Dr. Teresa Slus Radebaugh, chief, Dementias of Aging Branch of NIA's Neuroscience and Neuropsychology of Aging Program, exchanged greetings recently with Pope John Paul II. Radebaugh was in Rome with NIA colleagues Drs. Gene Cohen and Zaven Khachaturian (not pictured) to attend the 5th Annual Congress of the International Psychogeriatrics Association. See related story on p. 4.

To C or Not To C

Optimum Vitamin Dosages Still a Matter of Debate
By Rich McManus

While taking the recommended 60 mg of vitamin C daily pretty much guarantees that a person won't come down with scurvy, physicians really don't know what the optimum dose of C (ascorbic acid) or, for that matter, any vitamin, is.

For years, said Dr. Mark Levine, director of NIDDK's Intramural Nutrition Program and senior investigator in the Laboratory of Cell Biology and Genetics, scientists teased out minimum daily requirements of vitamins by determining the least amounts that should be ingested to prevent symptoms known to be caused by a vitamin's absence.

In the case of vitamin C, studies on British military pilots conducted during the 1940's indicated that as little as 5 mg per day could prevent signs and symptoms of scurvy—hemorrhaging (usually in the gums), hyperkeratosis, hypochondriasis, and hematologic abnormalities. Later studies conducted on prisoners in Iowa showed that 10 to 12 mg offered protection against scurvy. But both studies were flawed, reported Levine at a recent Clinical Center grand rounds.

"The figure of 60 mg was picked because it covers the needs of the entire population," he said. "While that amount will certainly prevent scurvy, is it therefore the optimal dose for humans? I would suggest that the minimal dosage may not be equivalent to the optimal."

Consumption of massive doses of vitamin C (many grams per day) has long been touted by such authorities as Nobel laureate Dr. Linus Pauling. "A vitamin is not a vitamin," he says, "when consumed in massive doses." While such claims are largely unproven, the unproven has considerable influence on health and nutrition beliefs, and it is important to view them in the context of the general public's attitudes toward health and nutrition.

NIH Lab Marks National Alzheimer's Disease Month
By Carolyn Shanoff

November is National Alzheimer's Disease Month, a time to focus attention on one of the nation's most serious health problems. Alzheimer's disease (AD), which appears mainly after age 65, affects 4 million Americans, including nearly half the population over 85. It gradually robs people of their ability to think, remember, and carry out daily activities.

With the steady growth of the over-65 population and the expected quadrupling of the over-85 group, NIA, the lead federal agency in the nation's support of Alzheimer's research, predicts that 14 million people will have the disease by the year 2050 without breakthrough treatments.

"AD research is a top priority of the NIA," says Dr. Gene D. Cohen, NIA acting director. "We are making progress on a number of fronts, and scientists are coming closer to finding out what causes the disease and to developing treatments for its symptoms."

Recent findings of NIA grantees, for instance, have pinpointed genetic mutations associated with the disease and have made a number of discoveries relating to the cellular changes that cause Alzheimer's.

New Traffic Manager To Chart Course in Employee Transit
By Carla Garnett

The least envied job on the reservation may have just been filled. NIH's Division of Security Operations recently established the Employee Transportation Services Office (ETSO) and its leader, new NIH'er Gail Thorsen, a professional traffic mitigator, has come to tame, among other campus gridlock headaches, the unwieldy parking problem.

She has her work cut out for her. Parking here is critically important—to Montgomery County officials, who want to decrease area traffic; to Bethesda businesses, who want to see an end to gridlock, but not necessarily to traffic; to NIH officials bound by law and formula to minimize available parking spots; and finally, to employees, who are so concerned about the issue that at the NIH director's first town meeting to discuss NIH/ADAMHA issues with senior staff, parking was a prime logistical problem aired.

"NIH senior management has long recognized our critical parking situation," says O.W. "Jim" Sweat, director of NIH's Division of Security Operations. "The establishment of ETSO is just the first step in..."
VITAMINS (Continued from Page 1)

Pauling: as healthful, and perhaps cancer preventing. According to Levine, however, no data show any health benefit from such treatment. Moreover, ingested several grams at a time, vitamin C can produce such unpleasant effects as bloating, flatulence and diarrhea.

"Pauling says he uses a dosage regimen that comes just short of producing these symptoms," said Levine, to chuckles in the audience.

Levine said he reviewed Pauling's research data on the effect of vitamin C on certain cancers and came up with an unfortunate conclusion: "It's very sad. There's no effect.

The investigators have selected for study such enzymes as proline hydroxylase and dopamine monoxygenase, which depend on ascorbic acid for their maximal activity. So far, they have learned that their approach is a new way to determine optimal vitamin requirements. They have also determined one very beneficial role for vitamin C—it is a specific kind of electron donor, which helps move metabolism forward in healthy cells. Unlike oxygen free radicals, unstable molecules that have been implicated in carcinogenesis, vitamin C is a stable free radical.

Levine and coworkers are currently planning clinical studies to examine more deeply the role of vitamin C in humans. Asked whether the recommended dietary allowance of 60 mg for vitamin C is valid, he replied, "My guess is that it is too low." As to whether megadoses of C can prevent cancer, he said, "The jury's out on whether doses of a half gram or more per day can prevent cancer."
Monkey Business Illuminates

American Psychological Association Honors NICHD's Suomi

By Birgit An Der Lan

Recently, the science directorate of the American Psychological Association nominated Dr. Stephen Suomi, chief of NICHD's Laboratory of Comparative Ethology, to be their "Distinguished Scientist Lecturer" for 1991. Previous nominees have been such influential figures as Jerome Kagan, Eleanor Maccoby and Gordon Bower. Suomi, the youngest nominee, who is internationally known for his work on inherited personality traits in rhesus monkeys, was invited to give the featured lecture at the Eastern and Southeastern Psychological Associations' recent meetings in New York and New Orleans, respectively; his talk was entitled "Upright and Laid-Back Monkeys: Individual Differences in Biobehavioral Development."

Suomi, who has long been interested in primates as animal models of human behavioral development, began his career as a student of Harry Harlow at the University of Wisconsin. Together with Harlow, he found that the harmful effects of early social isolation, long thought to be permanent, could be successfully reversed in monkeys. The procedure they established—permitting the deprived monkeys to play with monkey infants that had been reared normally—has since found widespread application in the treatment of retarded humans.

