Smoking of Drugs Creates New Dangers

Smoking of drugs such as heroin or cocaine produces concentrated blood levels that deliver a drug "punch" to the brain, according to NIDA researchers. These concentrated doses of smoked drugs produce powerful addictive effects and increase the risk of inadvertent drug overdoses, the researchers warned at a press briefing held during NIDA's recent Second National Conference on Drug Abuse Research and Practice.

"The research that we are reporting today shows that the route of administration of a drug does matter," said Dr. Roy Pickens, senior research scientist at NIDA's Addiction Research Center (ARC) in Baltimore. Studies conducted by Dr. Jack Henningfield at the ARC suggest that smoked heroin, cocaine, and nicotine get to the heart, brain, and other organs as rapidly as injected drugs, that is, almost immediately. This means that smoked drugs may produce dependence as quickly as injected drugs because "the abuse liability of drugs is directly related to the speed with which they get to the brain," Pickens stated.

The findings are important because national surveys show that a large number of people have been smoking drugs in recent years, said Pickens. Figures from the 1991 Household Survey on Drug Abuse show that nearly 5 percent of those surveyed had smoked marijuana in the previous 30 days. Another 0.2 percent had smoked cocaine, and 0.3 percent had used a smokable form of methamphetamine, commonly called "ice," in the same period. Less than 0.1 percent had smoked phencyclidine (PCP). Although these percentages may seem small, they translate into nearly 10 million current marijuana smokers and hundreds of thousands of current cocaine and ice smokers in the general population, said Pickens.

Cocaine smoking was reported to be increasing in a number of areas of the country and accounted for the majority of admissions for cocaine treatment in all regions, according to the June 1993 proceedings of NIDA's community epidemiology work group, which provides ongoing community-level surveillance of drug abuse patterns. In addition, since the

[See SMOKING DRUGS, Page 6]

DNA Repair Examined in Aging, Cancer

DNA intramural research is yielding clues that may some day make it possible to devise genetic therapies to enhance DNA repair at cell sites most susceptible to DNA damage and genomic instability. These therapies would have the potential for reducing the incidence of genetic damage, thereby lowering chances for developing cancers and other debilitating or life-threatening conditions in older people.

This is an exciting area, NIA's Dr. Vilhelm A. Bohr says, because "a number of human DNA repair genes have been identified and cloned, and are available for future gene therapy."

The NIA scientists are studying the causes of genomic instability, e.g., the damage and malfunctioning of DNA. Their research suggests that, in some cases, a local deficiency in DNA repair leads to gene rearrangements, chromosomal changes, and translocations. "In turn, these deficiencies may lead to cancer or diseases featuring accelerated aging changes," adds Bohr, chief of the institute's Laboratory of Molecular Genetics.

One such example is Werner's syndrome, an autosomal recessive trait characterized by scleroderma-like skin changes, muscular atrophy, a tendency to develop diabetes mellitus, aging of the face, and an increased incidence of cancer.

Also, older people can lack DNA repair capacity and thus experience a higher incidence of neoplasms such as colon cancer. In fact, scientists at Johns Hopkins School of Medicine recently discovered that some familial colon cancers were associated with DNA repair deficiencies. Similar changes in other mammals are suspected of contributing to tumors such as plasmacytomas in mice.

Bohr and colleagues at the NIA Gerontology Research Center in Baltimore studied normal

[See DNA REPAIR, Page 4]
National Asthma Education and Prevention Program (NAEPP), which brought together more than 30 private and public sector organizations that produced the first national guidelines on the management and treatment of asthma in 1991. Hurd was instrumental in the establishment of NAEPP in 1989. She also worked with the CDC, NIAID, and the American Lung Association to initiate a National Coalition for Tuberculosis Education, which targets educational information to HIV-infected persons.

Hurd has received many honors and awards including the designation as honorary fellow of the American College of Chest Physicians in 1990 and a Presidential Citation from the American Thoracic Society in 1991. She has also received a Meritorious Presidential Executive Rank Award and a DHHS Distinguished Service Award.

She completed her undergraduate work at Bates College in Lewiston, Me., and then earned an M.S. and Ph.D. in biochemistry at the University of Washington.

**NUTRITION RESEARCH MOVES (Continued from Page 1)**

acting director and chief of the Nutritional Sciences Branch of NIDDK's Division of Digestive Diseases and Nutrition.

The DNRC coordinates nutrition research and research training activities among the institutes by fostering trans-NIH RFAs, PAs, and RFPs that deal with nutrition and related disorders; by maintaining the Human Nutrition Research and Information Management System; and by representing NIH on various DHHS committees such as the interagency committee on human nutrition research and the nutrition policy board.

