

"Still
The Second
Best Thing
About Payday"

The NIH Record

NHLBI Helps Southeasterners Reduce Stroke Risk

By Louise Williams

Dear Dad, "How are you doing? I'm doing fine...I think you should stop smoking because you could get lung cancer or have heart disease."

That extract is from a letter written by 12-year-old Terence West, a 7th grade student in Nashville. The

letter, which goes on to warn his father of the dangers of second-hand smoke and the ways people fool themselves that "smoking will never hurt them," won top place in a contest sponsored by five Nashville churches to help their members stop smoking and reduce their risk of stroke and heart disease.

Terence read his award-winning letter at a special gathering that showcased the churches' innovative activities against stroke. The gathering also saw excerpts from a new play commissioned by the churches to tell people about risk factors for stroke. On hand for the event, held at Pleasant Green Baptist Church in Nashville, were the participating churches' pastors, Tennessee health department officials, and NHLBI representatives, including NHLBI director Dr. Claude Lenfant and Project Officer Glen Bennett.



Attending the Nashville meeting were (from l): Jackie Harris, health promotion team leader, Pleasant Green Baptist Church; Dr. Forrest Harris, church pastor; Joan Clayton-Davis, program coordinator, Nashville metropolitan health department; Valeria D. Steele, playwright; and NHLBI director Dr. Claude Lenfant.

Scientists Solve 3-D Structure of HIV Enzyme

Scientists at NIDDK have determined the 3-dimensional structure for the catalytic domain of HIV integrase, a key enzyme that is required for the AIDS virus to replicate itself. Their work was reported in the December 23 issue of the journal *Science*.

In order for HIV to reproduce, the virus must insert a DNA copy of its genetic information into the genome of a host human cell. Integrase is the HIV-encoded enzyme that is responsible for splicing HIV DNA into the human genome.

Knowing the 3-D structure of this important enzyme, researchers may be able to design a drug that could inhibit the action of this enzyme and block replication of HIV.

"The structure of the enzyme has until now eluded researchers because integrase clumps together in solution. This behavior has defeated all previous attempts to determine its structure," explains NIDDK scientist Dr. David R. Davies, whose group solved the structure. The breakthrough came when Davies' collaborators, NIDDK scientist Dr. Robert Craigie and coworkers found that the problem could be overcome by changing just a single amino acid in the catalytic domain of

(See 3-D, Page 2)

Researchers Release Map Of Chromosome 22

By Bob Kuska

Researchers have published a detailed, physical map of human chromosome 22. It provides sequence markers over an estimated 70 percent of the chromosome. With this map, scientists have gained a vastly improved roadmap to explore this gene-rich chromosome, which holds important clues into the causes of several cancers and numerous syndromes of embryonic development.

The paper also marks the publication of the third, comprehensive physical map of a human chromosome, a major goal of the international Human Genome Project. Similar chromosome-wide maps have been published for chromosomes Y and 21, and several other physical maps will be published in the near future.

A physical map establishes the connections between two recognized sequences on a chromosome. These sequences, like mileage signs on a highway, tell researchers where they are on the chromosome and how far they need to travel to reach another tagged sequence. The shorter the distance is between tagged sequences, the easier it is for scientists to find their way around the chromosome in search of disease-causing

(See CHROMOSOME 22, Page 4)

Draws Blood, Laughs

Is Richard Gourdine the Funniest Man at NIH?

By Rich McManus

Absent the creation of a randomly controlled, clinical double-blind trial that might prove him wrong, Richard Gourdine, a phlebotomist in the Clinical Center's clinical pathology department, will wear indefinitely the mantle of "Funniest Man at NIH."

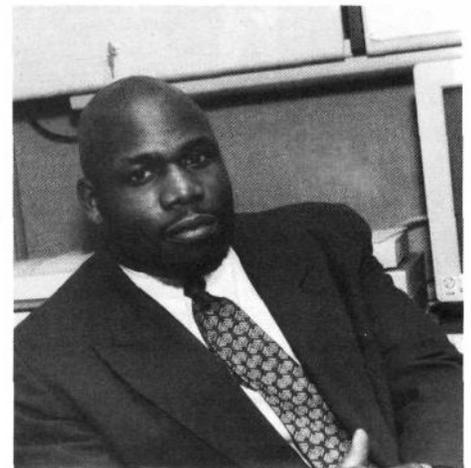
The 4-year NIH veteran earned that distinction recently when, at the urging of colleagues, he participated in the R&W-sponsored "Funniest Man at NIH" competition held at Headliners Comedy Club in the Bethesda Holiday Inn.