While on the faculty at Wisconsin, he began his work on the various factors affecting normal social development of monkeys. In particular, he began exploring his observation that about 20 to 25 percent of all rhesus monkey infants react to novelty and mild stress, such as brief separation from their mothers, with extreme agitation and anxiety, displaying what he calls the "uptight temperament," while the rest are hardly fazed—the "laid-back temperament."

In 1983 Suomi was invited to NICHD to head the Laboratory of Comparative Ethology. NICHD's rhesus colony at Poolesville has enabled him to extend this work, proving with selective breeding that these two types of temperament are heritable and stable throughout a monkey's lifetime. He and his colleagues have found that upright monkeys' overreactive behavior is based on an overreactive physiological makeup; that is, mild stress causes extreme physiological arousal of their adrenocortical and noradrenergic systems.

Some of the recent studies by Suomi and his colleagues on wild monkey populations have confirmed the laboratory observations, which means that they are looking at a natural phenomenon, not an artifact of captivity. The temperament and personality factors we see in infant, the infant develops some of the upright traits—it overreacts to separation from its foster mother, if she fosters an upright infant things go from bad to worse. Conversely "laid-back mothers," that is, mothers of foster mothers who are supportive and nurturing, can teach an upright monkey coping strategies; the young ones learn to avoid troubling situations and they learn how to get enough support to be able to handle stressful situations.

Recent parallel studies on human behavior, particularly those of Jerome Kagan at Harvard, show a strong genetic component to such traits as shyness. Because of the predisposition of shy and fearful individuals to such traits as shyness, Suomi says, those at risk for problems later in life, within a few months of birth and devising strategies to help them reduce stress.

Being upright is not all bad though—there can be selective advantages for individuals with this temperament: Upright monkey infants raised by laid-back foster mothers have an accelerated development and later rise to the top of the dominance hierarchy in their peer group; and in the wild the upright monkeys are more vigilant than their laid-back peers, a trait that seems to enhance their chances of survival when predators are about.

An important offshoot of this work is that it is leading to a generally acceptable definition of psychological well-being in primates. USDA regulations require that nonhuman primates be maintained in an environment designed to promote their "psychological well-being." The trouble is that the law doesn't define psychological well-being, and there is no consensus on how to promote it. Committees have been appointed at NIH to advise the USDA on these questions and, as a member, Suomi is having an impact on how these regulations are implemented. And what's good enough for monkeys is good enough for you and me—Suomi is involved in an effort to apply the principles of the USDA regulations to human environments such as day care centers and old peoples' homes.

Haircuts Benefit Inn

David's Hair Design, located at 7710 Woodmont Ave. in Bethesda, is holding its second annual "toys for tots" campaign to benefit the Children's Inn at NIH. On Sunday, Dec. 8, from noon to 5 p.m., new toys worth a minimum of $15 (wrapped and marked boy/girl with appropriate age) will be taken in exchange for hair cuts up to $45 in value. Redskinettes will be on hand to sign autographs. Call for appointments: 657-4488.
TRAFFIC

(Continued from Page 1)

solving the problems. Since NIH must conform with federal and local regulations, our present 0.5 parking spaces per employee (one spot for every two employees) will not be increased. Accordingly we must explore new initiatives to alleviate or mitigate our present parking arrangement."

So far, NIH has not been as successful as officials had hoped in getting employees to double up in cars, or change their commuting habits in any other ways. Thorsen thinks many are missing out on a lot of social and economic benefits.

"Carpooling is a minor adjustment in schedules that could lead to developing good friends and relationships," she suggests. "It can also save about 50 percent in commuting costs for the average employee who drives in alone."

Thorsen says her primary tasks will be to establish a carpool locator and implement any other initiatives to encourage employees to use public transportation, carpools, vanpools or to ride bicycles or walk to work. She has already decided what the first step in her plan will be.

"Education," she says. "Letting people know is the first thing. I’m an environmentalist, but not an extremist. I believe in alternative modes of transportation. They help both the community and the environment."

A new advertising campaign launched city-wide by the Washington Metropolitan Transit Authority will make Thorsen’s job a lot easier.

Touting the $21 commuter subsidy (called the Full Share Program) now available to most federal workers who ride Metrorail or Metrobus, the campaign is in a position to put PT, or public transportation, in the minds of NIH’ers who now drive to work. Although NIH’ers—and many other would-be commuter populations in the area—have historically ignored Metrorail’s "PT pleas," the recession-battered public may be ready for the promise of rebate. However, Thorsen’s supervisor Sweat shares her unshakable faith.

"I have confidence she comes to NIH with a solid professional background in transportation initiatives," he says, "and I look forward to the improvements I’m sure she can bring."

NIAMS Provides Lupus Booklet

A new NIAMS booklet, *What Black Women Should Know About Lupus,* is now available.

Addressed to Black women ages 12 to 44 who could have lupus or its symptoms, the booklet explains common signs of the disease and was created through efforts of the NIAMS task force on lupus in high-risk populations.

Lupus strikes women nine times more commonly than men and is especially prevalent among Black women. In fact, prevalence, incidence and mortality rates of the disease are three times higher in Black women than in white women. An immune system disorder in which healthy tissues are attacked by the defense mechanism that normally protects them, lupus is a serious health problem that is of special concern to Black women of child-bearing age. Many in the Black community have never heard of the disease, which often goes unnoticed until serious complications arise.

To get a copy of the booklet, write "Lupus Booklet," Box AMS, 9000 Rockville Pike, Bethesda, MD 20892.

Forum Highlights Health Communications Planning

Communication of health information is an essential—and legislatively mandated—part of the NIH mission. When it is done effectively, it can increase the number of high blood pressure patients staying on treatment, encourage people to choose low-fat, high-fiber foods, and in general promote specific health messages—based on biomedical research findings—to those patients, health professionals and members of the general public who can most use them. An overview of how to plan and carry out health communication programs will be presented in a seminar entitled "Effective Health Communications" to be held Tuesday, Dec. 3 from 2 to 3:30 p.m. in Bldg. 31, Conf. Rm. 8.

