. □

### Children of Divorce Are Subject of Sociology Study

A sociologist recently received a \$1.5 million MERIT award from NICHD to continue his groundbreaking work on children of divorce.

The awardee, Dr. Andrew J. Cherlin, of the department of sociology at Johns Hopkins University, has presented strong evidence that many of the behavioral problems common to children whose parents have divorced were actually present before the breakup occurred. Earlier research was based on the assumption that the divorce itself caused this behavior.

"I was surprised and pleased to receive this award," Cherlin said. "And it's always satisfying to have one's research recognized in such a significant way."

The MERIT (Method to Extend Research in Time) award is presented for research that shows the potential of steady, substantial future development. The award provides for an abbreviated renewal procedure for up to 5 years beyond the normal 5-year commitment for a regular research grant. The awardee is required only to submit a one-page abstract of the research plan for each year of the extension period.

"Overall, the evidence suggests that much of the effect of divorce on children can be predicted by conditions that existed well before the separation occurred," Cherlin and his coworkers wrote in 1991 in *Science*.

Largely as a result of this work, researchers now know that the breakup of a family is often a slow, painful process of parental conflict, inattention to the children's needs, depression, and extreme stress for all members of the household. During this time, the children may respond with aggressive, uncooperative, disobedient, and destructive behaviors, including substance abuse. Rather than merely triggering these behaviors, the breakup itself may simply exacerbate them.

This new understanding of the effects of divorce has broad implications for how social service agencies respond to the needs of children.

With the award money, Cherlin will be able to extend his work, investigating whether the process of family breakup affects children's future health, marriage patterns and divorce rates and economic status. By the summer of 1994, he and his colleagues hope to have preliminary information on the effect of parental divorce on a group of adult children in their thirties.—Robert Bock

## The NIH Life Sciences Education Connection

✎ Most people know the Division of Computer Research and Technology as the place to call when they need assistance with their personal computers or need to conduct some type of computational biosciences research. However, DCRT has also been involved in making science more accessible to students and the general public. The DCRT staff, led by Steve Gearinger, has used their expertise to assist in the development of two electronic bulletin boards that make NIH scientists readily accessible to the "neighborhood" educational system.

In January 1991, ALLIANCE, developed and directed by NIGMS' Dr. Irene Eckstrand, was launched as a pilot program to strengthen the science programs in local elementary schools. The ALLIANCE bulletin board has given students opportunities to learn to use computers, and to engage in scientific discussions and experiments (both one-on-one and electronically) with NIH scientists.

DCRT also worked with the Office of Education and Dr. Michael Fordis in 1991 to launch the NIHEDNET. This board provides a forum for intramural researchers, OE, and area science teachers and students to communicate with each other. In this board, electronic "conferences" allow access to a diverse range of topics from the Metropolitan Consortium for Minorities Clubs in the D.C.



area to postdoctoral vacancies at NIH.

DCRT continues to play a role in science education by providing demonstrations, lectures, and hands-on training to support the use of these bulletin boards.

✎ As many of you may have read in a previous edition of the *Record*, the Office of Science Education Policy (OSEP) is planning to pilot a "Mini-Medical School" this spring. "What's a Mini-Med School?" you may ask. In short, it's a free evening lecture series that puts outstanding scientist/teachers in direct contact with the public to

teach people about biomedical science and research and allows them the opportunity to experience the fun and excitement of real science. OSEP is looking for outstanding speakers to pilot this program at NIH. If you know an NIH scientist who is also an exceptional teacher, call with his/her name and the general topic area (cancer, neuroscience, molecular biology, etc.). Speakers with prior experience communicating science to the general public are especially needed. Contact Dr. Bruce Fuchs, OSEP, 2-2469, with your suggestions or for more information. Attend the first session of the "Science Education Luncheon Connection" on Jan. 25 in the 11th floor solarium of the Clinical Center to hear more about this program.



*Dr. Gilbert Ashwell of NIDDK's Laboratory of Biochemistry and Metabolism has received the Karl Meyer Award from the Society for Complex Carbohydrates. He shares the honor and cash award with Dr. Saul Roseman of Johns Hopkins University's department of biology. The investigators were cited for their "pioneering work in glycobiology research." Named for the man who essentially established the field of proteoglycan research, the Karl Meyer Award is given every 2 years. It is among the many honors conferred on Ashwell in the 40-plus years he has been a scientist at NIH.*

### Donor Center Seeks Recruiters

NIH's Blood Donor Center is expanding its donor recruitment program with the establishment of a network of volunteers to help in the education and recruitment of new donors. If you would like more information on this program or have an interest in becoming a key recruiter within your ICD, contact Terri Kerner, 6-1048. □

### PARKING AND TRANSPORTATION WORK GROUP FORMS

(Continued from Page 1)

one for every two employees, a limit NIH is currently slightly over. Anyone who has tried to drive to or from campus during peak morning or evening hours has first-hand knowledge of the need for this type of limit: Roads and intersections in the vicinity of campus are at the saturation point.