According to Dr. James O. Hill, obesity researcher and member of the national task force on prevention and treatment of obesity, nutrition-related diseases such as obesity, heart disease, and some cancers exact a tremendous toll on the United States health care system. "If we could reduce the prevalence of these diseases," he said, "the savings in health care costs would be enormous. Coordinating research efforts in nutrition and obesity through NIDDK is a move in that direction."

**The Record**

Czech Republic Honors Grantee

NIGMS grante Dr. Francisco Ayala recently received the gold honorary G.J. Mendel Medal for merits in the field of biological sciences from the Academy of Sciences of the Czech Republic. The medal is the greatest honor for achievements in the field of genetics bestowed by the academy. Ayala was honored for his "significant and worldwide recognized contribution to the research of evolutionary genetics."

Ayala is the Donald Bren professor of biological sciences and professor of philosophy at the University of California, Irvine. He is currently president of the American Association for the Advancement of Science, and has been elected to numerous scientific societies. He also served for 3 years on the National Advisory General Medical Sciences Council, the advisory board to NIGMS. Ayala earned a B.S. in physics from the University of Madrid in Spain and a Ph.D. equivalent in philosophy from the University of Salamanca in Spain. He also earned an M.A. in zoology and a Ph.D. in genetics from Columbia University.

**Vols Needed to Test Seldane**

The division of clinical pharmacology at USUHS needs healthy females, ages 18-45, to take Seldane (an antihistamine) for 1 week. Volunteers will be compensated $30 for their participation, and may be eligible for other research studies that pay up to $600. If interested or for more information, call the research nurse, (301) 295-3071.

**Hurd Fills Interim Ninr Post**

Hurd Fills Interim Ninr Post (Continued from Page 1)

HURD FILLS INTERIM NINR POST

CC's Piscitelli Receives Grant To Study IL-2 Administration

A pharmacokineticist in the Clinical Center's pharmacy department has received a $10,000 competitively awarded grant from the American College of Clinical Pharmacy to investigate the most effective way to administer a drug that modulates the body's immune system.

Pharmacokinetics, explains grant recipient Dr. Steve Piscitelli, is the science of what the body does to a drug once it's administered. "It is the absorption, distribution, metabolism, and elimination of drugs in the body," he says.

The study, developed in collaboration with NIAID, focuses on how the body processes the drug interleukin-2 (IL-2) when it is injected subcutaneously, that is, when a drug is administered by a short needle inserted just under the skin. Subcutaneous injection has long been the method used by people with diabetes to self-administer insulin.

IL-2, developed initially as a cancer-fighting drug, is given intravenously in tandem with antiretroviral drugs to patients with HIV infection as part of some current and NIAID studies. The antiretrovirals work to prevent the virus from replicating and killing more and more white cells, Piscitelli explains, and the IL-2 stimulates the infection-fighting capabilities of the white cells that remain.

Piscitelli will measure the levels of IL-2 in the body for up to 24 hours after the injection. "We will correlate the levels of IL-2 in the blood with side effects," he says, "and will also see if there is any relationship between blood levels and an increase in white blood cell counts."

Coeinvestigators in the study are NIAID’s Dr. Richard T. Davey, Dr. Clifford Lane and Julia Metcalf; and CC clinical nurse Mary Wells.

**Dr. Steve Piscitelli, a CC pharmacokineticist, has received a grant from the American College of Clinical Pharmacy to study the most effective way to administer IL-2.**

**Hewitt To Speak at Arthritis Committee Meeting, July 28**

The arthritis and musculoskeletal coordinating committee will meet on Thursday, July 28 from 1:30 to 3:30 p.m., Bldg. 31, Conf. Rm. 7. The featured speaker will be Dr. Tyl A. Hewitt, Developmental Biology, Genetics and Teratology Branch, Center for Research for Mothers and Children, NICHD. Hewitt will discuss "Current Trends in Limb, Muscle, and Skeletal Development."
Bible of Belly Aches

NIDDK Publishes Book on Digestive Diseases

Sixty million digestive diseases are reported each year in the United States, resulting in nearly 200,000 deaths, according to Digestive Diseases in the United States: Epidemiology and Impact. The new reference work is the first synthesis of information regarding the incidence, prevalence, morbidity, mortality, and natural history of multiple disorders of the gastrointestinal tract, liver, gallbladder and pancreas.

Largely derived from population-based surveys from 1983 to 1988 such as the National Health and Nutrition Examination Survey, the National Hospital Discharge Survey, and the National Ambulatory Medical Care Survey, Digestive Diseases in the United States focuses on the most frequently reported digestive diseases. Commissioned by the National Digestive Diseases Advisory Board and published by NIDDK, this monograph also recommends disease areas that require further research such as liver cirrhosis and its relation to malnutrition and alcohol metabolism and the various causes of peptic ulcers.