Elaine Bratic Arkin will describe the health communication process, including careful planning, audience testing, program implementation and evaluation. She is author of the book *Making Health Communications Work*, published by NCI. Currently a consultant, she has had extensive experience with communication programs at the Public Health Service and the National Cancer Institute.

Nancy McCormick-Pickett will speak on the topic of reaching special populations, particularly minority audiences. She is currently a special assistant in the public information office of the National Institute on Aging, where she is developing national communication programs. Most recently, McCormick-Pickett was vice-president and manager of health education at Prospect Associates. She has held several consumer affairs posts.

This is the first of this year’s public affairs forums, a series of presentations related to the many facets of NIH’s public information and education efforts. This program is open to all NIH staff. For reasonable accommodation and other information, contact Connie Raab, NIAMS, 496-8188.

Astronaut To Speak on Research, Experience Aboard Shuttle

Dr. Millie Hughes-Fulford, who flew last spring on NASA’s first shuttle mission dedicated to biomedical science, will give two talks at NIDR in early December.

On Monday, Dec. 2 at 10 a.m., she will speak on "Growth and Repair of Osteoblasts: Role of Growth Factors and Prostaglandins." On Tuesday, Dec. 3 at 3 p.m., she will relate her experiences during the mission—"Nine Days in Space: The First NASA-Dedicated Biomedical Mission."

Both talks will be held in the H. Trendley Dean conference room (Rm. 117) in NIDR’s Bldg. 30. All are welcome.

Hughes-Fulford, a cell biologist, visited NIDR’s Laboratory of Developmental Biology earlier this year to talk to staff members and summer students about her bone research.
AIDS DAY
(Continued from Page 1)

and imagination can we hope to prevail against the common threat."

The NIH World AIDS Day program, "Sharing the Challenge," will be held at noon in Masur Auditorium, Bldg. 10. Overflow seating will be available in Lipsett Amphitheater, also in Bldg. 10.

The theme of World AIDS Day 1991, "Sharing the Challenge," is intended to acknowledge and strike a responsive chord in many individuals and groups in the fight against HIV infection. According to WHO, it is hoped that the theme will stimulate action by groups that are not yet committed and individuals who do not yet feel personally affected by the pandemic. As Dr. Hiroshi Nakajima, WHO director-general, noted, "We all need to join forces and share the challenge. We need to commit time, resources, and efforts in a way that draws on the strengths of each of us for maximum collective impact. Only partnership gives us a chance of prevailing against the AIDS pandemic."

An Oct. 12 WHO press release estimated 9 to 11 million people worldwide have been infected with HIV (the virus that causes AIDS) and this number will more than triple in the next 8 years. Approximately one-third are women in Asia, where HIV spread began only during the late 1980's.

WHO projects that the rate of new infections will continue to climb. By mid to late 1990's, WHO predicts that more Asians than Africans will be infected. In many urban areas of East and Central Africa where one-third of sexually active adults are already infected, child mortality rates are reverting to their 1980 levels and canceling out impressive gains made through child survival programs.

As of October 1991, a cumulative total of 418,403 AIDS cases have been reported to the WHO from 163 countries. This represents an increase of 46,000 reported cases since July 1991. Taking into account underdiagnosis, under-reporting and delays in reporting, WHO estimates that about 1.5 million people, including half a million children, have developed AIDS since the beginning of the pandemic.

The NIH World AIDS Day program, cosponsored by the Office of AIDS Research and the Fogarty International Center, will feature addresses by Dr. Bernadine Healy, NIH director; Dr. Anthony S. Fauci, NIH associate director for AIDS research and NIAID director; Cleve Jones, founder and former executive director of the Names Project Foundation; and Sally Perryman, special assistant to the director of policy, New York State AIDS Institute. Prior to assuming her present position, Perryman was a human rights specialist in the New York State Division of Human Rights. In addition to investigating discrimination complaints based on violations of the human rights law, she conducted HIV awareness and sensitivity training for the staff at the division. She has lectured widely on her personal perspectives of living with HIV infection, including the opening ceremony of the VI International Conference on AIDS, the Institute of Medicine workshop on testing pregnant women and newborn babies, and the Black Leadership Commission on AIDS.

Jones founded Names and served as its executive director until late last year. He conceived the idea of the Names Project AIDS Memorial Quilt in November 1983 and announced the concept publicly 1 year later, after the death of a close friend. Jones helped establish the San Francisco AIDS Foundation, one of the first United States organizations created in response to the HIV/AIDS epidemic.

The quilt was first displayed across the Mall in Washington, D.C., in October 1987. Plans are in preparation to return its more than 14,000 panels, to D.C. in October 1992 (See sidebar). Segments from Common Threads—Stories from the Quilt, will be shown during the program. The film, winner of an Academy Award in 1989 for best feature documentary, is narrated by actor Dustin Hoffman, with original music written by Bobby McFerrin.

From an Olympic athlete to an 11-year-old suburban boy to an inner-city married man, Common Threads tells the story of people who shared a common fate—they were infected with HIV, developed AIDS, and died. With compassion and dignity, Common Threads tells of their lives and deaths—the support they found, the courage they summoned, and the love they shared. Although the film was released in 1989 and focuses on the dramatic story of the first decade of HIV disease in America, it is as dramatic and important now as it was when first released. It shows the human face behind the cold statistics of the HIV epidemic (more than 196,000 cases reported in the U.S. alone) and provides an unforgettable testament to the strength and endurance of the human spirit.
ALZHEIMER'S

(Continued from Page 1)

may cause or lead to the reversal of AD.
NIA intramural scientists at the Clinical Center and at NIA's Gerontology Research Center in Baltimore are working with an animal model for the disease that shows pathology similar to that seen in human AD. To continue this work, researchers at the NIA's Laboratory of Neurosciences (LNS) now are recruiting volunteers for several studies at the Clinical Center.

To learn more about how the disease progresses, LNS needs volunteers who have some memory loss or who have been diagnosed with AD or dementia to participate in a longitudinal study. This project will allow researchers to monitor carefully the progress of the disease to learn more about what kinds of changes it causes in the brain. Healthy normal volunteers, ages 18-90, also will be monitored so researchers can track the changes that occur in their brains as well.

According to LNS chief Dr. Stanley Rapoport, a team of specialists in dementia and memory loss will conduct a thorough diagnostic evaluation on all volunteers who enter the study. "The team includes neurologists, internists, psychologists, and geriatricians, in addition to nurses and social workers," he says. "The team specializes in dementia care, so they are able to provide interventions tailored to individual patients and their families."

