

"Still
The Second
Best Thing
About Payday"

The NIH Record

Campus Hospitable to Arts

NIH's Fuel Science With Sound of Music

By Rich McManus

(First of two articles)

Through fiscal years both lean and fat, eras both golden and leaden, and all of the vagaries of political change that regularly refashion the landscape, NIH has never been without the consolation of music, mainly of the classical variety.

For reasons yet unexplained, minds stimulated by science are often connected to ears—and hands—that relish sonatas, concertos, orchestras and symphonies.

Two proprietors of such happily linked facilities spoke recently of their lives in science and music, and of the chamber music ensemble—the NIH Chamber Players—they cofounded at NIH 6 years ago. Though collaborators in music-making, they took very different paths to their current status.

Dr. Carl Banner, program director for the etiology of Alzheimer's disease at NIA, is a



NIA's Dr. Carl Banner is a relative latecomer to science, having devoted his youth to the piano. After a hiatus, he has returned to the piano bench.

classically trained pianist who discovered a vocation in science relatively late in life, after years of dedication to music. Dr. Suzanne Epstein, on the other hand, made time for the cello when scientific goals, nurtured since childhood, permitted; an uninterrupted resume of academic accomplishment is capped by her current position, chief of the Molecular Immunology Laboratory at the Food and Drug Administration's Center for Biological Evaluation and Research.

"I was trained in music from when I was a very small child," recalls Banner, "and pursued a career as a concert pianist until the age of 26."

Although he was always academically

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Survival Linked to Cultural Issues

Diagnosis Delivered on Race, Poverty and Cancer

By Carla Garnett

Despite location in perhaps the globe's richest nation, some American communities have mortality rates more comparable to Third World countries, according to Dr. Harold Freeman, director of Harlem Hospital's department of surgery in New York and chair of the President's Cancer Panel.

Speaking on the day after President Clinton delivered a State of the Union address that focused heavily on national health care reform, Freeman gave details of his now widely reported research, which found that a young African American man living in Harlem has less chance to survive to age 65 than does a young man living in Bangladesh.

"There are pockets of people within America where people don't experience the typical American dream," he told attendees at a colloquium sponsored by NCI's Division of Cancer Prevention and Control. "This is unacceptable."

Although daily proof of this grim pronouncement comes to Freeman through his work with African Americans in Harlem, he said other poor areas around the country—regions populated to a large extent by Appalachian natives and Native Americans, for example—show a similar picture. He stressed the importance of getting a clear picture of the populations that are surviving cancer and those that are not.

There are close to 36 million poor people in the United States, he said. (Freeman defined poverty as a family of four living on \$13,000 or less per year.) About one-third of the U.S. poor are African American; nearly two-thirds are white, leaving a small percentage of other races among the poor in the nation. Native Americans represent the poorest segment of the country, followed closely by African Americans; Freeman used data that classified Hispanics as either Black or white, not as a separate racial group.

In Harlem, he said, 95 percent of the population is African American, 41 percent are poor and (See **POVERTY**, Page 2)

New Members Welcome

NIH Sailing Association Marks 30th Year, Sort Of

The NIH Sailing Association, one of the largest R&W-sponsored clubs on campus with some 200-250 members, is celebrating its 30th year in 1994, despite evidence from the archives of the *NIH Record* that the club actually began 31 years ago.

"So we're a year off, who cares?" laughs Dr. Frank Tietze, an ex-commodore of the club who, having 25 years of tenure in NIHSA, qualifies as the organization's Ancient Mariner. His willingness to forego quibbling over minor details in favor of serious celebration may well characterize a club whose social benefits have always kept membership levels—about equally distributed between male and female—high.

The club first met in January 1963 to take advantage of the fact that, as its first elected commodore Dr. Robert B. Livingston pointed out, "Some of the finest sailing waters in the world are within easy reach of NIH."

In that inaugural year, some 27 club members had their own sailboats. Members simply shared one another's vessels at a series of informal outings for both pleasure and for sharpening seamanship.

Somewhere along the way—historical details have gone out with the tides—the club ultimately acquired five 19-foot Flying Scot daysailers, which club members, who pay dues of \$35 a year, can reserve for a nominal fee.

(See **SAILING**, Page 4)

June Conference Outcome

NLM Makes AIDS Online Services Free to Users

The National Library of Medicine announced on Jan. 25 that it will no longer charge customers for online searches of its three AIDS-related databases—AIDSLINE, AIDSTRIALS and AIDSDRUGS—and also for DIRLINE, an online listing of some 17,000 organizations and information services providing information to the public about HIV/AIDS and other health-related topics.

Effective as of the announcement—made at a lunchtime gathering of the NLM Board of Regents—the action was taken on the recommendation of panelists who convened for 2 days last June at NLM to consider how NIH might do a better job of disseminating information about HIV/AIDS.

That meeting, sponsored by NLM and the NIH Office of AIDS Research, gathered the major constituent groups with an interest in the AIDS pandemic for frank talk about ways to disseminate information to fight the disease.

"It was the first time that representatives of all of the different groups with an interest in AIDS information were brought together in one venue," reported Dr. Elliot Siegel, NLM associate director for health information programs development. "Participants included clinical researchers, practitioners, journalists and the affected community. It was an eye-opener for them to hear about one another's

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POVERTY

(Continued from Page 1)

75 percent live in substandard housing.

Freeman then showed graphic slides of several Harlem women with newly diagnosed stage IV breast cancer. Malignant tumors appeared to be growing in shocking proliferations on the outside of breasts, indicating widespread, neglected disease. In one case, a woman's entire breast had been replaced by cancer.

These women—who came into Harlem

Hospital via the emergency room—became part of Freeman's study of 708 Harlem women who were treated for breast cancer. He noted some health care demographics of the study: 46 percent of the

patients had no health insurance, 29 percent were covered by Medicaid, 17 percent were on Medicare and 8 percent had private insurance. Half of the women in the study were deemed incurable at the time of treatment.

"This implies that there are Third World communities in America," Freeman said. "America is supposed to be the First World, whatever that means. America has the highest technology medically, yet we know of Harlems all over America that include all races—whites, Hispanics, Blacks. This is really an unacceptable paradox."

"This is extraordinary that this could happen in any part of America," he continued, explaining that the breast cancer study compelled him to work further in this area. "This is the great paradox of a hospital that treats burn victims, especially trauma, very well." A person with a gunshot wound will get into the operating room immediately, he pointed out, but a person with a lethal disease, exhibiting minimal symptoms, is often triaged back into the community with little or no followup until 6-8 months later when the cancer is terminal.

"If [the patient's] cancer becomes an emergency," he said, "then very few people will survive it."

A past president of the American Cancer Society (1989), Freeman stated, "Even with improved access to health care providers, there is statistical evidence of fewer preventive services to the poor."

In seven nationwide hearings on the poor and cancer, sponsored by ACS in 1989 in such regional centers as Atlanta, St. Louis, Sacramento, and El Paso, Freeman frequently heard similar complaints from cancer patients of a wide variety of races:

- ◆ They were in greater pain from their disease, he said. This was due mainly to the fact that their diseases were diagnosed in later stages.

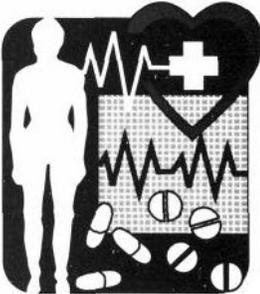
- ◆ These patients reported meeting barriers during negotiation of the health care system;

some made extraordinary sacrifices for health care.

- ◆ The education efforts available to them were perceived as insensitive and irrelevant.

- ◆ These people often gave up hope, adopting a fatalistic attitude about their chances to survive. "They become alienated and isolated," Freeman said. "And then they give up."

Overall, he continued, cancer survival is 10 to 15 percent lower in economically disadvantaged populations. Poverty has many characteristics, he said, not the least of which is an



"Survival itself is a fundamental instinct in all living forms and man is no exception, but the social, physical, cultural, political, and economic environment has a very clear influence..."

impoverished person's sometimes necessary concentration on day-to-day survival. He added that a little sensitivity on the part of medical personnel can go a long way.

"Think of the circumstances people are living under when you are offering them help," he advised.

Freeman also gave a bit of cancer history. Among the most interesting facts was that before 1930, the overall cancer death rate for women was slightly higher than for men. This was due chiefly to the high incidence of cervical cancer, the number one cause of cancer death among women at that time, he said. Unfortunately, "just as we were almost conquering cervical cancer," Freeman said, explaining the development of Pap smear testing, "we noticed the onset of tobacco-related cancer."

It was during this transition period that men's cancer death rates overtook women's. Freeman explained that women started smoking, generally, 20 years after men; today's cancer death rates for women—lung cancer has overtaken breast cancer as the number one cancer killer—reflect that approximate 20-year difference. Fully 30 percent of cancer deaths in the U.S. are related to cigarette smoking, he noted.