Competing against four other NIH'ers who worked up the nerve to do stand-up comedy in front of a crowd of strangers, Gourdine, 28, a Temple Hills, Md., native who had never even gone to a comedy club before, much less performed in one, nervously paced the sidewalk outside the club before going on stage as the evening's last contestant. "I didn't want to see anybody else's routine for fear it would deter me in some way," he explained.

Once onstage, however, Gourdine transformed himself—body and soul—into the Rev. Phillip Feelgood, a roly-poly preacher of unquestioned charisma and force who roamed the tiny stage declaiming, in staccato, impassioned bursts, a decidedly secular sort of healing.

An amiable, somewhat shy and friendly man with a sudden and mischievous smile, Gourdine freely admits he's not the kind who can turn funny in a heartbeat—his humor comes naturally, or not at all. His Rev. Feelgood routine, a *tour de force* of old-time country revival preaching,

(See GOURDINE, Page 8)



Comedian Richard Gourdine

3-D HIV STRUCTURE SOLVED (Continued from Page 1)

integrase.

HIV has three major enzymes: protease, which cuts precursor viral proteins; reverse transcriptase, which copies the RNA of the virus and makes DNA; and integrase. All three are vital to the virus and are appealing targets for drug design, but integrase is a particularly attractive target because "unlike reverse transcriptase and protease, there are no known cellular analogs of integrase," Craigie says. Because the function of integrase is unique, it may be possible for researchers to develop an inhibitor that would block this enzyme's action without inhibiting enzymes that are essential for the host cell.

A number of inhibitors have already been found for both protease and reverse transcriptase, and these are currently being tested in clinical trials. "The problem," says Craigie, "is that the virus rapidly mutates to escape these inhibitors."

Most effective of all, according to Davies, would be a "cocktail" of drugs based on inhibitors for all three of HIV's enzymes. The chance that the virus could simultaneously develop resistance to drugs against three different targets would be extremely low. □

Sauer Gives Director's Talk

The next lecturer in the NIH Director's Seminar Series will be Brian Sauer, who will speak on "Recombinase-Mediated Genome Design," on Friday, Jan. 27 at noon in Wilson Hall, Bldg. 1. □

NINDS's Di Chiro Awarded Distinguished Scientist Medallion

The Institute for Clinical PET, at its 6th annual meeting, recently awarded the Distinguished Scientist Medallion to Dr. Giovanni Di Chiro, chief of NINDS's Neuroimaging Branch. He was recognized for his introduction of positron emission tomography with 18-fluoro-deoxyglucose (PET-FDG) in the assessment of brain tumors. This scanning technique was later expanded for use in diagnosing tumors in nearly every part of the body.

The advent of computed tomography (CT) in 1972 and magnetic resonance imaging (MRI) in the early 1980's has made the diagnosis of many tumors easier and more reliable. However, many questions of critical importance for tumor management remain unanswered. CT and MRI can assist in the detection and localization of most neoplasms but, in many cases, they fail to reveal whether a given lesion is malignant or benign. Also, after some form of treatment (i.e., surgery, radiotherapy or chemotherapy) has been carried out, doctors often remain confronted with a mass at the original lesion site and need to know if that mass represents a viable tumor remnant and/or a recurrence or if it is just scarring or necrotic tissue. CT and MRI are frequently not helpful in determining this. So in 1980, in an attempt to obtain more information about tumor nature and posttreatment status of a given lesion, Di Chiro introduced PET-FDG.

The radioactive tracer used in PET-FDG is an analogue of glucose that is tagged with positron-emitting fluorine. The method is a derivative of the original Louis Sokoloff (NIMH) deoxyglucose autoradiographic technique used to measure local cerebral

glucose. According to the well-known Otto Warburg theory, which has been confirmed by ample experimental data, neoplasms use increasing amounts of glucose with higher



Dr. Giovanni Di Chiro

grades of malignancy. The combination of the Warburg theory and the Sokoloff technique is the basis of the PET-FDG method for studying tumors.