"This group uses a three-pronged approach to get an accurate picture of what is happening to the patient and how changes may be affecting family members. A thorough physical rule out potentially treatable causes of memory loss. A series of neuropsychological tests establishes the degree of cognitive impairment. And a social assessment allows us to provide support for the patient and the family members now and plan for the future," he explains.

Dr. Timothy Soncrant, chief of LNS's unit on pharmacology and pharmacokinetics, says volunteers with memory loss or a diagnosis of dementia or AD also are needed for several clinical drug trials, including one that will test whether oral boprotein replacement improves brain function. Boprotein is a vitamin-like substance that is essential for the synthesis of several neurotransmitters.

According to Soncrant, many people with AD have abnormally low brain levels of boprotein. "Congenital deficiency of boprotein impairs brain development and causes mental retardation," he says. "But a pilot study has shown that boprotein therapy increases neurotransmitter production in some people with AD."

The medications under study by LNS scientists have been through several phases of testing with positive results. Although there is no guarantee that a patient will benefit from participating in an LNS clinical drug trial, Soncrant says, it is possible that the treatment under study will have a positive effect. "As is the case for most diseases that lack a generally available treatment, the most promising remedies for AD are available only through participation in clinical trials," he says.

Those interested in participating in AD research at LNS can call 496-1754 for more information. Once a volunteer is accepted into a study, all expenses, including travel, are paid.

NIA Launches New Initiatives To Spur Research on Alzheimer's

The National Institute on Aging recently launched two major new initiatives to expand and hasten the search for drugs to treat Alzheimer's disease (AD). The 5-year companion projects include support for drug discovery groups at six research centers and a cooperative agreement with a 30-site consortium for short-term clinical testing of potentially promising compounds to slow AD or relieve some of its symptoms.

"It is time to mobilize the most creative scientific talents we have in aggressive pursuit of compounds to treat Alzheimer's disease and its symptoms," said Dr. Zaven Khachaturian, associate director of NIA's Neuroscience and Neuropsychology of Aging Program.

The drug discovery program has been structured to encourage research into the design, development, and testing of novel compounds that would delay, stop or even reverse the progressive decline in the cognitive function of people with AD. Meant to go beyond efforts already under way at academic research centers and in the pharmaceutical industry, the program will concentrate on projects that are more speculative. First year funding for this effort will total $2.8 million.

The NIA-sponsored 30-site consortium of Alzheimer's disease study units will conduct cooperative clinical studies on drugs to treat cognitive impairment and the secondary behavioral symptoms of the disease. It is designed to speed the movement of new compounds from the laboratory bench to the clinic. Human testing will focus on short-term evaluations to see if researchers should proceed with long-term clinical trials. Funding for this project in the first year is $2.7 million.

In the meantime, NIA also announced the award of $2.25 million for research on the effectiveness and costs of special care units in nursing homes for people with AD. Nine coordinated projects to evaluate the impact of these programs on people with AD, their families, and nursing home staff will be funded under the new Special Care Units Initiative.

Dr. Gene D. Cohen, NIA acting director, says the focus on care is a critical part of NIA's fight against Alzheimer's disease, and complements the institute's basic biomedical research effort. "The Special Care Units Initiative brings together two of the NIA's top priorities—Alzheimer's disease and long-term care. This research should go a long way in helping us determine the best and most cost-effective approach in caring for people with the disease."
International Researchers Meet, Discuss Alzheimer’s Risk Factors

Two hundred scientists from 20 countries gathered at NIH recently to discuss research on potential environmental risk factors for Alzheimer’s disease (AD). The meeting was organized by the National Institute on Aging, in cooperation with the program on research on aging of the World Health Organization. Scientists generally agree that both genetic and environmental factors cause Alzheimer’s, a brain disorder that results in impaired memory and thinking and changes in behavior.

According to Dr. Teresa Sluss Radebaugh, chief, Dementias of Aging Branch of NIA’s Neuroscience and Neuropsychology of Aging Program, the meeting was held to hasten the search for the cause(s) of AD. She said the conference enabled participants to build an international network to step up the pace of research on the age-specific incidence rates of the disease and to foster research on particular risk and protective factors.

“The level of research activity worldwide made the timing just right for an international conference,” Radebaugh said. “There are a number of exciting multinational and multisite studies on the epidemiology of Alzheimer’s disease already under way or planned for the near future.”

Among those studies is a groundbreaking cross-cultural investigation of Black American and Nigerian older people at risk for AD. NIA is funding the work of researchers at Indiana University and the University of Ibadan, Nigeria, who will compare cases of dementia brain diseases, with special attention to AD, in groups of people living independently and in nursing homes. One group of Blacks living in Indianapolis who are 65 and older will be compared with similar older Nigerians. Epidemiologists will study the onset of symptoms and disease, and conduct case-control and prospective studies of risk factors.

Radebaugh says the study’s primary objective is to determine the risk factors that affect prevalence and incidence of the disease, which are thought to be lower among Nigerians than among Black Americans. Researchers also will collect data on the most common physical signs of Alzheimer’s disease in the brain—plaques and tangles. They suspect that these lesions may differ in size and number in people in Nigeria and in Black American AD patients, but they are not sure why.

“Valuable information may be forthcoming from any differences that are observed,” she says, “if some risk factors can be identified that are common to people in both locations, or if the number of cases in the two locations can be associated with the frequency rates of certain risk factors.”

Other studies discussed at the meeting include the recently completed European Study on Dementia, a comprehensive analysis of Alzheimer’s data from 11 studies on risk factors around the world; a study of AD now under way in the United States and Japan that will evaluate the interaction of genetic and environmental susceptibility factors; and a continuing study on mental health, sponsored by the World Health Organization, that seeks to evaluate the prevalence of dementia throughout the world.

Radebaugh says researchers at the meeting emphasized the need for more dementia studies, particularly those that would examine specific environmental factors; those that would evaluate possible interactions of genetic and comorbid conditions; and those that would determine which factors enhance the progression of the disease.—Carolyn Shapoff

Dr. Robert S. Langer, an NIGMS grantee and Germeshausen professor at the Massachusetts Institute of Technology, recently became the first synthetic polymer chemist to be elected to the Institute of Medicine of the National Academy of Sciences. Langer, who has been supported by NIGMS for the last 13 years, also received the 1991 American Chemical Society Award in Applied Polymer Science. His research focuses on the development of controlled release systems for large molecules such as therapeutic drugs.