"Eliminating tobacco really has to be the number one way to arrest these cancer deaths," Freeman said. "The most robust indicator of who smokes in America is education. About 90 percent of people who smoke started when they were in their teenage years, in high school." Those with a college education are only about half as likely to smoke as those with less than a high school diploma, he reported.

Even more than smoking, diet plays an important part in cancer mortality. According to Freeman, about 35 percent of cancer deaths are related to unhealthy diet. Socially determined culture, he asserted, as opposed to genetically determined race, is probably more of an indicator of disease risk. A person's culture shapes his or her lifestyle, diet and behavior, he explained.

For example, Seventh-Day Adventists, many of whom consume an abundance of vegetables and shy away from meats and fatty foods, have a comparatively healthy diet. Their cancer death rate, consequently, is much lower than some cultures in which fatty foods are enjoyed.

"We also have to be careful about attaching the label 'minority' to those who do well or poorly with cancer," he said. "The Japanese population—still presumably considered a minority—has the best overall cancer survival rate in America. They also have the best economic and educational levels in America." Native Americans have the poorest cancer survival rates, followed by Blacks.

Freeman concluded with several recommendations including the need to explore an anthropological approach to public education, i.e., communicating with different cultures on their own terms, in their own languages.

"If you want to reach people in a substantial way, they need to be involved," he said. "We say we are a nation of humane people, but humanity is measured in the way we relate to people."

Freeman also advocated universal access to basic health care and emphasized including prevention efforts as a large part of that access.

"Survival itself is a fundamental instinct in all living forms and man is no exception," he said, "but the social, physical, cultural, political, and economic environment in which we grow up and live has a very clear influence on whether we will survive and also on the quality of that survival." □

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Gene Predicts Bone Density, Risk of Osteoporosis

Researchers have found a gene that may help to identify, early in life, individuals at high risk for osteoporosis. This gene strongly influences bone density, an important determinant of the risk of osteoporosis. Osteoporosis (porous, weak bone) affects more than 25 million people in the United States and is the major underlying cause of bone fractures in postmenopausal women and the elderly. Osteoporosis usually depends on two factors: the peak bone strength (density) attained in early life, and how rapidly a person loses bone in later life. "The prospect of having a genetic marker of bone density that would permit early intervention to prevent osteoporosis is extremely exciting," says Dr. Lawrence E. Shulman, director of NIAMS, which funded the study.

Although heredity has long been suspected of playing a role in bone density, until now genes responsible for this trait have not been identified. As reported in the Jan. 20 issue of the scientific journal *Nature*, Drs. John A. Eisman, Nigel A. Morrison and colleagues at the Garvan Institute of Medical Research in Sydney, Australia, have now found that a single gene can account for up to 75 percent of the total genetic effect on bone density. This gene codes for the vitamin D receptor (VDR), a protein that enables vitamin D to exert its actions on bone and on calcium metabolism. Nongenetic factors such as hormones, calcium intake, and exercise also influence the density of bone.

Eisman and his colleagues measured bone densities in 70 pairs of identical twins and 55 nonidentical twins. They found that identical twins, who share 100 percent of their genes, had more similar bone densities than did nonidentical twins, who do not share all genes. They also found that there are two forms (alleles) of the VDR gene, one called "B" and the other called "b." Normal people have one copy of the VDR gene from each parent, and thus may have either the BB, Bb, or bb combination.

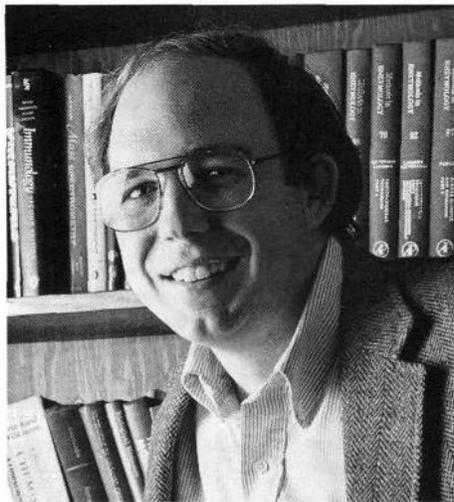
The researchers then looked at the effect of the two forms of the VDR gene on bone density. They found a strong link between the "B" version of the VDR gene and low bone density in the spine and femur (thigh bone at the hip). Bone density was lowest in those with the BB combination, intermediate in those with Bb, and highest in those with bb. Nonidentical twins that had the same alleles of the VDR gene were similar to identical twins in this regard, thus strengthening the importance of these receptor genes to bone density. It is not yet clear how the difference between the two forms of the VDR gene could affect bone density.

Eisman and colleagues also examined 311 unrelated healthy women from the Sydney area. In this second population, the vitamin D receptor gene was also found to be a strong predictor of bone density, and again the "B" allele was associated with lower bone density. The researchers predict that women with BB,

having low bone density in early life, will, when they start to lose bone as they age, reach the "fracture threshold" of low bone density in the spine 11 years earlier, and in the hip 8 years earlier, than those with bb. The latter translates to a fourfold increase in the risk of hip fracture for BB individuals as compared to those with bb.

These findings need to be extended to other and larger populations in the U.S. and elsewhere. They may provide an important explanation for the wide variation in bone density, not only among individuals, but also among various ethnic groups. African-American women in the U.S., for example, develop approximately 10 percent greater peak bone mass by age 35 than do Caucasian women.

Research is also needed to uncover the precise role of the vitamin D receptor in regulating bone density. These investigations open new frontiers in research on the underlying causes of osteoporosis, and in particular the critical role of vitamin D in bone formation and metabolism. They could also pave the way for developing new targeted approaches to the prevention and treatment of this common and debilitating disease.—Elia T. Ben-Ari □



Dr. Peter G. Schultz, professor of chemistry at the University of California at Berkeley, will discuss new aspects of molecular immunochemistry in the seventh Paul Ehrlich Lecture on Wednesday, Feb. 23 at 2:30 p.m. in Masur Auditorium, Bldg. 10. The talk, entitled "Catalytic Antibodies (Enlarging Karl Landsteiner's Legacy)," is sponsored by the FAES.

Genital Herpes Vaccine Study

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

NHLBI Hosts Marrow Conference

On Mar. 24-25, NHLBI, along with the Leukemia Society of America (LSA), will host a special conference on the "Clinical and Societal Issues in Marrow Transplantation." The conference will be held at the Hyatt Regency Bethesda.

The American Society for Blood and Marrow Transplantation is also a conference cosponsor.

The conference is arranged in three sections: The latest indications for marrow transplantation; the potential of gene therapy; and outpatient approaches.

The first section will provide an update to the last transplantation conference, held in September 1992, and should help clinicians and third-party payers determine which patients are suitable candidates for transplantation therapy.

The second section will explore the use of marrow transplantation in gene therapy, including the role of cytokines, cord-blood stem-cell transplantation, long-term effects of graft-versus-host disease, and emerging technologies such as T-cell depletion, stem-cell selection, and malignant-cell purging.

The outpatient section will look at implications for managed care strategies and at regulatory issues involving the establishment of and compliance with quality standards for products, equipment, and marrow transplantation units.

For more information, contact Jodi Shelley of the NHLBI Bone Marrow Transplantation Branch, 6-8387.

Workshop on TIPS, Hypertension

A 2-day workshop on the long-term benefits and risks of transjugular intrahepatic portal-systemic shunts (TIPS) in the treatment of portal hypertension will be held Feb. 28-Mar. 1, at the Bethesda Marriott, sponsored by the National Digestive Diseases Advisory Board.

TIPS, a shunting procedure introduced in the United States in 1991 at the University of California at San Francisco, has been reported to decrease significantly portal pressure, control variceal bleeding, and in some cases resolve abdominal ascites as well as hepatorenal failure.

While TIPS is considered highly effective in stopping acute variceal bleeding, it has not been shown to provide definite benefit in patients with less severe complications of portal hypertension. In addition, standards for training in the TIPS procedure, indications for its use, and guidelines for monitoring patients or for managing complications have yet to be established. The TIPS workshop participants will address these and other issues regarding the safe and effective use of TIPS.

Moderators and organizers for the workshop sessions are Dr. Lennox Jeffers, University of Miami; Dr. Mitchell Shiffman, Medical College of Virginia; Dr. Jay Hoofnagle, NIDDK; and Tommie Sue Tralka, NIDDK.

To register for this free workshop, call 6-6045. □

SAILING

(Continued from Page 1)

"Primarily it's a chartering outfit," explained 1994 commodore Dr. Dennis Cain, who, on land, heads the Protocol and Information Office in NCI's Division of Cancer Treatment. Members typically learn how to sail at NIHSA's twice-yearly sailing classes, cut their teeth on the small boats, then qualify to charter bigger boats from one of the many marinas dotting the Chesapeake Bay's upper reaches.