PET-FDG has proven to have excellent tumoral localizing properties. It is the only minimally invasive diagnostic procedure capable of grading the tumor as well as differentiating posttherapy recurrences from scarring or necrosis. The method has been used in many thousands of patients with tumors, in centers all over the world. Hundreds of papers have been published and symposia and seminars are being held dealing with the PET-FDG method as applied to oncological cases. The enthusiasm of the investigators has increased as more experience has been accumulated.

At a recent National Cancer Institute workshop dedicated to PET in oncology, the PET-FDG method was found to have the potential for broad applicability to cancer management. □

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The Asian Pacific Islander American advisory committee (AAAC) recently had its 7th annual holiday luncheon in Wilson Hall, Bldg. 1 during which the committee honored ICD representatives who had retired after 3 or more years of service. Pictured above are (back, from l) Dr. Hao Chia (Harry) Chen, NICHD; Dr. Victor Fung, NIEHS; Dr. Mohandas Bhat, NIDR; Joan Brogan, Asian Program manager, OD/OEO; Kyung Kim, OD/ORS; Dr. Abubakar Shaikh, DRG; Dr. Carl Ohata, NHLBI; (front, from l) Delia Flores-Mahjoob, OD/OEO; Dr. Marcelina Powers, DRG; Dr. Theresa Lo, NIAMS; Erlinda Iñejosa Ortañez, DCRT; and Dr. Rita Liu, AAAC awards subcommittee chair. Not shown are retiring members Sally Lee, NIGMS, and Jennie Owens, NCRR. AAAC advises the OEO director on issues of relevance to Asian and Pacific Islander Americans at NIH.

Study Patients Sought

Key to Premature Ovarian Failure May Be Found

By Robert Bock

An abnormal ovary function in the mysterious disorder known as premature ovarian failure may result from surplus of a key reproductive hormone at a critical time before ovulation, according to a recent finding by a team of NIH researchers; the study appeared in the *Journal of Clinical Endocrinology and Metabolism*, Vol. 79, No. 5, 1994.

One woman in 100 develops premature ovarian failure before the age of 40, said the study's principal investigator, Dr. Lawrence M. Nelson of the section on gynecologic research, NICHD.

Previously, he said, the condition was known as premature menopause. This older term is inaccurate, however, as it implies that the ovaries of women who have the condition have ceased working permanently. In fact, although women with premature ovarian failure do not experience a regular monthly menstrual cycle, in about half of them the ovaries nevertheless continue to work intermittently.

Briefly, the researchers found that women with premature ovarian failure apparently produce too much of a hormone known as luteinizing hormone. The high levels of this hormone appear to prevent normal function of the ovarian follicle—the membranous sac containing the developing egg. Ordinarily, luteinizing hormone causes the follicle to

rupture and release the egg and subsequently transforms the follicle into a yellow ovarian structure known as the corpus luteum.

In women with normal menstrual cycles, Nelson explained, the follicle becomes progressively larger, until it ruptures and releases the mature egg.

He added that the timing of this process requires a careful orchestration of reproductive hormone. The follicle grows in response to rising blood levels of follicle stimulating hormone. The follicle, in turn, produces the hormone estrogen, which causes the lining of the womb to thicken in preparation for the embryo to implant itself. It is at this time that luteinizing hormone normally causes the follicle to mature and rupture in order to release the egg.

In premature ovarian failure, however, due to high levels of luteinizing hormone, this hormonal synchrony fails to take place. For their study, the researchers charted the development of the ovarian follicles in 65 women with premature ovarian failure, using ultrasound. Of these women, 27 were found to have formed a follicle. Although the women did produce estrogen as their follicles developed, they did not produce nearly as much of the hormone as do women with normal menstrual periods.

In six patients with follicles who underwent surgery, the researchers found that the

follicles had matured and turned yellow but had not ruptured to release the egg, apparently in response to the chronic high levels of luteinizing hormone.

Nelson and his coworkers theorize that the abnormal ovarian function in women with premature ovarian failure may result from a lack of surplus ovarian follicles. Researchers have long known that in normally ovulating women, more than 50 ovarian follicles begin to mature each month. However, the surplus follicles die off shortly before the dominant follicle releases the egg.