‘Effective Alliances’ is Back, Applications Due by Dec. 13

In response to popular demand, the STEP committee will repeat its successful module entitled “Effective Alliances.”

The module is intended for review, program, grant and contract officials who have an interest in enhancing their job effectiveness. It will provide a challenging opportunity for participants to develop an increased understanding and appreciation of each other’s organizational culture and develop insights necessary for the establishment and strengthening of effective alliances within the NIH extramural community.

The content has been refined based on experience of previous modules and will promote an open exchange of ideas, perceptions and philosophies.

The module will be an off-campus, 2½-day residential experience, Mar. 24-26, 1992. It will be led by an outside trainer who will be assisted by NIH staff. Enrollment will be limited, however there is still time to apply. Application deadline is Dec. 13. For more information on how to apply, contact the STEP program office, 496-1493.
NCI Honors Employees at Annual Awards Ceremony

NCI director Dr. Samuel Broder presented numerous awards and citations at NCI's annual awards ceremony held Nov. 6. The following employees were honored:

NIH Merit Award

Dr. Thomas D. Mays—In recognition of outstanding administrative achievements for the steady filing of patients, the development of CRADAs, and the transfer of technology.

Paul Van Nevel—In recognition of his leadership in involving major corporations in breast cancer control activism to help save the lives of American women.

Susan Carey—In recognition of exceptional leadership and direction of the operations section, and outstanding contributions to the personnel management program, NCI.

Kay E. Kennedy—In recognition of exceptional leadership and coordination of the NCI-sponsored science enrichment program.

Adele M. Leif—In recognition of her numerous, valuable contributions to grants management at NCI and NIH.

DCBDC Purchasing Unit—For extraordinary efficiency, productivity, and professional performance of acquisition activities supporting the NCI Division of Cancer Biology, Diagnostics, and Centers. Robert Armstrong, Lorence Braunwell, Kathleen Morey, Y. Lynn Griffin, Mary Gulyas, Pamela Robbins, F. Jeanne Offutt, Thomas Smith, Adjoining Greenidge, Bessie Hoskins, Nitaah Agyemang, Aliese Allen, Anne Gulyas, Joyce Cleveland, Thomas Gordon and Myra Thomas-Payne.

Dr. Patricia S. Steeg—For outstanding accomplishments in the field of human breast cancer and discovery of the NM23 gene, which is an important prognostic marker.

Dr. William G. Stetler-Stevenson—For pioneering accomplishments in the understanding of human cancer invasion and discovery of the TIMP-2 protein, which blocks human tumor cell invasion.

Dr. John W. Greiner—In recognition of his pioneering work in the use of biological response modifiers to alter phenotype of tumor cells.

Dr. Zenleek Hrubec—In recognition of his epidemiologic research accomplishments that have clarified the role of ionizing radiation in cancer causation.

Dr. Betty Jane Stone—In recognition of exemplary and sustained computer related activities in international collaborative epidemiologic studies of cancer.

Cathleen Peters—In recognition of her personal dedication and contribution to the management of the Division of Cancer Treatment.

Roger S. Powell—In recognition of his commitment to the mission of the NCI as engender, stimulate and support innovative activity in the area of imaging science.

Dr. Gordon M. Cragg—In recognition of his efforts in locating and procuring sources of taxol, a new, highly active antineoplastic agent.

Dr. Kenneth M. Snader—In recognition of his efforts in locating and procuring sources of taxol, a new, highly active antineoplastic agent.

NCI director Dr. Samuel Broder (r) presents a 40-year length of service award to J. Thomas Lewin.

Dr. Michael John Hawkins—For vigorously and effectively stimulating the research and development of new anticancer agents.

Patricia L. Duffey—For critical contributions to the lymphoma treatment studies of the National Cancer Institute.

Dr. Jonathan Ashwell—For elucidating the nature of the response of T-cells to antigen and the cellular basis of negative selection in the thymus.

Dr. Stephen P. Creekmore—For the development of new methods of administering biological agents, particularly interleukin 2, to patients with cancer.

Dr. Louis A. Marx—For studies elucidating the nature of antigen recognition by T-cells and the development of the T-cell repertoire.

Dr. Birandra Sinha—For pharmacologic research on the synergistic effects of camptothecin and VP-16 enhancement of cytotoxic action.

Nola Whitfield—For exceptional originality and creativity in developing and implementing the supplemental supply research awards concept furthering research and career opportunities for underrepresented minority investigators.

Wilna A. Woods—For exceptional capabilities in developing close working relationships among staff, expediting review and award of research and development contracts for the National Cancer Institute.

Dr. Larry G. Kessler—For creative leadership in promotion of excellence in public service and for the advancement of applied research in cancer surveillance.

Dr. Charles R. Smart—In recognition of the central role he played in developing the NCI Guidelines for Early Cancer Detection.

Promotion to PHS Flag Rank

Dr. Bruce A. Chabner—Promoted to the rank of Rear Admiral in the PHS Commissioned Corps. As director of DCT since 1982, Chabner is responsible for the discovery and development of a number of treatments for cancer and AIDS.

PHS Citation

Dr. David A. Cooney—For outstanding contributions to our knowledge of the mode of action of the anti-HIV agents 2',3'-dideoxyadenine.

Dr. Gary Kellogg—For sustained high quality performance of duties during the period January 1990 to January 1991. During this period, Kellogg selected, planned, developed, and implemented over 50 studies to identify and evaluate the efficacy and safety of 17 new chemotherapeutic agents.

Dr. Joseph F. Fraumeni, Jr.—For pioneering and sustained efforts in developing and leading a complex epidemiology research program that has clarified the role of environmental and genetic determinants of cancer.

PHS Achievement Medal

Dr. Linda M. Putnam—For creativity, imagination, and perseverance in the conduct and coordination of an epidemiologic study to evaluate cancer risks among workers with chemical exposures.

Dr. Patricia A. Brown—For outstanding leadership and expertise in preparing the environmental NCI animal care and use program for AAALAC accreditation.