"We also run racing activities with the Flying Scots, and we have a cruising program with the big boats," added Cain. "Many of us have gone from sailing the little boats to the 30-40-foot commercial rentals."

"We go on 3-4 day charters and tie up together at different spots on the bay," adds Tietze, an investigator at NIDDK's Laboratory of Molecular and Cellular Biology who has been at NIH since 1956. "Then we have a social blow out."

But it's not all beer and skittles at NIHSA, not by a long shot. Club members not only take classes and on-the-water training, but also have to maintain the boats themselves, cleaning up after each voyage and repairing any "bruises" that may have occurred during an outing. Cain credits a strong cadre of committed members with keeping NIHSA vibrant and its fleet shipshape.

"A fleet captain is in charge of all the boats, and all work is done by volunteers," says Cain. "The boats come out of the water every fall. We take the masts off, and cover them for winter storage. Every spring, in March, we sand the bottoms and paint them with anti-fouling paint, and we clean and repair the sails."

Members dubbed "boat sponsors," he continued, are in charge of making sure every boat is in top condition each time out. "There are two sponsors for each boat. They take the responsibility for keeping them in their prime. That way, whenever you want to charter, there's a good boat sitting at the dock, ready to be rigged for sailing. You never face the problem of taking out an unsafe boat."

The daysailers are available, in season, 7 days a week. "There are two charters available each day," says Tietze, "Til 2 and after 2."

Available on a first-come, first-served basis, the boats "aren't used as heavily as one would think," opined Cain. "They're heavily used on weekends, less so during the week."

The boats dock at Selby Bay, near Mayo, Md., on the South River. "It's only 45 miles from NIH," said Cain, grinning at the knowledge that only a short drive after work connects his desk at Executive Plaza to a wooden pier by a salty sea.

The club also features a social program that continues throughout the year. "We meet once a month, often at FAES House or at members' homes," says Tietze. "We have a short business meeting then gather socially."

During peak sailing season, low-key races in the small boats are held weekly, and serious races—regattas—occur once a month. "At the



Flying Scot sailboats participate in a race on the Chesapeake Bay. Winners of the weekly contests square off against one another at the end of the sailing season in the annual Hot Shot Regatta.



Membership in the sailing club is not all cool breezes and unfurled sails. Here, members tug a boat out of the water for maintenance...



...which includes sanding the bottom of the boat and painting it with a special antifouling compound.



One of the greatest pleasures of chartering a cruise with NIHSA, say members, is rafting-up at the end of the day for an evening of good food, drink and socializing.

end of the season, in October, we hold a big race-off of the winners, the Hot Shot Regatta," said Cain.

Club members are ranked by skill, according to the judgment of their peers.

"I knew nothing about sailing when I joined," remembers Tietze, who had been a lifelong landlubber. "Someone in the lab got me interested, and I've been a member ever since."

Sailing rookies are classified as "restricted helmsmen." The next grade up is helmsman. The top rank is skipper, a status both Tietze, and Cain, whom Tietze taught to sail some 8 years ago, enjoy.

Much attention is paid to safety in club members' training, Tietze said. "Sailing is inherently a dangerous sport." Echoes Cain, "There is significant discussion of both weather



NIH Sailing Association members Drs. Dennis Cain (l) and Frank Tietze talk about the upcoming sailing season. Cain, who is NIHSA commodore this year, learned how to sail 8 years ago from Tietze, a past commodore who has been a member since 1969. NIHSA is celebrating its 30th year on campus.

and safety in the training course." Both men are instructors in the club, which also teaches celestial navigation.

The boats are fully insured through club dues, but renters are responsible for the deductible fee in case of damage or lost equipment.

"The boats are insured against everything but stupidity," says Tietze.

Membership has other perks as well, including subscription to the club newsletter *Wind and Wake*, edited by Dr. Gretchen Hascall, and a collection of NIHSA t-shirts and sweatshirts designed anew each year and on sale at R&W stores.

"We also have several big parties a

Sailing Club Holds Open House

The NIH Sailing Association will present its annual "Sail Into Spring" open house on Thursday, Feb. 24, from 5 to 8 p.m. at the FAES House (corner of Cedar Ln. and Old Georgetown Rd.). A \$5 fee covers admission and appetizers, with a cash bar available for beer and wine.

Information and applications for the upcoming sailing class will be available and members and program chairpersons will be present to tell about cruising and racing programs.

Membership in NIHSA is open to NIH employees, patients and contractors. The club owns five Flying Scots (19-foot sloop-rigged centerboard daysailers), which are moored near Annapolis.

For more information on the open house, call Mimi Poirier, 2-1835. Information about NIHSA is available at all R&W activity desks.

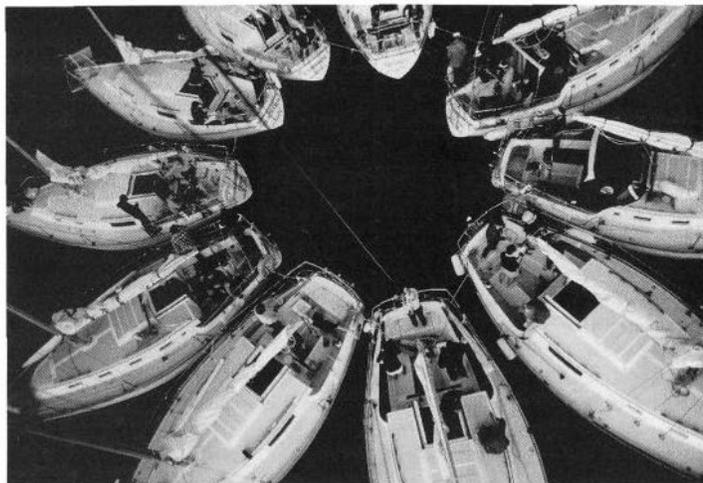
year," said Tietze. "And we're always looking for new members. There's such a turnover of people at NIH."

To listen to the men reminisce about voyages up the Miles and Chester rivers, or down the bay to the mouth of the Choptank River or a leisurely sail on a Flying Scot out to the Thomas Point Light, is to seriously consider membership.

"What's really fun is when we raft-up at the end of the day's cruise, creating a starburst pattern as the sterns of the boats meet—that's living," Cain says. Good food, drinks and socializing further enhance club members' experience.

To sign up for NIHSA membership, or to obtain more information about the club, visit any R&W activity desk. Experienced sailors are welcome to join the club. The spring course for new sailors begins in April; for information contact Marian Linde, 6-8213. —

Rich McManus



"What's really fun is when we raft-up at the end of the day's cruise, creating a starburst pattern as the sterns of the boats meet—that's living," Cain says. Above, sailing association members achieve the desired effect during a recent holiday weekend voyage.

Photo: Linda Brown, NCRR

SIDS Cases Tied to Hazardous Bedding, Say NICHD Grantees

Investigators supported by NICHD have found evidence that rebreathing expired air may have contributed to the death of infants initially diagnosed as having succumbed to sudden infant death syndrome (SIDS). These infants were found prone (face down) on bean bag pillows. Other types of soft bedding also may be hazardous to infants.

Each year in the United States, between 6,000 and 7,000 children die with a diagnosis of SIDS. The exact causes remain unclear, but recent studies from abroad have implicated the prone sleeping position with a greater risk of SIDS. In light of this evidence, the American Academy of Pediatrics issued a statement in the spring of 1992 recommending that parents place their infants on their side or back when putting them down to sleep. And on Jan. 5, 1994, the Consumer Product Safety Commission (CPSC) issued a safety alert advising that parents not place infants to sleep on soft bedding products.

Presently, there is no formal recommendation for infant sleep position, but in this country the most prevalent practice has been to place infants in the prone position. NICHD is supporting research to investigate why the prone sleeping position may make an infant more vulnerable to SIDS.

NICHD Merit awardee Dr. Bradley Thach and Dr. James Kemp at Washington University, St. Louis, have developed an animal model to study how sleeping face down may compromise respiratory function and how it may contribute to SIDS. When the investigators placed a sedated rabbit face down on a bean bag cushion, the expired carbon dioxide accumulated to a fatal level and the animal died a death compatible with asphyxia.

"We see the research in the animal model as very closely linked to what we have observed in actual infants sleeping in the face-down position," said Thach. "We think that this seems to supplement and fit well with the epidemiology that has come from New Zealand and Australia in terms of the efficacy of positioning infants in reducing SIDS."

As a result of these studies, the investigators provided important evidence to the CPSC that rebreathing expired air may have caused suffocation of infants found dead on bean bag pillows. In these cushions, the resistance to airflow is low, and in a relatively closed space the infant could rebreath its expired air. Similar findings have been observed with sheepskins. In New Zealand, where sheepskin is a common bedding, SIDS rates have dropped significantly after a public health campaign was launched advising parents to place infants on their back to sleep.