Nelson suspects that these surplus follicles play a key role by producing additional estrogen and other factors that keep levels of luteinizing hormone low, until the dominant follicle can mature.

To test this theory, he plans to treat women who have premature ovarian failure with a drug that would suppress their production of luteinizing hormone and allow a dominant follicle to grow in a more normal hormonal environment.

Premature ovarian failure patients who would like to participate in the study must be between 18 and 40 years of age and must not have undergone cancer chemotherapy, radiation treatments, or any surgery which might have caused their premature ovarian failure.

Those interested in participating may have their physicians contact Nelson at Bldg. 10, Rm. 10N262; phone 6-4686. □

NCI's International Cancer Information Center Nabs Hammer Award Presented by Vice President

NCI's International Cancer Information Center was recently honored for successfully enacting President Clinton's goal of making a government that works better and costs less. ICIC staff were among federal employees throughout the Washington metropolitan area who were presented with the Vice President's Hammer award by Vice President Al Gore, Jr., himself.

The agency teams were recognized for cutting red tape, streamlining programs, empowering front-line employees, cutting wasteful spending, and improving customer service. Each received a plaque consisting of a locally procured \$6 hammer, some ribbon, and a handwritten note from the vice president as a symbol of the effort. Susan Molloy Hubbard, director of the International Cancer Information Center, and Dr. Samuel Broder, director of NCI, accepted the award on behalf of the ICIC staff, who also received tiny hammer pins in recognition of their achievement.

The International Cancer Information Center received the Hammer award for a number of innovations it enacted to make it easier for health professionals to access the wealth of information on cancer biology, prevention, and treatment available at NCI.

In January 1994, ICIC launched a major effort to unify production and distribution of its information products and services under

one central mechanism—the Information Associates Program—providing easy, one-stop access to NCI's scientific resources for cutting edge information on cancer research, diagnosis, prevention, and treatment.

The Information Associates Program offers customers a wide array of options for accessing this information, which includes the *Journal of the National Cancer Institute*, *Journal of the NCI Monographs*, PDQ—the

comprehensive cancer database, CANCER-LIT citations and abstracts, and an online bulletin board system. The program also has a toll-free customer service line through which trained representatives provide information on the program, answer questions, and provide technical support in using the electronic information services.

For more information on the program, call 6-7600.



Members of NCI's International Cancer Information Center show off their Hammer award, bestowed by Vice President Gore.

CHROMOSOME 22 PHYSICAL MAP RELEASED BY RESEARCHERS

(Continued from Page 1)

gene mutations.

Constructed in overlapping, cloned segments of the chromosome, called YAC contigs, a physical map offers greater resolution than the initial genetic map, which yields general marker order, but much less resolution than the actual sequencing of the chromosome.

The new map, published in January's *Human Molecular Genetics*, is the product of an ongoing collaborative effort between researchers at the Children's Hospital of Philadelphia and the Whitehead Institute, two of the National Center for Human Genome Research's Genome Science and Technology Centers (GESTEC).

"Our map provides information that is of immediate use to anyone who is looking for genes and disease-causing rearrangements on this chromosome," said Dr. Beverly Emanuel, one of the paper's authors who heads the GESTEC and the division of human genetics and molecular biology at Children's Hospital of Philadelphia.

Dr. Eric Lander, director of the Whitehead Institute/MIT Center for Genome Research, added, "All of the long hours spent screening DNA sequences have really paid off nicely in this chromosome map."

Chromosome 22 is the third smallest human chromosome, spanning an estimated 50 million base pairs. It contains genes involved in numerous cancers, including Ewing's sarcoma, Burkitt's lymphoma, meningiomas, acoustic neuromas, and acute lymphoblastic leukemia. Recent reports also have suggested that the chromosome may contain a tumor suppressor gene involved in breast cancer.

The chromosome also is of great research interest because of the many developmental conditions already linked to it. These include cat eye syndrome, DiGeorge syndrome, isolated congenital heart defects, and velocardiofacial syndrome.

To date, more than 100 genes and pseudogenes have been mapped to chromosome 22, but researchers estimate that the chromosome may contain as many as 2,000 genes. "In one 250 kb region, there are at least nine genes closely packed together," said Emanuel.