Dr. Clara J. Witt—For unparalleled dedication in the implementation and management of an animal health monitoring program ensuring uniform, high quality animals for use in NCI research studies.

PHS Unit Commendation

Dr. Bruce E. Johnson, Dr. John D. Minna and Dr. James L. Mulshine—For providing new insights into the genetics and biology of lung cancer leading to new clinical trial strategies for prevention and treatment of lung cancer.

Mary C. Fraser, Dr. Joseph F. Fraumeni, Jr., Dr. Frederick P. Li, and Dr. Margaret A. Tucker—For innovative studies of cancer prone families, providing new insights into the causes of cancer and the means of prevention.

Dr. Robert J. Biggar, Dr. William A. Blattner, Dr. James J. Goedert, Dr. Paul H. Levine, Dr. Angela Manns, Dr. Charles S. Rabin and Dr. Stefan Z. Witkot—For comprehensive, innovative, and insightful studies of the epidemiology and natural history of human viral infections that have substantially influenced the practice of public health and clinical medicine.

Raymond F. Greene, Janet M. Morgan, Anastasia E. Nasis and James W. Wilson, III—For the timely and efficient preparation of drug information monographs for distribution to health care practitioners across the United States and around the world.

PHS Commendation Medal

Dr. Dwight C. Kaufman—For his innovative approach to the study of oxidative stress in cells using molecular biologic techniques.

Dr. Alan R. Kirsch—For his role in the establishment and maintenance of the molecular genetics research and training program within the NCI-Navy Medical Oncology Branch.

Dr. Charles E. Land—For outstanding and creative contributions to the study of cancer risk among Japanese atomic bomb survivors.
EEO Officer's Recognition Award

Dr. Bruce Chabner, Dr. William Coleman, Dr. Paulette Gray, Dr. Gail Bryant, Dr. Glenn Merlino, Dr. Clay Seganii, Donna Bonner, Sylvia Bennett, Nancy Archer, Dr. Philip Browning, Dr. Charles Link, Dr. James Liebmann, Dr. Stephen Hahn, Dr. Ricardo Parker, Dr. Jeffrey White, Dr. Ginaela Sorez, Dr. Michael Weickert, Dr. Alfred Johnson, Andre Reed, Dr. Valerie Stout, Dr. Ainsley Weston, Jeffrey McKenna, Dr. Susan Gottesman, Dr. Nancy Trun, Dr. Jackie Whang-Peng, Dr. Koong-Nah Chung, Claudia Glover, Dr. George Alexander, Charles Whitney, Laurie Perrin, Dr. Michael Daly, Dr. Michael Lighten, Dr. Kurt Kohn, Dr. Chris Hatch, Dr. John Donovan, Dr. Patrick Elwood and Dr. Sharon Sutton — For their involvement in the NC/McKinley High School adopt-a-school and teachers enrichment program. The success of the program is related to their interest and willingness to become involved in this initiative.

EEO Special Achievement Award

Barbara Byimun — In recognition of her outstanding leadership and commitment to the principles of equal opportunity in the Division of Extramural Affairs, as evidenced by the significant number of women in the DEA in supervisory roles.

Damian Crane — In recognition of his overall efforts to maintain open, flexible, diverse, and highly motivated administrative staff while maintaining a working environment that is sensitive to the needs of all developmental therapeutic program employees.

Carol Kelly-Smith — In recognition of her overall commitment and contributions to the goals of EEO, especially noted in the development and dissemination of informational books and handbooks that are used by all NCI employees.

Dr. Alan Rabson — In recognition of his overall leadership and commitment to the principles of equal opportunity in the Division of Cancer Biology, Diagnostics and Centers, as exemplified by the presence of women and minority physicians in DCBDC.

EEO Honorable Recognition Award

Cheryl Stahle — In recognition of her overall leadership and commitment to the principles of equal opportunity during her career at the National Cancer Institute.

Lecture Explores King Herod's City

The NIH Lodge of the Order Sons of Italy in America will sponsor a lecture titled “New Archaeological Discoveries in King Herod's City, Caesarea Maritima, Israel.” The speaker will be Dr. Kenneth Holm, associate professor of history at the University of Maryland. The presentation will be held in Lipscomb Amphitheater, Bldg. 10 on Friday, Dec. 6 at noon. Holm, who received his Ph.D. from the University of Chicago in 1973, has been involved with the Caesarea Maritima excavations since 1978. He has been the recipient of a number of awards and has numerous publications relevant to his scholarly work.

This lecture is the fifth in a series of cultural and arts programs sponsored by the OSIA Lodge to commemorate the Columbus Quincentenary. All are welcome at these programs.

Membership in the NIH Lodge is also open to anyone who would like to join. Call Nina, 496-7495, for more information.

William C. "Cy" McGee, an architect in the Facilities Engineering Branch, NIEHS, has been voted president-elect of the Triangle chapter of the Construction Specifications Institute (CSI)—an organization of professionals in the construction industry including architects, engineers, specifiers, contractors, product manufacturers and property owners. McGee has been involved in the development and operation of the NIEHS campus for many years. He has also been active in CSI, serving past terms as both president and vice-president.

Progress continues on the playground begun at the end of October at the Children's Inn at NIH. Shown overseeing the work are inn board member Holly Parker (1), landscape committee member Rene Feller, and inn executive director Bob Gray. Fundraising is still under way for the project, slated for completion next month.
Saw Computers Change Research

DCRT's William Mohler Retires After 34 Years Here

By Anne P. Enright Shepherd

It's never too late to learn, and Dr. William C. Mohler, associate director of DCRT, will be the first to say so. In fact, Mohler, who will retire Nov. 30, says that he learned most of what he knows about computers after becoming associate director of the division charged with managing them.

Mohler, a retired Public Health Service commissioned officer, has administered DCRT programs and operations for more than 24 of the 34 years he has been at NIH. He was heavily involved with the NIH Information Resources Management Council and served as its executive secretary from 1985 to 1990.

"Bill Mohler is a dedicated hard worker, and devoted to DCRT and NIH," remarks Dr. David Rodbard, DCRT director. "He has been involved since its beginnings and participated in nearly every major decision for 24 years—buying computers, trying to meet the needs of the NIH community."