Since NIH can't create additional parking, the problem of parking violations is of immediate concern. When carpool permit holders park single-occupancy vehicles, and single-occupancy vehicles park in spaces designated for carpools, visitors, handicapped, etc., they cause a spiraling effect as reserved spaces are taken from other drivers and/or areas are blocked by illegally parked cars. In the past year, the NIH Division of Security Operations has issued an average of nearly 300 parking citations each week. Numerous autos were also towed each week, costing owners an additional \$60 or more.

Simply by observing existing regulations, drivers could have an immediate impact and begin improving the parking situation on campus. Improper use of carpool, visitor, patient, and/or handicapped parking and the blocking of roads, standpipes, stairwells, and fire lanes is not only an inconvenience, but also is inconsiderate, often dangerous, and takes

spaces from others who are already doing what they can to help.

For those employees who continue to find it too inconvenient to follow the policies designed to maintain a safe and efficient parking environment on campus, they should be aware that they will likely be ticketed and possibly towed. Repeat offenders can also lose their parking privileges for up to 6 months.

Minimizing parking violations on campus is only one step toward improving the parking situation. In addition to observing NIH parking regulations, drivers should allow sufficient time upon their arrival on campus to find an appropriate parking space. This may require use of the satellite parking and shuttles at Mid-Pike Plaza to the north or Garage 57 to the south. Wherever possible, employees should consider the use of alternate forms of transportation such as carpooling and public transportation. There is also free parking, by permit, for NIH employees at the Shady Grove Metro station. In addition, employees who take public transportation or commute in a registered vanpool can qualify for up to \$42 per month in Transshare subsidies.

If you have suggestions on how to improve the parking situation or transportation systems at NIH, or would like more information about

PTWG, contact one of the members listed below. If you would like more information about NIH parking policies or the NIH Transshare Program, contact the NIH Employee Transportation Services Office, 2-7433.—Tim Wheelles

### NIH Parking and Transportation Work Group Members

Ron Baker	DES	2-2848
Chauncey Brown	DSO	6-8404
Ken Carney	NLM	6-6491
Don Fierstein	DL	2-1832
Leo Luberecki	OGC	6-4108
Juanita Mildenberg	DES	6-5037
Lynn Mueller	DES	6-4817
Heidi Munger	ORS	6-5037
Johnny Robbins	NCRB	6-4131
Dr. Denise Simons-Morton	NHLBI	6-3503
Lisa Strauss	NINR	2-3158
Gail Thorsen	DSO	2-7433
David Tillet	ORS	6-5556
Cecelia Trainor	NIDDK	6-5889
Eric West	NIDR	6-6621
Tim Wheelles	NIDA	3-7703



## TRAINING TIPS

The NIH Training Center, Division of Personnel Management, offers the following hands-on courses:

Personal Computing Training 496-6211

Course Titles	Starting Dates
Welcome to Macintosh	2/24
Intro to WordPerfect (Mac)	2/7
Intro to MS Word (Mac)	3/2
Excel - 4.0 Level 1	2/14
Excel - 4.0 Level 2	3/8
MacDraw PRO	3/14
Intro to Personal Computing for New Users	2/15
Intro to DOS 6.0	2/4, 3/14
Intro to Windows 3.1	2/11, 28, 3/7
Advanced Windows 3.1	1/31
WordPerfect for Windows	2/22
Harvard Graphics for Windows	2/23
Pagemaker 4.0 for Windows	3/9
Lotus for Windows	2/7
Intro to WordPerfect 6.0	2/22
WordPerfect 5.1 - Advanced Topics	2/8
Intro to Harvard Graphics, Rel. 3.0	3/7
Intermed Harvard Graphics, Rel. 3.0	2/2
Advanced Paradox	2/28
dBASE IV - Advanced Topics	2/15
Microsoft Mail (DOS)	2/1
IMPACT System for Admin Staff	3/7
IMPACT System for Professional Staff	3/7
IMPACT System: A-TRAIN (TMS)	2/16
Intro to CRISP	3/11

Additional courses are available by request. For more information, call the Training Center, 6-6211, or consult the NIH Training Center Catalog. □

## Johnson, Peruski Join Genome Research Review Office

Drs. Nancy Johnson and Leonard Peruski have recently joined the National Center for Human Genome Research's Office of Scientific Review as scientific review administrators.