In December 1993, a group of French investigators published a first generation, or rough draft, physical map of the entire human genome. The most recent published map builds on this baseline effort, providing considerably more mileage signs, or sequence tagged sites (STSs), on chromosome 22. It consists of 15 contigs, with each contig containing between two and 74 STSs.

The map is most densely tagged between chromosome bands 11.2 and 13.1 on the long arm of the chromosome. This area contains genes for cat eye syndrome, DiGeorge syndrome, Ewing's sarcoma, neurofibromatosis 2, isolated congenital heart

defects, velocardiofacial syndrome, and perhaps a form of schizophrenia.

"This physical map will greatly facilitate the study of this gene-rich region of chromosome 22," said Dr. Francis Collins, director of NCHGR, which supported this project. "It should lead to gene discoveries and ultimately to better treatment of human disease."

Although chromosome 22 represents a small piece of the human genome, like Pennsylvania to the entire United States, the researchers found that traversing its complex, molecular terrain was no Sunday stroll through Independence Square.

The group relied heavily on STS-content mapping, a strategy akin to piecing together a jigsaw puzzle made up of hundreds of chromosome 22-specific STSs. Knowing ahead of time the approximate location on the chromosome of most STSs, like knowing the pattern and shape of a given puzzle piece, the researchers tried to order these markers on larger segments of the chromosome. By eventually joining together these larger segments, the researchers can form even longer, overlapping stretches (contigs) of the chromosome that contain numerous STSs.

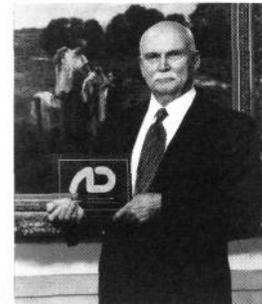
Dr. Callum Bell, the paper's lead author, said that chromosome 22, like other human chromosomes, contains several regions that are unstable when cloned into existing vectors. This instability manifests itself in deletions and permutations that can complicate contig construction.

To streamline this process, Bell and colleagues used simulated annealing, a computer algorithm developed by David Searls of the University of Pennsylvania Medical School. Using Searls' algorithm, the researchers performed various computer runs that showed a series of possible marker orders, each equally valid. This approach helps to minimize "holes" in the map, while also showing the possible ambiguities in assigning marker order. Bell gave high marks to this approach.

Over the coming months, Emanuel said that the group will attempt to fill in the gaps in the map as efficiently as possible, in preparation for the sequencing of the chromosome. □

Art Directors Laud NCRR

Known by the NIH community for its striking visual arts, NCRR's Medical Arts and Photography Branch (MAPB) recently received acknowledgment from its artistic peers when Ronald Winterrowd, chief of MAPB, accepted the 1994 Distinguished Leadership Award on behalf of NIH from the Art Directors Club of Metropolitan Washington. The club recognized NIH for continually meeting the highest standards in the graphic arts.



Ronald Winterrowd

"It's difficult for a government organization to win this award," Winterrowd said, "because of the competition from private industry where senior and proven artists can command greater salaries than government can offer. Government has to rely on recruiting the most promising young artists."

The MAPB staff, along with outside designers and illustrators, provides professional visual communication services and technical assistance to NIH. MAPB's professional artists, photographers, and other specialists design graphic presentations and medical illustrations, produce videos, and photograph subjects and material for displays and slide presentations.

"They have a tough job to graphically present very difficult subject matter such as cancer, heart disease, arthritis, Alzheimer's, depression or AIDS. They recognize the importance of good design," remarked Sharon Mills, chairman of the awards committee, in a speech at the ceremony. She acknowledged MAPB's enormous body of work and previous accomplishments, including awards from the American Institute of Graphic Artists, the Illustrators Club, *Communication Arts*, and *Print* magazines.

Previous recipients of the leadership award include the National Gallery of Art, the American Institute of Architects, the Smithsonian Institution, and the National Geographic Society. □

NHLBI Workshop Explores Stem Cell Processing

The field of stem cell transplantation has seen major advances in recent years. To review those advances and recommend areas for future research, the NHLBI Bone Marrow Transplantation Branch is convening a special 2-day workshop.