"If information was collected from national data sources, it's here," said Dr. James Everhart of NIDDK's Division of Digestive Diseases and Nutrition and editor of the book.

Today, digestive diseases are estimated to cost $87 billion, or at least 11 percent of all U.S. health care expenditures. According to the compendium, of the 440 million acute medical conditions (such as abdominal pain and headache) reported in the U.S. annually, more than 22 million are for acute digestive conditions, with 11 million from gastroenteritis and 6 million from indigestion, nausea, and vomiting. These acute digestive conditions result in 71 million days of restricted activity, 16.9 million days lost from school, and 19.4 million days lost from work.

In addition, more than 40 million chronic digestive conditions such as ulcers and bowel problems are reported annually, causing disability in nearly 1.7 million persons. Chronic digestive diseases result in 158 million restricted activity days and 22 million days lost from work.

The new reference book also shows that malignancies of the digestive tract are the most common, causing more than 26 percent of all cancers. The most common sites include the colon/rectum, pancreas, stomach, esophagus and liver.

"This is a very valuable reference book that puts in one place all available statistical data on digestive diseases in the United States," said Dr. Jay H. Hoofnagle, director of the Division of Digestive Diseases and Nutrition, NIDDK. "We now have a significant tool to help construct federal health care policy and direct biomedical research."

Everhart agrees: "We are more likely to have good policy if good data are available."

Copies of the book are available for $15 from the National Digestive Diseases Information Clearinghouse, Box NDDIC, 9000 Rockville Pike, Bethesda, MD 20892; 654-3810.

NIH's Blacks in Government Chapter Gives, Receives Awards

The NIH chapter of Blacks in Government recently held its first annual awards/scholarship dinner dance. Award recipients were Ivan Wallace, Chapter Involvement Award; Ann Coleman, MLK Help Somebody Award; Zita Givens and O.H. Laster, NIH Community Involvement Award; and Felicia Shingler, Young Adult Achievement Award.

The NIH BIG Chapter President's Award was presented to Gladys Whitted, NIH BIG first vice president, and Ruby Fields, BIG founder and past national president. Gregory Wims, president of Montgomery County's NAACP, was awarded one of NIH BIG's two Distinguished Service Awards; the second one went to Rep. Albert R. Wynn (D-Md.) of the state's fourth district for his contributions to the African American community. Vincent A. Thomas Jr., president of NIH's BIG chapter, was surprised and honored by his chapter members with the Nelson Mandela Leadership Award. Gloria Hatcher and James Harley won tickets to the scholarship dinner dance in BIG's recent membership drive raffle.

In its most recent activity, BIG's community outreach program committee sponsored a potluck fellowship on July 15 featuring Isis author Dr. Frances Cress Welsing.

Upcoming BIG events include the following:

- The young adults resources and development committee will sponsor the second of two "Summer Sets" on July 26 from noon to 1:30 p.m. This program is designed to provide a forum for summer students and young adults to discuss concerns and issues of interest to them. The final "set" will be held on the lower patio of Bldg. 31, in front of the R&W gift shop. Contact Felicia Shingler, 4-7256, for more information.

- The BIG fundraising committee will sponsor a trip to Atlantic City on July 22. The bus will leave Bldg. 31C at 5 p.m. and return at 7:30 a.m. on July 23. For ticket information, call Shirl Brinson, 3342.

- BIG's national conference will be held Aug. 1-5 at the Sheraton Washington Hotel in Washington, D.C. NIH's BIG chapter will receive the Distinguished Service Award, which is the highest honor given to any chapter by the national BIG organization. For conference registration information, call Jalil Mutakabbir, 6-2112, or Ann Coleman, 6-5497.

Qualitative Research Meeting To Be Held July 25, Bldg. 1

A conference on "Improving the Health of the Nation with Qualitative Research" will be held on Monday, July 25 from 8:30 a.m. to 5:30 p.m. in Wilson Hall, Bldg. 1.

This conference is timely for several reasons. First, NIH supports research on a number of health problems for which experimental or survey data is inappropriate or insufficient. These include behavioral risk factors in HIV and AIDS, alcohol and drug use, violence, and sexual behavior and fertility. Related to this, three institutes that comprised ADAMHA have recently rejoined NIH: NIMH, NIDA, and NIAAA. Third, the outreach materials for the newly revised guidelines for the inclusion of women and minorities in clinical research call for a new look at qualitative methods in order to ensure the participation of broad segments of the community in research.