NICHD, in collaboration with the Centers for Disease Control and Prevention and the Indian Health Service, is supporting two case control studies of medical and environmental risk factors for sudden infant death.—**Anne Blank** □

MUSIC

(Continued from Page 1)

successful, winning a full scholarship to Yale at age 16, it did not occur to him to pursue any career other than music. He studied music in Washington with Thelma Stein, in St. Louis with Harold Zabrack and Edith Farbman, in Santa Barbara with Leon Fleisher, in New York with Leonard Shure, and in Buffalo with Leo Smit and Mischa Schneider. Banner won prizes in a series of local and national piano competitions, and played numerous recitals and chamber concerts, twice soloing with the St. Louis symphony before he was 15.

Born in Washington, D.C., and a graduate of Woodrow Wilson High School, he comes from a musical family: his brother plays violin in the Boston symphony, and relatives on both sides are or were professional classical musicians.

Nevertheless, the life of an aspiring concert pianist was full of unforeseen difficulties: to support himself, Banner took odd jobs, driving a school bus and a taxi in the District, working in a Silver Spring day care center, and as a hospital technician. "The things musicians do to survive," he observes wryly.

In addition, his concerts were usually unpaid, poorly attended, often unreviewed, and cost him money for hall rental, piano tuning, and publicity. Banner, then in his mid-twenties, decided to play one last recital and then quit music altogether and go back to school.

"It just wasn't working out. I went to a career counselor and, after a week of testing, he told me I was ideally suited to be a college freshman," he said, laughing, "and that I had a great sense of adventure."

So he started over, taking courses toward a social work degree at Montgomery College, Takoma Park. Eventually, a childhood love of science reasserted itself, and he transferred to the University of Maryland to major in zoology. "Biology and especially molecular biology captured my imagination."

He had the good fortune, he says, to work in the lab of Dr. Richard Imberski at Maryland, where he got his first taste of laboratory research. "We were studying *Drosophila* imaginal disks and homeotic mutants, which seemed to hold some secret of biological development, as we now know they do."

As a result of this experience, Banner applied to the department of cellular and developmental biology at Harvard University to pursue his Ph.D. "They were a little concerned about my resume before admitting me to Harvard," Banner remembers. "They wanted to know about the 10 years that were academically blank. I told them I was a concert pianist, which turned out to be okay. I guess they were afraid I'd been in jail."

Banner studied the molecular genetics of development in *Bacillus subtilis* for the next 7 years at Harvard, completing his doctorate in 1983.

"When I quit music, I was relieved at first not to be spending most of the day practicing. I gave the piano to my brother and boxed up my scores." However, halfway through his



FDA's Dr. Suzanne Epstein cofounded the NIH Chamber Players with Banner 6 years ago, and now plays in the group with a corps of new members she recruited.

graduate work, his love of music reawakened.

"I became interested in the genetic code as pure pattern, and began translating DNA sequences into musical scores. I also ran into another graduate student who was a fine violinist. I was walking down Divinity Ave. and heard someone whistling Brahms' A major violin sonata behind me. I asked if he was a violinist, and it turned out he was a very good

one. We played together every Sunday for brunch at a restaurant in Cambridge called Jeff's Kitchen for almost 2 years. We developed a following; people would come every Sunday and just hang out for hours. Jeff, the proprietor, was a musician who cooked, served, and played the piano on Friday nights."

Banner's collaboration with Dr. Suzanne Epstein began in 1987, 2 years after he arrived at NIH as a senior staff fellow in the Laboratory of Molecular Genetics, NINCDS. "I discovered that the NIH community has a lot of fine musicians hidden in labs and offices. I met Sue through John Wolff," a violinist who recently retired from DRG.

Together with other NIH musicians they encountered informally, Banner and Epstein began playing concerts in one another's homes, a pleasant tradition that endured for several years. "The home concerts were very popular. I used to brew a batch of homemade beer for the occasion, and Sue brought food. After awhile, they got too popular; we couldn't fit more than 20 people and a piano quartet in my house, and everybody wanted to be invited back. Sue finally arranged for the FAES to sponsor our concerts at the NIH." They eventually teamed up with violinist Morton Raff (retired from NHLBI) to form a trio that became the NIH Chamber Players.

In 1989, Banner joined NIA as program

NIH Has Always Hosted Music, Some of It World-Class

When it comes to hosting world-class music, NIH needn't take a back seat to any venue on the globe. We might as well rename Masur Auditorium Carnegie Hall South, if the ability to attract talent is any criterion.

Though NIH may well have been a mecca for musicians even earlier, 1959 appears to be the watershed year for appearances by classical artists on campus. That was the year the Foundation for Advanced Education in the Sciences (FAES)—NIH's supreme patron of the arts—was established.

Its brief charter, one bold sentence long, ends with a marvelously inclusive clause stating its purpose—"to facilitate communication among scientists by whatever means may be practicable." Somehow, no setting was considered more convivial for the achievement of this goal than the FAES-sponsored appearance by famous music-makers.

A glance into old *NIH Record* files produces a generous collection of citations under the subject headings "concerts" and "chamber music." The initials FAES and R&W appear in many of the citations, which catalog visits by such artists as: Pinchas Zukerman, Jean-Pierre Rampal, Rudolph Serkin, Peter Serkin, Radu Lupu, Charlie Byrd, Carlos Barbosa-Lima, Murray Perahia and Maurizio Pollini, to name a few.

Home-grown music, too, has always had a place on campus. In the early 1960's, Dr. Charles P. Hutterer, who by day was assistant chief of the Grants and Training Branch,

National Heart Institute, was a pianist who led an NIH ensemble. Dr. M. Kenneth Wolf, for a time a research associate at NINDB, and a student of Artur Schnabel, gave concerts. Dr. Enoch Gordis, NIAAA director, is a professional-caliber pianist, and NIH deputy director Dr. Ruth Kirschstein was a serious pianist earlier in her life. The NIH Orchestra, a 45-piece band, played throughout the 1960's. Every summer, for the benefit chiefly of Clinical Center patients, the bands from the four U.S. uniformed services played regularly outdoors at NIH. For years, retired NIH'er John Wolff, whom many still remember, headed an R&W music club.

One of the odder presentations on campus occurred Dec. 12, 1968, when the Chamber Orchestra of German Pediatricians gave a concert of baroque music.

The best-known music is typically sponsored each year by FAES; its annual concert series includes some of the world's most renowned classical musicians, who often sell out Masur Auditorium.

Also, in recent years the Manchester String Quartet has performed regularly for the pleasure of NIH'ers who want to enjoy classical music during the lunch hour.

Many other types of music have found audiences at NIH as well, including barbershop harmony, light opera, hootenanny, and choral, including a show in 1963 by the Singing Boys of Mexico.

Clearly, at NIH, the halls are alive with the sound of music.

director for the etiology of Alzheimer's disease (AD). "This was a very exciting time to get involved with AD research, since very significant strides have been made in understanding the causes and pathogenesis of AD in the last 5 years. I really enjoy getting a bird's eye view of the overall research effort, which is the privilege of a program administrator."

At the same time, Banner found that he missed the day-to-day creative process involved in devising, interpreting, and reporting his own experiments. "Some of that creative energy found its way back into music-making, I guess. I began to want to play at a more professional level, with more rehearsals and more frequent performances."

So in 1992, Banner cast about for other musicians and eventually formed the Rock Creek Chamber Players, of which he is artistic director. Since September 1992, this ensemble has played every month in the Art Barn, an old stone building adjacent to Pierce Mill in Rock Creek Park, under the auspices of the National Park Service. The group also performs in a free monthly concert series for the NIH community in the 14th floor assembly hall of Bldg. 10.

"The NIH series is possible thanks to Dr. George Patrick (chief of the Clinical Center recreation therapy department)," says Banner. Patrick encouraged the group to perform in the assembly hall, but most importantly, he managed to acquire a good piano. "That was the single most important event in our tenure here as musicians," enthuses Banner, who for 2 years had lugged his own electronic piano—an offense to some aficionados of classical music—to Clinical Center performances. "It's a Petroff grand, made in Czechoslovakia, a very fine instrument."

Another major benefit to Banner's group has been an avid NIH listenership. "The NIH audience is unique," he maintains. "It's a wonderful audience. They're sophisticated, cultured, interested, and have a good appetite for the experimental—they'll listen to whatever we do, and they keep coming back every month."

In rehearsal two or three evenings every week, the Rock Creek Chamber Players tackle a diverse repertoire ranging from Bach Brandenburg Concertos to new works by contemporary composers. In November, the group gave the Washington area premiere of a trio for flute, bass clarinet, and piano by Boston composer Martin Boykan (who wrote that he enjoyed a tape of the NIH performance). For its Mar. 13 concert, the group plans to perform music by three women composers—Elisabeth Brown, Grazyna Bacewicz, and Emma Lou Diemer. "It is a great tragedy and loss that women composers have been neglected for so many years," says Banner, whose artist wife Marilyn has been active in supporting local women artists. The original members of the Rock Creek Chamber Players were Banner, violinist/violist Frederick Shoup (who introduces each work with a brief musicological commentary), and flutist Midge Carlton.