The "Stem Cell Processing Workshop" will be held Feb. 16-17 in Lister Hill Auditorium, Bldg. 38A. About 25 experts from the United States and Canada will speak on such topics as: the basic biology of the hematopoietic stem cell; functional assays, phenotypic analysis, and the relationship to transplantation; stem cell sources; the status of clinical transplantation; accessory cells; quality assurance; collection, storage, and preservation, including cryopreservation and the use of cord blood stem cells; methods of graft purging and the detection of minimal residual disease; and stem cell selection and in vitro expansion.

To register or obtain more information, call Holly Dodge, (301) 468-6555, ext. 2060.

Clinical Center Parking Garage To Undergo Renovation

1981 may not seem like so long ago, but 14 years is a lifetime when discussing "state-of-the-art" knowledge and technologies. Fourteen years ago, few could imagine the progress in technology that has enabled the Clinical Center to be at the center of breakthroughs such as gene therapy. And, as with changes in the definition of medical state-of-the-art, there have been changes in all sorts of technology, from computers to cars to parking garages. Yes, parking garages.

When the Clinical Center underground parking was designed and built as part of renovations in 1981, it was considered an interior structure and minimal concrete cover over the steel reinforcement was used, as was common for the time. However, experience and research have shown that concrete is vulnerable to corrosive materials like rainwater, salt, and carbon monoxide that are brought into the garage by cars. Relatively flat floors with few drains has meant pooling of the corrosive moisture, and summertime heat has intensified the corrosion. This has led to a general deterioration of the structure that will be addressed by an overhaul set to begin this month.

The project will not just repair the facility, but will use new techniques to ensure a longer life this time around. This involves removing the top 4 inches of damaged concrete, replacing rusted steel with a more corrosion-resistant epoxy-coated reinforcing steel, and pouring a new layer of concrete engineered to be more durable and impervious. Also included will be a new snow melting system for the steep P1 ramp, a better color-coded paint plan, and more drainage.

The 12-phase project, expected to be completed over 3 years, will affect employees by disrupting vertical sections of parking spaces for approximately 3 months at a time. "The majority of the work will be done on the P1 and P2 levels," explained Jim Wilson, CC building services manager. "Minor work is planned for the P3 level, including using this level to shore up work on the other two."

Employees with red and patient-care permits will continue to be able to park on all levels of the garage, though obviously there will be fewer spaces; the location of those available spaces will shift based on the construction phase. Parking for scientific directors, clinical directors, and people with disabilities will continue to be reserved, but will be relocated several times over the course of the project. The Design and Construction Branch will be placing signs at garage entrances to give adequate warning of the start of the project, and of the changes at each phase.

To minimize disruptions such as noise, the contractors will use a high-pressure water system controlled by robotics to remove the concrete. As an additional safeguard, concrete on the P2 level above the sensitive cyclotron labs will be removed with hand-

held chipping hammers.

"This system was chosen because it will keep noise and vibration inside the building to a minimum," said Athanasia Mantzouranis, project officer for the Division of Engineering Services, ORS. "The system was recently used successfully to renovate parking at the Kennedy Center."

Employees will also see other parking areas affected by this project. The construction staging area will use 27 parking spaces in lot T5 on Convent Drive, and the bus pull-off area, also on Convent, will be out of commission during some phases of the project.

Anticipating the project's impact on campus parking, the Office of Research Services has left open about 350 temporary

NIA's Eichhorn Named Scientist Emeritus

Dr. Gunther L. Eichhorn has been named NIH scientist emeritus after retiring from NIA in May with 38 years of service. NIH gives the honorary title to distinguished, retired research scientists so they may continue their research after retirement with lab space and technical resources.

Eichhorn is best known for his pioneering studies on the biological effects of metal ions on nucleic acids, including the reversible folding and unfolding of nucleic acid helices. He provided explanations of how metals may cause mutations and errors in transcription. These contributions stimulated many groups worldwide to work in these areas.

In recent years, his group investigated the mechanisms by which the DNA code is correctly copied into RNA. Using molecular structural techniques, he developed a scheme in which RNA polymerase could exist in two forms—one to place correct substrates in position for RNA elongation and the other to prevent incorrect substrates from incorporating into the growing RNA chain.

Eichhorn applied nuclear magnetic resonance (NMR) techniques to metabolic aging studies using subjects from the Baltimore Longitudinal Study of Aging, and he set up the In Vivo NMR Unit to further these and other studies.