For more information call Sylvia Ellison of NICHD, 6-1174.
cells from mice that are cancer prone. They explored DNA repair in several segments of genes in B cells of inbred mice. One group, DBA mice, is resistant to the development of plasmacytomas after treatment with an irritant, while another group, BALB/c mice, is sensitive and develops plasmacytomas. In these sensitive or susceptible strains, DNA repair deficiencies were found in DNA regions that frequently become translocated in tumor cells (c-myc and pvt genes).

“The results,” Bohr reports, “indicate that efficient DNA repair at a certain site may be very important for the maintenance of genomic stability.”

The NIA researchers are now investigating other sites of genomic instability such as the mitochondria. These tiny organelles in each cell are the main sites for metabolism and energy production. They are particularly relevant to cancer and aging, and are sites of many age-related mutations and deletions.

“We previously discovered that there is DNA repair in mitochondria,” Bohr says. The next step is to determine whether mitochondrial instability is also due to localized DNA repair deficiencies.—Dan Rogers

Herpes Vaccine Shows Promise

An experimental vaccine has safely reduced by a third the number of genital herpes outbreaks in people with previous recurrences of the disease, according to an NIAID study reported in the June 11 issue of The Lancet. The research provides the first evidence, in a controlled clinical trial, that a vaccine used as therapy can modify the course of a chronic viral infection.

The vaccine contains a single recombinant, or genetically engineered, protein of the herpes simplex virus type 2 (HSV-2), the virus that causes most cases of genital herpess. During the year of the study, vaccine recipients reported 36 percent fewer confirmed herpes outbreaks per month and close to a 33 percent lower average number of recurrences than did placebo recipients. Participants tolerated the vaccine well.

More than 25 million Americans are infected with HSV-2. Once a person is infected, the virus remains in the body for life and can cause repeated, painful outbreaks. While some people have only one or two noticeable recurrences in a lifetime, others may experience several a year.

“Genital herpes is a common, chronic viral infection not adequately treated by antiviral therapy alone,” says Dr. Stephen E. Straus, staff pediatrician, NIAID, and lead researcher on the study. “While the vaccine was less effective than we had hoped, it proves that the concept of a therapeutic vaccine is possible and encourages us to continue to pursue potentially more effective formulations of a vaccine. Such studies are now under way in our NIAID clinics.”

Multi-Institute Nursing Unit Opens for Children in CC

Doors are now open for a Clinical Center first. It’s the 13-bed pediatric unit on 11 East, the first multi-institute CC unit designed and staffed especially for children.

“Children aren’t simply small adults,” says Clarissa Mickle, head nurse. “They have special needs and the unit is designed to help staff members meet those needs,” adds Dr. Jack Yanovski, an NICHD pediatrician who serves as the unit’s acting ward chief.

Patient rooms feature cream-colored walls with pastel borders. Whimsical animal herds gallop across the plaid curtains. A playroom staffed by play therapists is just across from the nurses’ station.

“Children need a place to play,” Yanovski says simply. And they work, too. “It’s important to occupy children with chronic illnesses with intellectual endeavors,” he explains. A CC teacher provides bedside tutoring and classroom instruction for unit patients.

A home-like family room just down the hall includes a television, microwave, and refrigerator. Comfortably furnished, it offers both a place to relax and a quiet corner for medical consultations.

“Our patients board with a parent or other care giver,” Mickle points out. “Brothers and sisters can visit, along with grandparents and friends. They help support a child through illness.”

There’s a separate treatment room for unit patients. “The child’s own room is a safe haven,” Yanovski says.

The 12-member nursing staff was specially trained through a 4-month orientation on the 9 West pediatric unit, Mickle notes. “It was a very specific orientation to pediatric nursing concerns, including growth, development, and medications. The 9 West nursing staff was very supportive.”

As the staff pediatrician, Yanovski describes his role as consultative. “I make sure the individual treatment plan set by the attending physician is carried out. I am available to assist in any way, including emergencies.”

“We are here to support biomedical research,” adds Mickle, who also serves as head nurse on 9 West. “The reason the unit exists is to support the care and needs of the pediatric patients. While meeting those needs, we can also meet the needs of any research protocol.”

Senior investigator Dr. Frederick Ogbinibe of the CC critical care medicine department, chairs the pediatric care committee, the group that developed the concept of a multi-institute, inpatient unit for pediatrics.

“Committee members past and present worked extremely hard to address the concerns of institutes that admit pediatric inpatients,” he explains, “in order to design and staff a unit that would best meet the needs of those patients. The committee members themselves reflect a cross-section of professionals who care for children, and the plans were wholeheartedly endorsed by the medical board.”
Opportunities for research into disorders of hearing and balance have been enhanced by the formation of a new temporal bone and brain pathology registry. "The new registry allows investigators to locate all temporal bones and brain tissue with a specific diagnosis," said Dr. James B. Snow Jr., NIDCD director. "This ability, along with the recently developed methods of antigen retrieval and extraction of DNA from processed temporal bones, makes this enormous American collection of great value in the molecular biology of disorders of hearing and balance."