Dr. Arnold Pratt, former DCRT director, said of his long-time associate, "Although I don't think Bill has ever practiced medicine, he was described by a friend as a true healer—he would listen, think, and be kind to whoever needed a helping hand. This is one reason I can truly call him an effective leader."

After earning a B.A. in psychology at Yale University in 1949, Mohler went to Columbia University's College of Physicians and Surgeons, where he received his M.D. in 1953.

For the most part, Mohler has pursued his career here on the NIH campus. Except for his internship and residency at Presbyterian Hospital in New York City and a postdoctoral fellowship at Johns Hopkins University's McCollum Pratt Institute, Mohler has dedicated his professional life to biomedical research and management at NIH.

From the mid-1960's to the mid-1960's, Mohler served in the National Cancer Institute as a clinical associate, then as an investigator for NCI's Clinical Pharmacology and Experimental Therapeutics Service. Switching gears, he shifted from scientist to administrator in 1965 when he became assistant to the NIH director of laboratories and clinics.

Although his early computer training was minimal (as was almost anyone's in the early 1960's) Mohler's curiosity was high. He had heard that Dr. Arnold Pratt had a computer, and Mohler went to see what he could learn. "I figured that a computer would be better than hewing my calculator to do statistics," Mohler explains.

As he soon found out, computer programming was not a simple solution for his computationally intensive analyses. "Dr. Pratt gave me a FORTRAN manual and a pat on the back and said 'Read this and come back and see me.' "

To say the least, this new technology was a long way from being user-friendly. "I got lost at the point where they talked about DO loops (a programming command)," remembers Mohler. "I couldn't figure that out. So I put it away and went back to my adding machine."

In 1964, however, Mohler learned FORTRAN II programming on an IBM 1620 in an NIH computer course taught in the Stone House. "That course made me feel that computers are, in fact, not as mysterious as one may believe."

Then, in 1967, he found his niche. The fledgling Division of Computer Research and Technology and its then-director Pratt—Mohler's would-be FORTRAN mentor—invited Mohler to be DCRT's first associate director for program operations. Mohler was considered for the position, in part, he says, because, "I had learned that computers would not bite."

His years in DCRT have been filled with the responsibilities of program operations and special projects. He pioneered the organization of the NIH clinical electives on computers in clinical medicine, a program designed to teach computer technology to medical students from all over the country. As DCRT director Rodbard recalls, "He successfully ran that program. Then, after about 10 years, he turned it over to me to run. Through that program, I learned about nearly every activity in DCRT."

Mohler also served on the board of the Symposium on Computers and Medical Care, a responsibility that Rodbard too later shared.

Rodbard continues, "Bill has stayed on as associate director for the past year with the express purpose of wanting to ease the transition to a new director. He has served faithfully and loyally. He is a gentleman."

Mohler served as acting chief of several division branches, and in 1990, he was DCRT's acting director for several months while the search for a new director was under way.

Through the years, his scientific curiosity has never taken a vacation. "Dr. Mohler just loves to analyze data," Rodbard divulges. "His office would be knee-deep—sometimes waist-deep—in computer outputs. He has a very critical eye and is a perfectionist."

Upon retirement, Mohler says he doesn't have immediate plans. "Ask me in 6 months," he quips. "Until then, I'll be busy being retired."

As it turns out, he does have some ideas for the future. Spending time with his wife and children is a priority. So is making it to the meetings of a traffic modeling advisory committee to the planning board in his community. And, he says, he may even take a computer course.

Automated NIH Manual Available

To enhance the NIH Manual System, the Division of Management Policy has recently expanded the MANUALS Bulletin Board (MBB) to include the text of all current NIH Manual chapters (except NIH Manual 1130, which will be added in the future). The MBB is designed to provide the NIH community with on-line access to all current NIH Manual chapters. The board can be accessed using DCRT's electronic bulletin board system, Enter BBS, available through WILBUR.

Chapters are available in both ASCII and binary formats. Use the ASCII format to read text online; use the binary format to download text to a WordPerfect document, which can then be retrieved and used as needed. Separate ASCII and binary directories, available in the Files section of the MBB, are grouped by functional area (e.g., acquisition, grants, personnel).

Issuing offices can now easily update chapters by downloading chapter text, in binary format, to a WordPerfect document and making necessary revisions.

DMP plans to schedule demonstrations of the MBB for specific committees/groups by functional area beginning in January. DMP will also schedule demos and hands-on training for the MBB to other interested staff upon request. Contact Carol Bowie or Joan Casey, 496-4606, for more information or to arrange to attend a training session.

NIMH Study Needs Volunteers

The Child Psychiatry Branch, NIMH, is recruiting healthy, normal boys and girls ages 9-16 to participate in safe scientific tests. These include paper and pencil measures, eye tracking, and magnetic resonance imaging. Volunteers will be compensated for their time.

Contact Monica or Debra, 496-1891 (extension 2, then 4 on the voice mail), and leave name and number.
**OD’s Betty Beveridge Retires to New Home, Marriage**

Betty J. Beveridge, NIH committee management officer, retired recently after a long and varied career with NIH, beginning in the Division of Research Grants; most of her NIH service was in the Office of the Director.

She served as secretary to then NIH deputy director Dr. John F. Sherman immediately prior to joining the Committee Management Office in 1974, and was named committee management officer in 1982. During her tenure, she saw the number of NIH chartered advisory committees climb from 133 to 192 and membership increase by 45 percent from 2,336 to 3,594, the largest public advisory committee system in the federal government.

Among the many challenges facing her were those occasioned by passage of the Health Research Extension Act of 1985, which gave the NIH director authority to establish scientific and technical committees and appoint members. Last June, Beveridge received the NIH Director's Award, citing her experience and professionalism in the management of committees at NIH.

Beveridge was honored by friends and colleagues at a farewell reception held in Wilson Hall, where she was presented with a check to be used toward a trip to Dorset, England, home of her ancestors. Among the many tributes she received was one by the director of the DHHS Secretary's Advisory Committee Office, who related to the guests how, when she was new in the department and had a question, she was told “call Betty.”

Betty Beveridge

---

**Research Participants Needed**

Healthy nonsmoking females ages 20-30 are needed for a Laboratory of Neurosciences drug study. Individuals who want to participate in this study must not be on any medications and should contact NIA, 496-4754, Monday through Friday, 9 a.m. to 5 p.m. Compensation for each phase of this two-phase study is $235.