In 1973, he edited a 2-volume work, *Inorganic Biochemistry*, which has been the "bible" of the field. Since then he coedited a series of widely cited books, *Advances in Inorganic Biochemistry*.

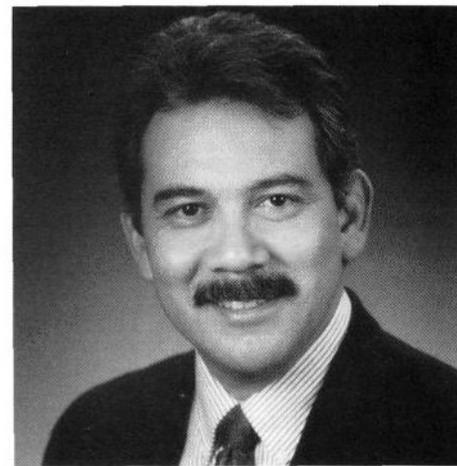
During his distinguished career, Eichhorn received numerous awards such as the Maryland Chemist of the Year Award in 1978 and the Watkins Lectureship Award from Wichita State University in 1983.

Before joining the Gerontology Research Center staff, he was a faculty member at Louisiana State University and then at Georgetown University. As a PHS commissioned officer, Eichhorn worked in the physical chemistry section of the National Institute of Mental Health. In 1958, he was recruited to lead the molecular biology section of the National Heart Institute, Gerontology

parking spaces spread across campus. Despite the loss of between 250 and 400 spaces at each phase of the project, the campus parking ratio will remain at approximately 0.5 spaces per employee. This is the maximum allowable ratio for federal installations in this area.

In addition, NIH leases 150 parking spaces in Garage 57 (downtown Bethesda) and up to 300 cars can park free at Mid-Pike Plaza (Rockville Pike); there is regular shuttle service to campus from these spots. Additionally, there are 300 spaces at the Shady Grove Metro station earmarked for NIH's free use, and employees with renewed interest in the NIH Transhare program (a public transportation subsidy of up to \$42 per month) can contact the Employee Transportation Services Office, 402-RIDE. □

Branch, which later became the Gerontology Research Center, NIA, in 1975. He served as chief of the Laboratory of Cellular and Molecular Biology and the inorganic biochemistry section from 1978 until his retirement. He was NIA acting scientific director in 1988, until the appointment of Dr. George R. Martin in December of that year. □



Dr. Michael Sesma recently joined the staff of NIGMS's Office of Scientific Review as a health scientist administrator. He comes to NIH from the department of psychiatry at Washington University School of Medicine in St. Louis, where he had served as a visiting assistant professor from 1990 to 1994 and as a research instructor since 1994. He also served as an assistant professor of optometry at the University of Missouri-St. Louis School of Optometry from 1985 to 1994. In his new role, Sesma will be responsible for the scientific and administrative review of grants submitted to the institute's Minority Biomedical Research Support Branch. Prior to joining the staff of the University of Missouri, Sesma did postdoctoral research in neuroscience at Vanderbilt University. He earned a B.A. in biology and psychology from the University of California, San Diego, and a Ph.D. in physiological psychology and neuroscience from the University of California, Riverside.

STROKE RISK

(Continued from Page 1)

NHLBI sponsors the activities of the church coalition and many other groups through its "Stroke Belt Initiative," now in its second phase. The initiative, which began in 1990, seeks to increase the awareness and control of high blood pressure and other stroke and heart disease risk factors among people living in an 11-state region in the southeastern United States. The area covers Alabama, Arkansas, Georgia, Indiana (the only non-southeast state), Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

The area is known as the Stroke Belt because it has the nation's highest age-adjusted death rates from stroke—more than 10 percent above the national average. The



Terence West reads his award-winning letter to an assemblage that includes (from l) Joan Clayton-Davis of Nashville; Glen Bennett, NHLBI project officer; and Lenfant.

high stroke rates affect all those living in the region but are worse for Blacks. Their death rates from stroke exceed those for whites—and are higher than those for Blacks living elsewhere in the U.S.

"The Stroke Belt Initiative funds projects through state health departments, helping them extend their health care resources," said Lenfant. "For instance, the initiative helps the states reach populations with limited access to traditional health care services."