The NIDCD National Temporal Bone, Hearing and Balance Pathology Resource Registry was established in September 1992 through a contract awarded to the Massachusetts Eye and Ear Infirmary, coprincipal investigator, and the Deafness Research Foundation by NIDCD. Dr. Saumil N. Merchant of the Massachusetts Eye and Ear Infirmary, coprincipal investigator for the registry, said, "The first year has been very successful. It has been very gratifying to be involved in the development and growth of the registry because temporal bone research is so crucial for improved understanding of disorders and diseases of the ear."

Merchant explained that temporal bone research is important because the middle and inner ear, which contain the organs of hearing and balance, are encased in the temporal bone. This makes the ear inaccessible to direct observation and experimental manipulation in live humans. Study of abnormal temporal bones from organ donors is sometimes the only way to learn the underlying causes of many hearing and balance disorders.

Temporal bone research began in the early 1900's when several temporal bone collections were started in Europe. It wasn't until the development of new surgical techniques in the mid-1930's, however, that it became obvious that better knowledge of the ear and ear disorders was needed. It was at this time that several laboratories in the United States began to collect and study temporal bones. The National Temporal Bone Bank Program (NTBBP), which consisted of four regional centers, was established in 1960. Each center would solicit donor pledges, collect specimens upon the death of the donor, and distribute the specimens to the appropriate laboratory to be processed and studied. By 1976, 28 laboratories in the U.S. were engaged in temporal bone research.

"One of our biggest tasks was to elicit cooperation from the temporal bone laboratories around the country," said Merchant. "Fortunately, the response from these laboratories has been overwhelmingly positive. Nearly all of the laboratories are enthusiastic about the registry and are collaborating. So far 20 of the 24 collaborating laboratories have sent us their data to include in our centralized database."

The database is one of the greatest strengths of the registry. "The database contains information on all known human temporal bone and brain tissue collections relevant to the study of hearing and balance in the United States," said Merchant. "The database is supplied to scientists in member laboratories on compact disk-read only memory (CD-ROM) and updated regularly. Registry staff perform database searches, free of charge, for any scientist who does not have the CD-ROM disk. The database presently contains information on approximately 10,000 temporal bones from 5,923 donors."

How To Become a Donor
Do you know individuals who suffer from a hearing or balance disorder? If so, you may want to suggest they become temporal bone donors. Many of the 30 million Americans with hearing and balance disorders would become temporal bone donors if they knew more about it. No one is too old or too young to be a donor. Removal of the temporal bone will not affect the appearance of the donor's head, face or outer ear and therefore will not affect funeral or burial arrangements, including an open casket. Temporal bones are collected at no cost to the donor's family or estate and will in no way delay donation of other organs if the donor has expressed the desire to donate other organs. Potential donors should be encouraged to call 1-800-535-DEAF for more information. The elimination of hearing and balance disorders depends on their help.

The database is one of the greatest strengths of the registry. "The database contains information on all known human temporal bone and brain tissue collections relevant to the study of hearing and balance in the United States," said Merchant. "The database is supplied to scientists in member laboratories on compact disk-read only memory (CD-ROM) and updated regularly. Registry staff perform database searches, free of charge, for any scientist who does not have the CD-ROM disk. The database presently contains information on approximately 10,000 temporal bones from 5,923 donors."

World Neurology Group Meets
The World Federation of Neurology research group on neuroepidemiology (WFN-RGN) recently held its annual meeting at NIH, bringing together neurologists and other health professionals to discuss informally neuroepidemiological research projects going on in almost every corner of the world.

Members from Canada, Ecuador, Tunisia, Italy, Mexico, Israel, Great Britain, China, France, India, The Netherlands, and the United States presented scientific papers, abstracts, and current research projects to the group.

As part of this year's meeting, WFN-RGN sponsored an invited lecture given by Dr. Albert Hofman, professor of epidemiology and chairman of the Department of Epidemiology and Biostatistics at Erasmus Medical School in Rotterdam, The Netherlands. He spoke on "Neurological Diseases in the Elderly."

More than 20 researchers discussed their work during the scientific presentations, which were divided into four sessions—breath of neuroepidemiology, descriptive and methodological studies, dementia, and other chronic diseases. Research topics discussed at the meeting included incidence and mortality of stroke in China (1986-1990), prevalence of neurocysticercosis in an Andean community in Ecuador, incidence of dementia in age-associated memory impairment (Israel), and sudden death in an adult outpatient cohort with epilepsy (Great Britain).

The meeting also included a 2-hour poster session during which more than 15 posters highlighting both basic and clinical neuroepidemiological research were on display; WFN-RGN members had the opportunity to view and discuss the posters with the authors.