Comments Banner, "Midge is a real professional, with tremendous experience in the performance of contemporary music. Fred has been the key to our diverse programming; he knows the chamber literature thoroughly, and has wonderful ideas for programs. He also recruits the players; Fred seems to know every musician in town."

They are often joined in their concerts by Grace Boeringer, violin/viola, Martha MacIntire, oboe, Bill Hendricks and Angela Murakami, clarinet, Ann Franke, cello, and Michael Rohrer, double bass. Many other musicians, mostly local freelance performers, have performed with the group, all on a volunteer basis.

Paradoxically, Banner feels that his art has gained something by his having removed himself from the pressures of professional

The Rock Creek Chamber Players

The Rock Creek Chamber Players are a group of area musicians dedicated to high quality live performance of classical and contemporary chamber works. In the last 2 years, they have performed more than 50 concerts in the Washington area. Frequently performing in unusual and informal settings, the group has entertained audiences in art galleries, theaters, private homes, hospital lobbies, and even on a traffic island in Bethesda. The Rock Creek Chamber Players can be heard monthly at NIH and at the Art Barn Gallery in Rock Creek Park.

music. "When I began to play again, classical music looked different to me. It seemed to me that I had been trained in a dying art, suffocated by hide-bound tradition. I began to try to put the energy, freedom and punch of rock and jazz back into chamber music. I think that's what makes what I do interesting. People pick up on that sometimes."

Banner does not see any difficulty in reconciling his music activities with a career in science. "What the world needs is whole people, not specialists. Most people must perform many roles well in their public and private lives." He says he sees his concert series as a form of service to his community. He feels that music can contribute to making the NIH campus a more civilized place, and that researchers, patients, caregivers, and administrators can all benefit from the cultural nourishment of good chamber music.

"We scientists tend to be cut off from our emotional and spiritual lives because of the emphasis on rational thought that is part of our training. Music and the arts are powerful tools for reintegration of the whole person. Many people, perhaps as a result of technology and specialization, don't really know what it feels like to be moved by live, emotion-laden music, made on the spot by real people."

The Rock Creek Chamber Players' next performance is Sunday, Feb. 27 at 3 p.m. in the 14th floor assembly hall, Bldg. 10, and features works of Haydn, Milhaud, Brahms, and Takoma Park composer Nicholas Maw. □

Young Heads Gordon Conference

Dr. Marian F. Young recently was named vice-chairman of the 1995 Gordon research conference (GRC) on chemistry, physiology, and structure of bones and teeth. She will assume the chairmanship in 1997, the first woman to do so. The GRC on bones and teeth, now a biennial meeting, was first held in 1954. Kimball Union Academy in Meriden, N.H., is the site of the 1997 conference.

For the past 10 years, Young has headed a molecular biology laboratory within the Bone Research Branch (BRB) of the National Institute of Dental Research, where she directs a program to study the regulation of genes expressed by bones and teeth.

She joined NIDR in 1981 as a postdoctoral research fellow in the Laboratory of Developmental Biology and Anomalies. There she began her studies

of recombinant DNA technology, eventually cloning a gene coding for type II collagen, the major collagen in cartilage.

In 1983, she joined BRB and in 1990 was awarded tenure at NIH. Currently, she and her colleagues are working toward developing

transgenic animal models to study inherited defects of bones and teeth. In addition to research, she has devoted her time to training a number of staff fellows in BRB who have subsequently found research positions around the world.

A native of Mahopac, N.Y., Young earned a bachelor's degree in biology from the State University of New York in Oneonta and a doctorate in developmental biology from the University of Connecticut in Storrs.

The Gordon research conferences are small, informal gatherings where scientists can freely exchange ideas without the distractions found at large scientific meetings. Named for Dr. Neil E. Gordon of Johns Hopkins, the GRC began in 1931 as a single conference. It has become some 130 conferences today, attended by 14,000 scientists from around the world. The GRC is a self-supporting, nonprofit organization based in New Hampshire. □



Dr. Marian F. Young

BIG Tutor Meeting Rescheduled

If you are an NIH employee interested in tutoring or in being tutored, an interest session will be held on Feb. 18 in Bldg. 31, Conf. Rm. 9 from 1:30 to 2:30 p.m. The Blacks in Government (BIG) tutoring program's theme is "Helping Others Help Themselves—An Empowerment Strategy." For more information, contact Felicia Shingler, 4-7255, or Joy Pinkney, 4-7235. □

FREE ACCESS TO AIDS DATABASES (Continued from Page 1)

needs. For us, it was a way to keep in touch with our customers, our community of users."

Some 75,000 members comprise that community at the moment; they have signed on to NLM's international online database network, which individuals can join simply by obtaining a user ID and password. With these tools, users can access MEDLARS, NLM's family of online databases that includes the AIDS trio.

The average cost of an AIDSLINE search had been about \$1.25, said Ann White-Olson of NLM. Searches result in downloadable citations and abstracts, not entire journal articles.

White-Olson said users are best served by obtaining \$29 copies of Grateful Med, an NLM software package that lets users formulate their literature searches offline, which is cheaper than being connected to the mainframe. NIH users receive access to Grateful Med and the databases through a special arrangement between NLM, DCRT and the NIH Library.

Last year, some 6 million searches of NLM's databases were conducted, said Robert Mehnert, library information officer. Of that total, some 50,000 accesses were to AIDS-related databases.

"We applaud NLM for today's decision," said Cornelius Baker, director of public policy and education of the National Association of People with AIDS. "It's a good step, a very positive action. Obviously, other barriers still exist to people with AIDS seeking enrollment in trials and getting adequate health care. But this step will encourage patients to understand what's going on with their own bodies. If they can do that, often they can live longer."

Baker also lauded the effect the decision will have on providing both rural and inner-city caregivers with the most up-to-date information on HIV/AIDS treatment.

Declaring that the dental community is the least-served with useful AIDS-related information, Dr. Henry Wray, director of dental services at Washington's Whitman-Walker Clinic, said free access will be a particular boon to dentists. "There's a lot of fear and denial on the part of dentists about their patients' (HIV) status," he said. Access to good information may allay those fears, he suggested, adding, "Dentists are going to like fooling with the computer. We tend to like new gadgets and toys."

Regents chair Rachael Anderson said NLM's board "recognizes that information is a very powerful resource and tool for families, practitioners and others. We appreciate that even a small cost (for searching) can act as an impediment to gathering information. Fees can be a barrier, and people get no further."

"You might call this a case of the government doing something right," observed NLM director Dr. Donald Lindberg. He said the June conference yielded "some very straight

advice on how to improve access to our services."

The AIDSLINE database has more than 90,000 references to AIDS-related journal articles, books, audiovisuals, and conference abstracts. AIDSTRIALS, produced jointly with NIAID and FDA, contains current information about more than 500 clinical trials of drugs and vaccines tested by both NIH and private organizations. AIDS DRUGS contains detailed information about the 190 agents being tested in the clinical trials. DIRLINE (Directory of Information Resources Online) includes information on more than 3,300 national, international and federal organizations that provide services specifically related to AIDS. AIDSLINE started in 1988 and includes materials published since 1980, while the trials and drugs databases began in 1989.

Lindberg said NLM isn't sure whether the volume of online accesses to its AIDS databases

will rise dramatically in response to the fee waiver, but observed that the public, in general, appears to be getting more savvy about satisfying its appetite for information.

"It seems that the American public is perhaps better prepared to utilize (NLM's) information than before. Maybe the information we provide is simply becoming more relevant," he said.

The June conference resulted in a roster of some 60 recommendations now under consideration by NIH. Library officials noted that the fee-waiver decision was accomplished "in record time."

Recent increases in NLM's AIDS funding enabled the library to offer this new service, said Mehnert.

A copy of the report of last June's conference, *Information Services for HIV/AIDS: Recommendations to the NIH*, is available from NLM's Information Office, 6-6308.—Rich McManus □

Birkedal-Hansen Named NIDR Intramural Director

Dr. Henning Birkedal-Hansen, 48, has been appointed director of the Intramural Research Program at the National Institute of Dental Research. Prior to his appointment, he was chairman of the department of oral biology and professor of dentistry at the University of Alabama School of Dentistry at Birmingham. He also was a professor of biochemistry and microbiology at the University of Alabama Medical Center.

"Dr. Birkedal-Hansen will provide dynamic leadership for our Intramural Research Program," said NIDR director Dr. Harald Loe. "His experience as a researcher and administrator will be indispensable as he guides NIDR's intramural program through the rest of this decade and into the 21st century. We are delighted to have him join our institute."

As director of the IRP, Birkedal-Hansen will oversee NIDR research conducted in the institute's own laboratories and clinics on the NIH campus.

He is no stranger to the NIH, having served on several NIH site visit teams during the past 12 years and as a member of the Fogarty International fellowship study section.