Johnson graduated summa cum laude from Hamline University with a B.A. in biology and received her Ph.D. in immunology from



Dr. Nancy Johnson

Harvard University. Her research experience has covered the areas of genetics, cancer biology, pathology and cell biology. Her most recent position was as an AAAS science, engineering and diplomacy fellow, in the Office of Research at the U.S. Agency for International Development.

Johnson coordinated the office's competitive research grants programs, which funded innovative research projects in less-developed countries. A member of AAAS, she also belongs to the American Society for Microbiology and the American Association of Immunologists.

Graduated with honors from Michigan Technological University with a B.S. in

biology, Peruski received his Ph.D. in microbiology from the University of Michigan. He was a postdoctoral fellow in protein structure and design at the University of Michigan and also at the Michigan chapter of the American Heart Association. Most recently, Peruski was a research associate in the division of basic sciences of the National Jewish Center in Denver. He holds memberships in both AAAS and the American Society for Microbiology.



Dr. Leonard Peruski

While Johnson and Peruski work collaboratively in the Office of Scientific Review, they also have developed "specialties" according to their interests. Peruski works on the grants that deal with computers, informatics, and DNA sequencing. Johnson works on those grants dealing with ethical, legal and social implications. The remainder of the grants, most of which involve mapping, are split equitably among the scientific review staff of the Office of Scientific Review. □

## Two Studies Link Twin Births to Cerebral Palsy

The current rise in multiple births may contribute to an increase in children born with cerebral palsy (CP), according to a report published in the December issue of *Pediatrics*. In a study involving more than 155,000 children, researchers from NINDS and the California Birth Defects Monitoring Program (CBDMP) found that twin pregnancies produced a child with CP more than 10 times as often as pregnancies producing a single child.

"With the number of twin births on the rise in this country and others, it is vital for us to increase our base of scientific knowledge about this very special population," said Dr. Patricia Grady, acting NINDS director. "Twins accounted for 10 percent of all cases of CP in this study, and we need to explore the reasons behind that number."

CP refers to a group of disorders with different causes that affect motor-control areas of the central nervous system. Its symptoms include movement disorders and often problems in speech and learning, as well as delays in physical development, and sometimes seizures. About half a million Americans have CP and an estimated 5,000 new cases of disabling congenital CP are added to the American population each year.

The current study was led by Dr. Judith K. Grether, an epidemiologist with CBDMP, a

division of the California department of health services, and by Dr. Karin Nelson, acting chief of NINDS's Neuroepidemiology Branch. They examined 2,985 individuals from 1,537 twin pairs who were born between 1983 and 1985 in four northern California counties and who survived to age 3. The researchers found that among the almost 3,000 children from twin pairs, 20 children in 18 pairs had CP. Approximately seven out of every 1,000 twin children had moderate or severe CP. And, more than 10 twin pairs out of every thousand twin pregnancies had CP in one or both members.

Although the results reported in *Pediatrics* describe a fairly small number of twins, the findings were replicated by a study conducted in Western Australia that extended the research to triplets. That study, published in the November issue of the *British Medical Journal*, reported that twin pregnancies produced a child with CP eight times more often than single pregnancies, while in triplet pregnancies a child with CP was produced 47 times more often. Again, scientists found that the death of one infant in a multiple set is related to a high risk of CP in the survivor(s).

Nelson, a coauthor of both studies, said: "We have always known that low birth weight babies were at higher risk for neurological disorders, but the new results of these studies

demonstrate how substantial the risks are for children of multiple births."