Dr. Karin Nelson, acting chief of the NINDS Neuroepidemiology Branch (NEB) and a member of the WFN-RGN, served as host for this year's meeting. Her presentation, titled "Childhood Neurologic Disorders in Twins," highlighted her recent work with Dr. Jonas Ellenberg of the NINDS Biometry Branch on the increased risk of cerebral palsy and seizure disorders in twins.

The WFN-RGN was established in the 1960's by former NIH scientist Dr. Leonard T. Kurland (now of the Mayo Clinic) in an effort to promote and encourage scientific communication between neuroepidemiological investigators around the world.

In 1982, the group founded the journal Neuroepidemiology, and the late Dr. Bruce Schoenberg, then chief of the NINDS NEB and chair of the group, served as its first editor.

The group's main objective is to prevent neurological disease and to improve health care worldwide by sponsoring meetings, providing editorial guidance to the publishers of Neuroepidemiology and other publications, coordinating research and other relevant activities, and collaborating with other organizations including the World Health Organization.
early 1980's, an increasing number of people being treated in methadone clinics for heroin addiction have reported that they have not been injecting heroin; they have been smoking it, said Pickens.

The researchers cited a number of factors for the increase in cocaine and heroin smoking. People do not think that smoking drugs is as dangerous or addictive as injecting them; people find smoking drugs to be more palatable than using needles to inject drugs; and most importantly, people want to avoid the increased risks of contracting HIV/AIDS and other infectious diseases associated with injection-drug use.

People who are shying away from injection-drug use because of its associated dangers may not realize that smoking drugs has many dangers of its own, warned Pickens. Henningfield’s findings show that the body rapidly absorbs smoked cocaine and other drugs from the lungs into the arterial blood stream in concentrated bullet-like bursts that explode into the heart and brain within seconds. These waves of cocaine-laden arterial blood have a potential to stop the heart and produce the same highly addictive effects that are produced by intravenous injection, he said. Moreover, since it is difficult to control the precise dose administered when smoking a drug, this method of drug-taking produces greater variations in blood levels of the drug than injecting it. Therefore, the risk of inadvertent overdose, which is always present with street drug use, may be magnified when drugs are smoked, said Henningfield.

Because the pharmacological effects of smoked drugs are so distinctive, it is important for researchers in a clinical setting and treatment personnel who must respond to individual drug abuse patterns to know not only what drugs were taken but how they were taken, said Dr. Edward Cone of ARC. He has been studying the possible use of hair testing to detect the type of drug used and its method of administration.—Robert Mathias

**Herpes Study Needs Women**

Healthy women ages 18 or older are sought to participate in a research study of an experimental vaccine for prevention of genital herpes. Volunteers are needed who do not themselves have genital herpes, but who are in a stable relationship with a partner who is known to have the disease. Both partners will be screened to confirm eligibility. Compensation provided. For more confidential information, call 6-1836.

---

**First DSFM Career Development Program Graduates Students**

Sixteen former custodial workers in the NIH Division of Space and Facility Management’s Sanitation Services Branch recently celebrated their graduation from the first DSFM Career Development Program. For the graduates, the year-long program of classroom and on-the-job training signals an end to the in-house cleaning/contract cleaning cycle and represents the beginning of a new era of career opportunities and job challenges under a restructured SSB.

"Your willingness to teach [us] these things will remain and be passed on to other people as long as we live," the graduates said in an ode to their instructors. "Some of our goals we thought were unreachable we have reached due to your persistence and encouragement. You will always be remembered as our teachers. We learned how to be a part of a team. We learned how we can make a difference and that people do care."

The positions the graduates assumed following SSB’s restructuring are 10 inspectors, two facilities management technicians and four office automation clerks. Paul R. Horton, DSFM director, presented each graduate with a plaque in recognition of successful completion of the program.

---

**Kerza-Kwiatecki Named NIAMS Executive Officer**

Margaret Kerza-Kwiatecki, NIAMS’s first budget officer, has been appointed executive officer of the institute.

Said Dr. Lawrence E. Shulman, NIAMS director, "Ms. Kerza-Kwiatecki’s administrative and scientific skills and background make her eminently qualified for her new position. Over the years, Ms. Kerza-Kwiatecki’s sound judgment regarding solutions to management and organizational issues has proved invaluable. She is fully dedicated to the overall goals of both the NIH and the institute."

In her new post, Kerza-Kwiatecki will participate in program planning and evaluation, along with supervising budget, data systems, personnel, contracting, procurement, and other administrative activities. Prior to her service at NIAMS, she served as a branch chief in NIH’s Division of Financial Management.