An expert in the field of periodontology, he has focused his research on the molecular mechanisms of periodontal tissue destruction. In particular, he has been active in the rapidly evolving field of matrix metalloproteinases—enzymes used by cells to reshape the connective tissues that hold the body together. He was among the first to demonstrate that fibroblasts, the cells that build the supporting tissues of the body, also have the ability to destroy them. He also showed that the destructive enzymes are released from the cells in an inactive form that is later activated outside the cell.

"I am very excited by the opportunity to influence the future development of the intramural program," said Birkedal-Hansen. "The intramural program is an integral part of NIDR's commitment to improving the oral health status of this country. I will do everything in my power to further develop the

program's tradition of scientific excellence."

He received his D.D.S. in 1969 and Dr. Odont. (Ph.D.) from the Royal Dental College of Copenhagen in 1977. Subsequently, he was a general practitioner and held several academic appointments at the Royal Dental College.

He has been with the University of Alabama School of Dentistry since 1979, when he joined the faculty as an associate professor. In addition to his most recent positions as a department chairman and professor, he simultaneously served as director of the school's research center in oral biology and as assistant dean for research and graduate affairs.

Among the many honors and awards he has received are the Basic Research in Periodontal Disease Award from the International Association for Dental Research, the J.J. Pindborg Prize in Oral Biology sponsored by the Munksgaard International Publishers, and the Hede Nielsen Foundation Prize, from the Hede Nielsen Foundation in Denmark.

Birkedal-Hansen belongs to several professional associations, including the American and International Associations for Dental Research, the American Society for Bone and Mineral Research, the American Association for the Advancement of Science, and the New York Academy of Sciences.

He has been a member of the editorial board of the *Journal of Periodontal Research* since 1985 and has served as a reviewer for a number of journals, including the *Journal of Dental Research*, *Biochemistry*, and *Proceedings of the National Academy of Sciences* (U.S.A.). □



Dr. Birkedal-Hansen

NIAID's Chanock Honored by Bristol-Myers Squibb

NIAID's Dr. Robert M. Chanock recently received the third annual Bristol-Myers Squibb Award for Distinguished Achievement in Infectious Disease Research, which consists of a medal and \$50,000. The award recognizes his outstanding contributions to fundamental research on human viral infections and his work on vaccine development.

Since 1968, Chanock has been chief of the Laboratory of Infectious Diseases in NIAID's Division of Intramural Research. In 1956, he was the first to isolate respiratory syncytial virus (RSV) from infants with severe lower respiratory tract disease. This virus was later shown to be the most common cause of serious viral lung disease in infants and young children worldwide. He has devoted 40 years to developing means for control and treatment of RSV.

"We at NIAID are delighted that Dr. Chanock has been selected to receive the 1993 Bristol-Myers Squibb award," says Dr. Anthony S. Fauci, NIAID director. "This well-deserved recognition not only honors his international leadership in the area of RSV research but also pays tribute to the many seminal contributions he has made throughout his illustrious career to our knowledge of other infectious diseases."

In healthy children, RSV may simply cause cold-like symptoms or bronchitis with fever, but for premature infants with immature lungs and children with congenital heart disease, the virus is the most common cause of life-threatening viral pneumonia. In 1992, RSV caused nearly 1 million deaths around the world, including an estimated 4,500 in the United States. Another 90,000 American babies are hospitalized with RSV disease each year.

The significance of Chanock's work is increasing as RSV threatens the growing populations of children and adults with AIDS and other individuals who have weakened immune systems because they have received organ transplants or undergone cancer chemotherapy.

In his NIAID laboratory, he directs research programs that study many different areas of infectious disease, from common flu to the more exotic dengue fever, a tropical disease caused by an insect-borne virus that is widely disseminated throughout tropical and semitropical regions of the world.

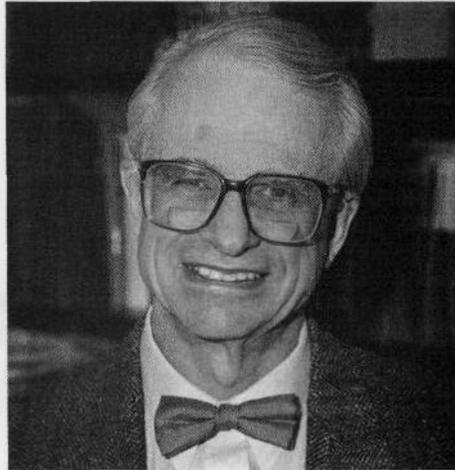
"The research in our laboratory is most often long-term and high-yield but also high-risk in the sense that there is no guarantee of successful results," Chanock said. "However, if we do succeed, there is an enormous payoff in the saving of lives."

"Dr. Chanock's outstanding research has stimulated the entire infectious disease community, just as his leadership and enthusiasm have nurtured several generations of scientific colleagues," says Dr. John I. Gallin, director of NIAID's Division of Intramural Research. "His dedication in

attacking long-term, difficult projects has yielded major advances in infectious diseases."

In addition, he adds, "Dr. Chanock's research illustrates the uniqueness of intramural research at the National Institutes of Health, supporting investigators as they pursue worthy studies that answer some of the most difficult medical problems of our time."

Chanock received his medical degree from



Dr. Robert M. Chanock

the University of Chicago in 1947. After completing a residency in pediatrics, he began his research career in 1950 under the supervision of Dr. Albert Sabin, who later produced the live, oral "sugar cube" polio vaccine at the University of Cincinnati.

After serving as a United States Army captain for 2 years, he returned to the University of Cincinnati as an assistant professor in pediatric research. Later in 1956, he joined Johns Hopkins University School of Hygiene and Public Health and began to focus his research on searching for the cause of common respiratory diseases such as croup, bronchiolitis and pneumonia.

He is internationally known for important findings including:

- Identifying the cause of primary atypical pneumonia, also known as "walking pneumonia." Until his studies on this condition in the early 1960's, most experts believed this common form of pneumonia was caused by a virus. Chanock demonstrated that the disease is caused by a mycoplasma, which he later named *Mycoplasma pneumoniae*. In addition, he was the first to show that the disease can be treated effectively with an antibiotic such as tetracycline.

- Development of a live, attenuated enteric adenovirus vaccine. He was responsible for developing an oral vaccine that was highly effective in preventing a flu-like respiratory disease, caused by an adenovirus, from reaching epidemic proportions among new military recruits who ate, lived and worked in close quarters. The vaccine is now routinely used in the military, where in the past the disease was especially debilitating to boot-camp trainees.

- Discovery of the four human parainfluenza viruses. He first detected these four viruses that together are responsible for almost as much serious respiratory tract disease in infants and young children as RSV. Parainfluenza viruses are now known to be the most common cause of severe infantile croup.

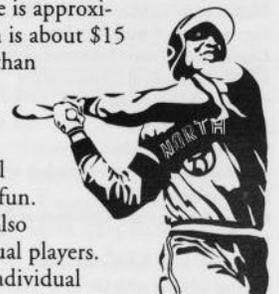
- Discovery of the Norwalk group of viruses. His laboratory was responsible for the discovery and characterization of these viruses, which are the leading causes of acute nonbacterial gastroenteritis. The Norwalk viruses, which typically spread quickly through families, schools, resorts and other group settings, cause severe diarrhea and vomiting. The disease has been recently associated with eating raw shellfish.

Currently, Chanock is working on a treatment for RSV disease using fragments of monoclonal antibodies that can be inhaled into the lungs to attack the virus directly at the infection site. At present, the only therapy for RSV disease uses pooled human gamma globulin, rich in RSV antibodies, administered intravenously over a period of several hours. He believes an aerosol treatment using RSV antibody fragments could prove to be several thousand times more efficient than the standard therapy.

His contributions have been recognized by his election to the National Academy of Sciences and to the Danish Royal Academy of Sciences. He is the recipient of the PHS Meritorious Service Medal and Distinguished Service Medal, the NIH R.E. Dyer Lecture Award, Infectious Diseases Society of America (IDSA) Joseph E. Smadel Medal, the IDSA Squibb Award for Excellence in the Field of Infectious Disease, the E. Mead Johnson Award for research in pediatrics, the Robert Koch Medal of the Robert Koch Foundation (Bonn, Germany) and the ICN International Prize in Virology.—James Hadley □

Softball Team, Players Needed

The NIH R&W Men's Softball League is looking for one additional team for the upcoming season. Teams consist of approximately 15 players. The softball season runs from May until August and includes both the regular season and playoffs. Games are played weekday evenings at a field close to NIH. The entry fee is approximately \$200, which is about \$15 per player and less than \$1 per player per game. Compared to county softball leagues, this is a real bargain for a lot of fun. Current teams are also looking for individual players. Team captains or individual players should contact Frank Nice, 6-1561, or George Roberts, 6-5694, for more details. □





The NIH Life Sciences Education Connection

We promised science education enthusiasts some interesting discussions during the Office of Science Education Policy's (OSEP) new "Science Education Luncheon Connection Series" and, for those who attended the first session on Jan. 25, that's exactly what you got. There is a lot more information sharing being planned for the upcoming months.