---

**NCl’s Nusbaum Leaves NIH**

Adèle Nusbaum has retired as program analysis officer in the Division of Cancer Prevention and Control at NCI, the institute at which she spent 17 of her 22 years at NIH.

She received degrees in political science from the University of Rochester and in public law, and government from Columbia University before working for several New York public relations firms. She then directed communication for both a national and a regional community service organization before coming to the Federal Women’s Program at NIH in 1969.

"Some things have changed, but some have stayed the same," she said of her experience. Although much progress has been made in the field of opportunities for women—"Who would have dreamed (in 1971) that the director of NIH would be a woman?"—Nusbaum says there’s still room for improvement.

Women are still not proportionately represented at higher grades in most institutes, she noted.

Nusbaum, who directed NIH’s first equal opportunity employment program, has watched the percentage of women at NIH increase nearly 15 percent since 1971. As of 1988, women composed nearly 60 percent of the NIH workforce and were represented at all levels. Promotions for women have also increased.

One of her final projects was a 2-day cancer control communication clinic for grantees from state health departments. The clinic focused on communication of cancer prevention, and "it was very successful," she said.

Her post-retirement plans include consulting on some short-term projects, redecorating her apartment, and traveling to Thailand.

---

**DCRT Computer Training Classes**

<table>
<thead>
<tr>
<th>Classes</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of SAS at NIH</td>
<td>12/2-12/13</td>
</tr>
<tr>
<td>Running SAS Software in the PC-DOS Environment</td>
<td>12/3-12/5</td>
</tr>
<tr>
<td>ENTER BBS</td>
<td>12/3</td>
</tr>
<tr>
<td>Mainframe Services at NIH</td>
<td>12/4</td>
</tr>
<tr>
<td>Cxbatch</td>
<td>12/5</td>
</tr>
<tr>
<td>Windows Optimization</td>
<td>12/6</td>
</tr>
<tr>
<td>Recurrent Problems in Data Analysis</td>
<td>12/9-12/13</td>
</tr>
<tr>
<td>Introduction to COMPRO Utilities</td>
<td>12/9, 12/11</td>
</tr>
<tr>
<td>Scripts and Buttons in FileMaker Pro</td>
<td>12/10</td>
</tr>
<tr>
<td>Introduction to PC Mainframe</td>
<td>12/10</td>
</tr>
<tr>
<td>Communication with ProComm Plus</td>
<td>12/10</td>
</tr>
<tr>
<td>Laboratory Analysis Package (LAP)</td>
<td>12/12</td>
</tr>
<tr>
<td>Creating and Using Simple WYLBUR Command Procedures</td>
<td>12/16-12/17</td>
</tr>
<tr>
<td>The Automated Laboratory Using LabView</td>
<td>12/17</td>
</tr>
<tr>
<td>Cracking DOS 5.0's SHELL</td>
<td>12/17</td>
</tr>
<tr>
<td>Intermediate PC-DOS</td>
<td>12/18, 12/20</td>
</tr>
</tbody>
</table>

Classes are offered by DCRT’s Computer Center Training Unit, without charge. Call 496-2339 for more information.
Cain Hits Century Mark
At NIH Donor Center

Dr. Dennis F. Cain gave his 100th blood donation at the NIH Donor Center on Nov. 8. As we all know, a car can travel many miles on a tank of gas, just as a gallon of blood can be given to many patients. With Cain’s 100th donation, he has given 12.5 gallons, which is equivalent to a tank of gas.

Although many miles can be covered on a tank of gas, a gallon of blood can help 24 to 32 patients. Cain has helped approximately 300 to 400 patients—the equivalent of 100 carpool.

Cain began donating blood while he was a summer student at Georgetown University in the mid-1950’s. He believes that no records were kept of his first donations, an unthinkable practice today. He has given blood regularly since joining NIH in 1968; currently he works for the National Cancer Institute.

The NIH Donor Center congratulates Cain on his milestone and hopes to see him around its “refueling center” for many more donations.

South African Student To Speak at NIH Human Rights Program

Palesa Makhale, a South African graduate student studying psychology at Howard University, will be the featured speaker at the annual Human Rights Day program sponsored by the medical scientists committee. The program will be held in the Little Theater, Visitor Information Center, Bldg. 10 on Wednesday, Dec. 11 at 1 p.m. The presentation is entitled, “The Psychological Effects of Living in an Apartheid System.”

The medical scientists committee, an affiliate of Amnesty International, works for human rights around the world by writing letters to foreign governments in response to violations of internationally accepted standards of human rights. Human Rights Day is an occasion to celebrate the successes of the past year as well as to gain a fresh perspective on a particular aspect of human rights.

Makhale’s personal and educational backgrounds combine to give her a unique outlook. She was born in Soweto and witnessed the 1976 uprising there. She was away at boarding school at the time, but the school closed and she was returned to Soweto in the midst of the chaos. In the mid-1980’s, the efforts of an American pastor working there made it possible for her to attend Goshen College in Indiana. She completed her bachelor’s degree in psychology in just 2 years, after which she was admitted to Howard University to do graduate study. She has interviewed many foreign students who lived in war zones as children and is studying the long-term effects of such experiences. Her graduate thesis will develop the concept that apparently abnormal feelings and behavior may be normal responses to extraordinary circumstances. For example, she attributes her own fear of even the tamest dogs to the association of dogs with police in her childhood. But for all that she has seen and heard, this soft-spoken young African seems neither embittered nor discouraged. She looks forward to returning home and contributing to the healing of her country. In the meantime, she says, “I always like to deliver a message of hope.”

The program is free and everyone is invited to attend.

R&W Schedules Tahoe Trip

R&W has scheduled an 11-day vacation trip to California and Lake Tahoe for next summer, starting Aug. 8. Destinations include San Francisco, Napa Valley, Yosemite National Park, Monterey, Los Angeles, San Diego and Lake Tahoe. Cost is $1,689 per person, double occupancy and includes air and ground transportation, accommodations and 14 meals. A deposit of $100 per person is due upon reservation, with final payment due June 4, 1992.

For more information, stop by the R&W Activities Desk for a detailed flyer or call 496-4600 and R&W will send you one.