She holds a master of science degree in microbiology and a bachelor of science degree in biology from Catholic University and is a graduate of the NIH Management Intern Program. The intern program provided a great career opportunity for a science major, she says, because the program gave her experience in several administrative areas. As executive officer, she plans to "support and advance the institute’s mission, which encompasses a larger and diverse array of diseases that affect the lives of all Americans."
**TRAINING TIPS**

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

<table>
<thead>
<tr>
<th>Course Titles</th>
<th>Starting Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome to Macintosh</td>
<td>8/22, 9/20</td>
</tr>
<tr>
<td>Advanced Macintosh Techniques</td>
<td>8/16</td>
</tr>
<tr>
<td>Intro to WordPerfect (Mac)</td>
<td>8/2</td>
</tr>
<tr>
<td>Intro to MS Word (Mac)</td>
<td>8/17</td>
</tr>
<tr>
<td>Excel - 4.0 Level 3</td>
<td>8/6</td>
</tr>
<tr>
<td>Intro to FilemakerPro</td>
<td>Upon request</td>
</tr>
<tr>
<td>Intermediate FilemakerPro</td>
<td>Upon request</td>
</tr>
<tr>
<td>Intro to Personal Computing for New Users</td>
<td>8/16</td>
</tr>
<tr>
<td>Intro to DOS 6.0</td>
<td>8/22</td>
</tr>
<tr>
<td>Advanced Windows 3.1</td>
<td>Upon request</td>
</tr>
<tr>
<td>WordPerfect for Windows</td>
<td>8/16</td>
</tr>
<tr>
<td>Harvard Graphics for Windows</td>
<td>7/25</td>
</tr>
<tr>
<td>Pagemaker 4.0 for Windows</td>
<td>9/20</td>
</tr>
<tr>
<td>Excel 4.0 for Windows</td>
<td>Upon request</td>
</tr>
<tr>
<td>Project for Windows</td>
<td>7/26</td>
</tr>
<tr>
<td>Intro to WordPerfect 6.0</td>
<td>9/12</td>
</tr>
<tr>
<td>WordPerfect 6.0 - Advanced Topics</td>
<td>7/25</td>
</tr>
<tr>
<td>Intro to Lotus 1-2-3, Rel. 2.4</td>
<td>Upon request</td>
</tr>
<tr>
<td>Advanced dBase IV</td>
<td>8/16</td>
</tr>
<tr>
<td>SQL Processing with the SAS System</td>
<td>9/12</td>
</tr>
<tr>
<td>MS Mail (DOS)</td>
<td>Upon request</td>
</tr>
<tr>
<td>MS Mail (Windows)</td>
<td>8/25</td>
</tr>
<tr>
<td>MS Mail (Macintosh)</td>
<td>Upon request</td>
</tr>
<tr>
<td>SQL Processing with SAS System</td>
<td>9/12</td>
</tr>
<tr>
<td>IMPACT System for MSCa</td>
<td>Upon request</td>
</tr>
<tr>
<td>IMPACT System for Admin Staff</td>
<td>8/8</td>
</tr>
<tr>
<td>IMPACT System for Professional Staff</td>
<td>8/8</td>
</tr>
<tr>
<td>IMPACT System: A-TRAIN (TMS)</td>
<td>8/17, 9/1</td>
</tr>
</tbody>
</table>

**USUHS Seeks Nonsmokers**

The department of medical and clinical psychology of the Uniformed Services University of the Health Sciences seeks healthy, nonsmoking males and females, ages 18-35, to participate in a study of impression formation. Participants will be paid $20 for completion of a 2-hour session. If interested, call Denise, (301) 295-3263, for more information.

**Lister Hill Director Daniel Masys To Retire**

Dr. Daniel R. Masys, director of the National Library of Medicine's Lister Hill National Center for Biomedical Communications since 1986, will retire from the Public Health Service Commissioned Corps in September to become director of biomedical informatics at the School of Medicine, University of California, San Diego.

NLM director Dr. Donald Lindberg, in announcing Masys' retirement at the most recent board of regents meeting, observed that "In the 8 years since he joined the NLM...he has provided a wonderful style of leadership to Lister Hill that was collegial, helpful, and inspiring—and spilled over to all of NLM."

In addition to his directorship of NLM's research and development component, Masys was also instrumental in the library's initial strategic planning for factual databases and was heavily involved in the early program development and establishment of NLM's National Center for Biotechnology Information.

The NLM board of scientific counselors, in May 1992, cited Masys for his "outstanding leadership of LHNCBC," and noted that he "has made many major decisions that have affected the institution positively. The growth of quality and professionalism of the people and products of the LHNCBC has been exceptional."