This month's program on Tuesday, Feb. 22, will allow OSEP the opportunity to not only discuss exciting things going on in science education, but also provide you with the opportunity to take part in a hands-on demonstration of NIH EdNet, an electronic bulletin board developed by the Office of Education (OE) to foster communication between NIH scientists and precollege students and teachers. OE's Ginnie Trulio will demonstrate how EdNet works and discuss how scientists can play an important role in science education without even entering a classroom. OE staff will also describe two new conferences that will be of particular interest to postdoctoral students. "Employ 1" posts an updated inventory of faculty and industry positions available to postdocs once they leave NIH. "Employ 2" has an updated listing of postdoctoral positions available at other institutions outside NIH.

Note, however, that the Feb. 22 session at noon will be held in Bldg. 10, Rm. 1C726, instead of the 11th floor solarium. All other sessions, including Mar. 29, when Rick Weiss of the *Washington Post* discusses the relationship between science, science education and the media; Apr. 26's session, when the executive director of the National Association of Biology Teachers discusses the relationship between science teachers and other science professionals; and the May 31 discussion on loaning laboratory equipment to schools, will be held at noon in the 11th floor solarium, Bldg. 10, as previously scheduled. For more information call OSEP, 2-2469. □

DCRT Training Classes

Classes	Dates
Forces Organizing Biomolecules (8 sessions)	2/16 - 3/23
Database Technology Seminar	2/18
Memory Management on the PC	2/22
Getting Started with Windows	2/23
Gopher and Mosaic Information Services	2/24
BASIC Biomedical Computation	2/25
COBOL/370 Conversion	2/25
ROC Methodology	2/25
Fundamentals of Unix	2/28 - 3/1
PC Mainframe Communication w/ ProComm	3/2
PC Troubleshooting	3/2-3
Library Information Resources at DCRT	3/3
MATLAB	3/4
Microsoft Mail Administration	3/7
Getting Started with C	3/7-10
NIH Directory and E-mail Forwarding	3/8
Planning and Installing a LAN	3/8
Macintosh Networking with TCP/IP	3/9
Introduction to Networks	3/10

DCRT Offers Record Number of Spring Classes

DCRT's spring term is offering a record number—more than 80—of courses and seminars on a wide range of computer topics.

Classes are offered in seven areas: personal computers, networks, IBM 370, Database, Unix, general seminars, and seminars for scientists.

In the area of general interest seminars, this semester is highlighting the importance of computer security with "Introduction to Computer Security," "RACF for IBM 370 Data Security," "Disaster Recovery," and "Computer Data and the Privacy Act."

Network access to scientific information such as GenBank, Current Contents, and Reference Update is readily available through the GOPHER and MOSAIC information services.

Two seminars will be given: "GOPHER and MOSAIC Information Services" and "Using GOPHER." The former has been scheduled for Lipsett Amphitheater so a large number of students can be accommodated.

The greatest number of new offerings is in the scientific area:

- "Health Survey Data Analysis: Methods and Applications," by Drs. Edward Korn and Barry Graubard, NCI, is a 30-hour course that will provide instruction on univariate and multivariate methods for analyzing categorical and continuous survey data. Students will learn how to use SUDAAN on the PC to analyze real survey datasets.

- "Forces Organizing Biomolecules: A Practical Introduction," by Dr. Adrian Parsegian is an 8-session, 16-hour course.

For both of these classes, the number of students who can be admitted is limited.

Other new advanced scientific seminars being offered by DCRT staff include:

- "Assessing the Rheological Properties of Biological Media," by Dr. Ralph Nossal;
- "Using Image 1.53 for Densitometric Analysis of 1-D Gels," by David Chow;
- "Introductory Topics in Artificial Neural Networks for Computing," by Dr. Joseph Bryngelson;
- "Techniques in Computer Assisted Drug Design," by Dr. Robert Pearlstein.

Almost everyone who uses a computer today could benefit from a class in networking. Ten courses, including "Introduction to Networks," "LAN Concepts," "Planning and Installing a LAN," "Windows NT Advanced Server Administration," "NIH Directory and E-mail Forwarding Service," "Using the Internet," "Network Services," and "Ad-

vanced Network Topics" comprise a program designed to meet the needs of the entire NIH community.

These classes have been very popular and, although additional sessions are scheduled when possible, it is a good idea to call soon to sign up.

Personal computing courses offered by DCRT provide short introductions to their subjects.

For popular courses on personal productivity software such as WordPerfect and Excel, contact the NIH Training Center, 6-6211. (DCRT collaborates with DPM in supporting NIH Training Center courses.)

New DCRT classes this term will include "PC Trouble Shooting," a hands-on class in how to work with diagnostic software, tear

down a system, perform preventive maintenance, and do upgrades.

A new class, "BASIC Biomedical Computation," will show you how to unlock the programming power of your PC, while "Pedigree Drawing Programs for Mac and PC," and "Receiver Operating Characteristic (ROC) Methodology," will appeal to scientific users

with more advanced skills.

Traditional IBM 370 and database courses will be joined this term by "COBOL/370 Conversion," "Client-Server Access to Centrally Managed Data," "FOCUS Query Language," and a new seminar series, "Database Technology."

In addition, new classes are being given in "Central Computing Services at NIH," "Overview of the Administrative Database (ADB) System," "System Modeling for Application Development," and "Library Information Resources at DCRT."

Generous participation by DCRT staff and a growing number of presenters from other NIH institutes continues to make it possible to offer this program to NIH employees without charge to students or their organizations.

Full class descriptions are available in the printed brochure, from the NIH GOPHER on the Convex, and from ENTER TRAINING under WYLBUR on the IBM 370.

For information about classes, to register by telephone, or to obtain a copy of the brochure, contact DCRT's new Technical Assistance and Support Center, Bldg. 12A, Rm. 1017, phone 4-DCRT.



Training Center's Thompson Retires

To the consternation of the colleagues and customers who could always count on her knowing how to help and going the extra mile to do so, Georgette R. Thompson retired from the NIH Training Center, DPM, on Dec. 31, 1993.

She was recruited from the private sector nearly 15 years ago to provide part-time technical support to the office skills program in what was then the Training Assistance Branch, DPM. When, shortly thereafter, her program manager was assigned an additional time-consuming project, Thompson was able to keep the program running with minimal supervision.

In the next reorganization, she was made a full-time employee and promoted to secretary to the chief of the



Georgette Thompson

Development and Training Operations Branch. She managed that office, devoting special attention to the development of junior staff.

Her next promotion, to employee development assistant, brought with it new challenges. Within the Leadership Development Branch from which she retired, Thompson was responsible for technical support to executives and managers who sought assistance with executive programs, management development courses and myriad specialized ICD programs.

Thompson exemplified responsiveness to customers long before "customer service" was in vogue. While she drew great satisfaction in meeting customer needs, she was equally proud of her record of on-time submission of the *NIH Record* "Training Tips" column for the past 15 years.

While she looks forward to traveling with her already-retired husband to see beaches, old friends and new horizons, she is already having some difficulty fitting these trips into a full schedule of exercise, crafts, bridge and new challenges.

As always, however, she will be devoted mother, grandmother, and number one fan to her children and their families in North Dakota and the Washington, D.C., area. □

Beginners' Judo Class Starts

The NIH Judo Club will start its next beginners' class on Tuesday, Feb. 22, at the Malone Judo Center in Bldg. 31. It will run every Tuesday and Thursday evening from 6:15 to 7:30 for 8 weeks. The cost is \$35. Students will be encouraged to continue as regular members when the class is completed. For more information, call Stephanie Harrison, 6-9490. □

Ralph Knutti, Former Heart Institute Director, Dies

Dr. Ralph E. Knutti, former director of the National Heart Institute (NHI), died on Jan. 19 in Pennsylvania of pneumonia. He was 92.

Knutti was born in 1901 in Palo Alto, Calif. He earned an A.B. and B.S. in medicine from West Virginia University and in 1928 an M.D. from Yale University. After a year as assistant in pathology at Vanderbilt University and an internship in surgery at Lakeside Hospital in Cleveland, he held an appointment in pathology and bacteriology at the Rockefeller Institute for Medical Research in New York, staying for 2 years. He then served as assistant professor and associate professor of pathology at the University of Rochester and the University of Southern California, respectively.

He joined the PHS Commissioned Corps in 1951, coming to the National Institute of Arthritis and Metabolic Diseases as chief of its extramural programs. In 1960, he became associate director of the institute.

In 1961, he became director of NHI, now

the National Heart, Lung, and Blood Institute. As director, Knutti sought to develop and support far-reaching intramural and grants research programs in the diseases of the heart and blood vessels. He retired from NHI and the PHS in July 1965.