The number of twin births and, as a result, low birth weight babies, has climbed sharply in the past few decades. The *Pediatrics* article points out that medical science has been "strikingly successful" in allowing low birth weight infants to survive but "not effective in preventing their low birth weight or altering the rate of neurological morbidity among them." Subsequently, many more healthy infants survive, but there is also an increase in the number of infants with long-term neurological disability. The authors say that many of the findings were unexpected, because previous studies predated modern neonatal and obstetrical care and were not based on such well-defined populations.—Margo Warren and Shannon Garnett □

## NIAAA Moves to New Site

On Jan. 10, the National Institute on Alcohol Abuse and Alcoholism moved to a new location. The new address is NIAAA, 6000 Executive Blvd., Rockville, MD 20892-7003. The intramural research components remain at their present locations. All telephone and fax numbers remain the same except for fax number 3-9334, which has been changed to 3-8774. □

## NIDCD Center Wins Addy Award

The University of Arizona National Center for Neurogenic Communication Disorders recently was presented the "Addy Award" by the Tucson Advertising Club for its local campaign on stroke prevention in the Hispanic community. The center at the University of Arizona is one of the five National Multipurpose Research and Training Centers supported by NIDCD. The campaign included a fotonovela (photo novel) and a 60-second radio public service announcement.

The Tucson Advertising Club promotes distinction in the local advertising community through emphasis on education, competition and professionalism. The Addy Awards are presented in recognition of Tucson's best work in the industry.

The Arizona center focuses on neurogenic speech and language disorders, and development of research training, continuing professional education and information dissemination to patients and the public.



*Dr. Robert Adelstein (r), chief of NHLBI's Laboratory of Molecular Cardiology, donated his 100th unit of blood at NIH's Blood Donor Center recently. Sharing with him in the celebration are his wife Miriam (c), who works in CC's nursing department, and Dr. Harvey Klein (l), chief of the CC's department of transfusion medicine. Adelstein says that donating blood is his hobby and notes that it is a very reasonable one at that. He began donating as an intern at Bellevue Hospital in New York in 1959 and has continued ever since.*



*A picture of the first fotonovela (photo novel), "Tres cosas lindas hay en la vida," ("Three Beautiful Things in Life"), which describes the cause, prevention and treatment of stroke in a story.*

To obtain copies of the fotonovela, call 1-800-241-1044 (voice) or 1-800-241-1055 (TT). □

## Postmenopausal Vols Needed

The Cardiology Branch, NHLBI, needs postmenopausal volunteers for a study of vitamins and hormone replacement. Participants must not be currently taking estrogen; certain other medications are okay. Volunteers will be paid. If interested, call Diane Badar, 6-8033 or pager 104-3741-7 (digital). □

## NIH Offers Training to Administrative Support Staff

A comprehensive job skills and career enhancement program will soon be available to administrative support staff in one-grade interval jobs. The Administrative Skills Development Curriculum, developed by the NIH Training Center, will provide extensive, individualized training along with career counseling to administrative support staff throughout NIH.

Participants will be selected by their ICDs to take part in this 3-year program combining skills assessment, course work, and optional career counseling. The curriculum can be completed without any disruption to current job duties and with the involvement of participants' supervisors and personnel offices. After attending initial information sessions with their supervisors, all participants will take part in an intake workshop, "Planning for Career Advancement for Administrative Support Staff." Participants will use data from professionally administered assessments to formulate individual development plans. These plans, approved by participants' supervisors and personnel offices, will guide curriculum participants through the program. A minimum of six courses must be completed in 3 years to earn a certificate of completion. At least two courses must be taken each year.

All interested administrative support staff and their supervisors should attend a preliminary information session hosted by the NIH Training Center. The information sessions will be held from 11:30 a.m. to 12:30 p.m. on:

- Jan. 25, Parklawn Bldg., 3B, Rm. C
- Jan. 26, EPN, Conf. Rm. H

- Jan. 27, Bldg. 31, Conf. Rm. 7
- Feb. 1, Westwood Bldg., Rm. 428
- Feb. 2, Bldg. 10, Masur Auditorium

The curriculum is open to all NIH administrative support staff in one-grade interval jobs with the approval and funds authorization of their supervisor and ICD. For more information, call Mary Fisher, NIH Training Center, 2-3383. □

## Two Herpes Studies Recruit

NIH is currently recruiting for two vaccine trials involving genital herpes. Study one will vaccinate persons with confirmed genital herpes; study two will vaccinate the uninfected partner of individuals known to have genital herpes.

Study one: Healthy 18-55 year old men and women with physician-confirmed genital herpes of at least 1 year duration are needed for an 18-month-long placebo-controlled vaccine trial. The vaccine is being tested to determine whether it can reduce the number and severity of herpes outbreaks in the infected population.

Study two: Healthy volunteers age 18 and older are sought to participate in a research study of an experimental vaccine for prevention of genital herpes. Individuals are needed who do not themselves have genital herpes, but who are in a stable relationship with a single sexual partner who is known to have the disease. Both partners will be screened to confirm study eligibility.

For more confidential information on either of these studies, call 6-1836. □