As a member of the federal coordinating committee on science engineering and technology's subcommittee on high performance computing, communications and information technology, he encouraged NLM and NIH to participate wholeheartedly in what is now a multimillion dollar program in high performance computing and communication (HPCC) with potential for major findings in medical informatics. He recently led the NLM effort to support health care applications under the HPCC program. Twelve research and development projects were awarded, totaling $26 million over 3 years.

Masys also carried out his own research projects, which included the development of information retrieval software for two NLM interactive videodisc projects—in medical anatomy and in the prints and photographs collection of NLM's History of Medicine Division.

Masys is an honors graduate of Princeton University and Ohio State University College of Medicine. He received postgraduate training in internal medicine, hematology and medical oncology at the University of California, San Diego, and the Naval Regional Medical Center, San Diego.

His interest in medical informatics began when, as a computer programmer, he developed a series of microcomputer programs to assist in clinical cancer research while practicing as a cancer specialist. In 1984, he became a computer medical specialist in the Computer Communications Branch at NCI, and there helped develop the PDQ (Physician Data Query) online cancer information system. He served as chief of NCI's International Cancer Research Data Bank before coming to the library as LHNCBC director in 1986.

Masys is a diplomate of the American Board of Internal Medicine, and is a fellow of both the American College of Physicians and of the American College of Medical Informatics.

He served as chair, NIH computer scientist review committee, as DHHS delegate to the Federal Computer Networking Council for 1988-1992, and as chair in 1993 of the U.S. Surgeon General's professional advisory committee for physicians. He is founding associate editor of the Journal of the American Medical Informatics Association, and is a member of the board of directors of the American Medical Informatics Association. Among his awards are the PHS Commendation Medal and the U.S. Surgeon General's Exemplary Service Medal. He also received the NIH Director's Award.

**Head-Injured Subjects Needed**

NIMH needs traumatically brain-injured subjects for a study of brain function. Volunteers must be between the ages of 18 and 50 and be at least 6 months post-injury. Procedure involves cognitive testing, a magnetic resonance imaging (MRI) scan, and a positron emission tomography (PET) scan. The PET scan involves exposure to a small amount of radiation that is within both NIH and FDA guidelines. Volunteers will be paid $330. For more information call Brenda Kirby, 2-3682.
First World Congress on Stress Planned for October

Stress is increasingly linked to the pathogenesis of cardiovascular, gastrointestinal, immune and many other diseases, including depression. The need to consolidate new discoveries in the field of basic and clinical stress research has led to organization of the First World Congress on Stress by Drs. George Chrousos, Richard Kvetnansky, Phil Gold, and Esther Sternberg, all from NIH, and Dr. Richard McCarty of the University of Virginia.

The First World Congress on Stress will be held at the Hyatt Regency Bethesda on Oct. 4-7. The meeting is being organized by NICHD and NIMH, in collaboration with the International Society for the Investigation of Stress and the Hans Selye Foundation, along with the support of NIH's Office of Alternative Medicine and NHLBI.

The goal is to bring together leading international scientists to discuss physiological, molecular, psychosocial and pathophysiological aspects of stress. The program will cover basic molecular biology mechanisms, regulation of hormone secretion, and clinical problems in which stress plays an important role.

Sessions on molecular biology of the components of the stress response, stress and the immune system, psychosocial aspects of stress, among others, are being planned. The opening Hans Selye Memorial Lecture will be delivered by Dr. Wylie Vale from the Salk Institute, La Jolla. Both basic and clinical researchers will find an array of opportunities for discussion.

Two young NIH investigators, Dr. Giovanni Cizza (NIMH) and Dr. Karel Pacak (NINDS), were elected to serve as chairmen of the local organizing committee. Cizza graduated magnacum laude from Pisa University School of Medicine, Italy. After a clinical fellowship in endocrinology at the same university, he studied at the Mario Negri Institute for Pharmacological Research, Milano, where he has collaborated extensively with NICHID's Developmental Endocrinology Branch. Interested in the interaction between stress and aging, Cizza received several awards, including the 1992 New Investigator Award from the American Geriatric Society, and the 1992 Henry Christian Award from the American Federation for Clinical Research.

Pacak graduated with highest honors from the faculty of medicine, Charles University in Prague. After finishing his specialization in internal medicine there, he was offered a fellowship at NINDS under the guidance of Drs. Irwin Kopin and David Goldstein. During his 4-year stay at NIH, Pacak published several articles focusing on the role of central and peripheral catecholamines in stress. In 1993 he defended, in Prague, his Ph.D. thesis titled, "Microdialysis: a new in vivo tool for assessing brain noradrenergic systems in stress and hypertension."

The registration cost for NIH employees is $280. For registration and more information, contact Cizza, 6-6886, fax 2-1561; or Pacak, 6-2656, fax 2-0180.