He then became executive officer of Universities Associated for Research and Education in Pathology, Inc.

Knutti is survived by his wife, Dr. Sarah H. Knutti, of Kennett Square, Pa.; his sister-in-law, Mrs. Frank R. Knutti; a niece, Leslie Knutti Butler; and two grandnieces, both of West Palm Beach, Fla.



Dr. Ralph E. Knutti

NINDS's Donna Carter Mourned; Worked in Budget Office

Donna Hurst Carter, a budget analyst in the NINDS budget office, died on Dec. 24, 1993, in a car accident that also killed her brother-in-law and grandmother and seriously injured her sister.

Carter was born in Honolulu on July 4, 1958. She graduated from Seventy-First High School in Fayetteville, N.C., in 1976. She earned her associate of applied science degree in respiratory care at Houston Community College in 1985 and her bachelor of science degree in health management/technical management at the University of Maryland in 1992. Carter was one of seven people selected from more than 200 applicants to participate in the NIH Management Intern Program in 1992. After graduating from that program in 1993, she joined the NINDS budget office.



Donna Hurst Carter

Carter was well-liked and respected by colleagues and coworkers. "I had the great honor to serve as Donna's mentor during her year's training," said Richard Sherbert, NINDS executive officer. "Donna was one of the brightest persons that I have had the pleasure of working with. She had an extraordinary ability to fully enjoy life and to spread her joy to everyone around her. I have no doubt that she would have had an incredibly successful

career and would have risen high in the ranks of administrative managers at the NIH."

Carter was a member of Blacks in Government. She volunteered to work within the institute on issues regarding NIH support of historically Black colleges and universities and the improvement of working conditions for the minority community.

"Donna touched the lives of so many by setting a standard of unconditional giving," said Carl Lucas, a grants management specialist in the NIAID Grants Management Branch. Lucas participated in the management intern program with Carter. "She contributed whenever a need arose," he continued. "She felt compelled to make a difference by speaking against an injustice, a controversial point, or simply by voicing the concerns of those who couldn't be heard. She encouraged others to seek their dreams, hopes and goals. Donna will be greatly missed by the NIH community."

Carter was a member of the American Association of Respiratory Care, the Great Hope Baptist Church in Richmond, Va., the Alpha Kappa Alpha Sorority, and the Altrusix Club, which gives scholarships to Black youth and supports other community activities. She was a member and founder of the student chapter of the American College of Healthcare Executives at the University of Maryland.

She is survived by her husband, Harvey G. Carter; her mother, Naomi Hurst; and a host of other relatives and friends. A memorial service will be held on Tuesday, Feb. 22 in Bldg. 1, Wilson Hall, from 11 a.m. to noon. A memorial scholarship fund in her name is now being established at the University of Maryland. Those interested in contributing should contact Lydia Kenlaw, 6-9147. □

Qi Gong Questioned

Skeptics Randi, Alcock Investigate Extraordinary Claims

By Chip Denman

On Jan. 21, two of the world's best known skeptical investigators reported on their personal experiences in evaluating unusual medical claims. Speaking at Masur Auditorium, James "The Amazing" Randi and Dr. James Alcock were warmly welcomed by an audience that had braved glacial cold and frozen parking lots.

Alcock, professor of psychology at York University, Toronto, and Randi, a professional conjuror, had traveled to China at the invitation of China's leading scientific newspaper in 1988 specifically to provide perspective on aspects of Qi Gong healing techniques. Alcock described the historical traditions of Qi Gong (pronounced chee-gung), beginning with Lao Tze's Taoist teachings of the 6th century B.C. and culminating with the political strictures of modern China.

According to Alcock, the modern distinction of "soft" (or internal) and "hard" (or external) Qi Gong is relatively recent. Soft Qi Gong, which emphasizes meditation and personal control, has the longer tradition. Hard Qi Gong, based on the idea that a master can project some kind of vital energy to another individual, is in part the reflection of the hard-line materialism of the Maoist Cultural Revolution.

Alcock showed a video taken on his trip in which a Qi Gong master appeared to control the movements of a patient several meters away, much like a conductor controlling an orchestra.

James "The Amazing" Randi asked scientists to do a better job of reaching out to the public with the values, the facts, and the methods of science.



Alcock reported that when the patient was taken out of sight of the master, there was no correspondence between patient's and master's movements; apparently the Qi Gong master was simply following the patient's motions rather than the other way around.

On the same trip, Alcock and Randi also conducted simple trials with children who were said to read with their armpits and buttocks and to break and restore match sticks by mental control of Qi energy. The tests, without exception, did not support these claims. Some of Alcock and Randi's Chinese colleagues cautiously told them about videotape that clearly caught the children cheating. For fear of reprisals, however, the Chinese psychologists could not openly

criticize these Qi prodigies. Alcock said that it was his sense that the Chinese scientists welcomed the western visitors as individuals who could openly express criticism, skepticism, and good science in those months leading up to Tiananmen Square.

Randi continued the report of their investigations into Qi Gong. With the help of Iiro Seppänen, a magician visiting from Finland, a "hard" Qi Gong stunt previously seen at Masur

Dr. James Alcock went to China at the invitation of China's leading scientific newspaper in 1988 specifically to provide perspective on aspects of Qi Gong.



Auditorium last September (see *NIH Record*, Oct. 12, 1993) was duplicated. A few months ago, a large audience at NIH saw Qi Gong Master Wang-Pong Cheng demonstrate his supposed control of Qi energy by shattering stones and by breaking a chopstick with a folded dollar bill. Randi explained that the chopstick stunt is a summer-camp-style trick accomplished simply by the magician quickly sticking out an unnoticed finger to break the stick.

Randi, an internationally known performer and MacArthur "genius" Award winner, touched upon his many personal investigations including "psychic surgery" in the Philippines, homeopathy in France, and recent "innovations" in Russia. Randi further entreated scientists to do a much better job of policing themselves and reaching out to the public with the values, the facts, and the methods of science.

Randi concluded by calling on NIH to focus its efforts to evaluate "alternative" medicine. Rather than spread limited resources thinly across projects holding little promise, Randi suggested that federal money would be best spent to settle once and for all the efficacy—or lack thereof—of certain well-known alternative practices such as homeopathy, acupuncture, and "facilitated communication" (a treatment for children with autism). "One must be careful," he urged, "to not throw the baby out with the bathwater. But when the bath has been carefully examined and no baby found, throw it out!"

The program was organized by National Capital Area Skeptics, a nonprofit organization sponsoring monthly public lectures to promote critical and scientific thinking. □

STEP Committee To Present 'Alternative Medicine' Forum

The Staff Training in Extramural Program (STEP) committee will present a STEP Forum entitled "Alternative Medicine" on Thursday, Mar. 10, from 1 to 3 p.m. in Wilson Hall, Bldg. 1.

Alternative medicine includes a wide variety of approaches to medical conditions. This forum will provide an overview of the field as well as insights into specific studies dealing with acupuncture, "complementary medicine," effects of massage on the development of HIV-exposed babies, and intercessory prayer.

Speaking at the forum will be: Dr. Joseph Jacobs, director of NIH's Office of Alternative Medicine; Dr. James Gordon, Georgetown University; Dr. Frank Scafidi, University of Miami; and Dr. Scott Walker, University of New Mexico.

No advance registration is required. Attendance will be on a first-come, first-served basis. Sign language interpretation will be provided. For more information call 6-1493.

Team Heifer Enlists Farm Aid

Two NIH veterinarians—Dr. Shelley Hoogstraten-Miller of NINDS and Dr. Georgina Miller of NCRR—will run the Boston Marathon for Team Heifer, an informal group of veterinarians who run the race to raise money for Heifer Project International (HPI). HPI is a self-help, community program that gives animals to organized groups of farmers who need assistance. Approximately 75 percent of HPI income goes directly to board-approved projects in the United States and all parts of the world where needs are most critical. Currently there are more than 130 projects in 32 countries and the U.S. NIH'ers may help support Team Heifer by sending contributions to Heifer Project International, Box 767, Goshen, IN 46526 (1-800-422-0474). Make checks payable to "Marathon '94." □

Martial Arts Classes Open

The NIH Taekwondo Club is offering a beginner's class for adults, women and men, starting Mar. 14. The class will meet in the Malone Center (Bldg. 31C, B4 level, next to the NIH Fitness Center) on Mondays and Wednesdays, from 5:45 to 7 p.m., and continue for 2 or 3 months until participants can be integrated into the regular club training.

The NIH Aikido Club is also accepting new members. It meets Tuesdays and Thursdays, 5:45 to 8 p.m., at the Visitor Information Center, Bldg. 10, and Saturdays, 11:30 a.m. to 1 p.m., in the Malone Center.

Basic fees for both clubs are \$80: \$40 dues (3 months), \$20 for club liability insurance (an annual fee), and \$20 for uniform.

Those interested are encouraged to watch regular training sessions of either club. For details call Don Murphy, 6-1736. □