The state health departments work with churches and other community groups. The states train volunteers to conduct health education activities in varied settings, teach public health nurses to intervene with smokers, screen populations for high blood pressure, and develop easy-to-read health education materials.

The states also use a variety of awareness-raising activities to increase the public's understanding about stroke and its risk factors. For example, one effort, called "Strike Out Stroke," brought the hypertension message to major- and minor-league baseball and high school football games. Messages appeared on scoreboards at halftime and volunteers took free blood pressure readings.

In the initiative's second phase, the states are doing the following types of projects: church-based risk factor intervention programs; intervention in health department clinics and outreach services; community education and intervention programs; and public education campaigns using mass media.

For instance, in the intervention in health department clinics and outreach services area, one state is using quality assurance audits to improve and extend blood pressure control among underserved populations. An audit team visits clinics in counties with low blood pressure control rates and reviews patient charts for compliance with 27 standards of practice. Counties devise plans to correct the faults and receive followup audits to check their progress. The plan already has seen a drop in the number of deficiencies.

The church-based risk factor intervention programs include an effort to certify lay blood pressure workers and train volunteer coordinators to conduct hypertension screenings and other activities.

The community-education and intervention programs include a youth-mentor project that trains Black teenagers to give presentations on the dangers of smoking to adult and youth organizations, and to lead smoking cessation groups.

The public education/mass media campaigns include a project that trains local health department staff members to work with radio stations with large Black audiences to develop program ideas about high blood pressure control.

The Nashville church effort was part of Tennessee's community education and intervention programs. With projects in Chattanooga, Memphis, and Nashville, the stroke prevention message reaches nearly 70 percent of the state's Black population. Besides the Pleasant Green Baptist Church, the Nashville project includes New Hope Baptist Church, Buena Vista Church of Christ, Corinthian Baptist Church, and First Baptist Church, Capitol Hill.

"The Nashville churches asked what they could do to educate their congregations and came up with their own ideas," explained NHLBI's Bennett.

One idea was the letter-writing campaign, which is more than just a contest, said Jackie Harris, a nurse who is health promotion team leader at Pleasant Green Baptist Church. "The children follow up on their letters by going to the parent or other important adult at intervals through the year to see if the person has quit and, if not, to urge him or her again to do so."

The new play also demonstrates the churches' creativity. The group commissioned the work from Valeria D. Steele, a Tennessee playwright, director, and actress. Her works include a one-woman show, "Four-Part Harmony," which has toured the country, and "Dr. King's Legacy."

The new play "is called 'Choices' and is about risk factors and the need for change," said Harris. "It follows a family living in a place called Choices. The family works through the importance—and discovers the fun—of choosing a healthy lifestyle."

The 50-minute play draws on the talents of area drama students and is designed to be performed during a church service. Eventually, the play will be videotaped, making it available for home viewing.

"These activities show what a community can accomplish when it's motivated," said Lenfant. "They come up with innovative, effective ideas that health educators everywhere can use to raise people's awareness about risk factors." □

Women's Health Seminar Series Focuses on Genetic Testing

The Women's Health Seminar Series continues with a look at "Genetic Testing and Women" at 2 p.m. on Tuesday, Jan. 31 in Lipsett Amphitheater, Bldg. 10.

The program will open with an overview of "The Scope of Genetic Testing: Past, Present, Future." Dr. Neil A. Holtzman, professor of pediatrics at Johns Hopkins, will discuss the many ethical, legal and social issues that have arisen as the number of conditions for which tests are available has increased.

Reproductive genetic testing also raises a number of issues and possible decisions for expectant parents. Dr. Karen H. Rothenberg, Marjorie Cook professor of law and director of the law and health care program at the University of Maryland, will discuss "Genetic Accountability and Women."

Culture also plays a major role in defining a person's beliefs, values and standards. Women, who comprise more than 50 percent of the population, need to be able to voice their opinions and concerns. Therefore it is imperative that they understand both their culture and the medical culture in order to be heard. Dr. Nancy Fisher, director of medical genetic services at the University of Washington, will wrap up the seminar with a look at "U-Genetics, My Genetics, Our Genetics: Culture, Women and Genetic Technology."

The seminar will conclude with a question-and-answer session.

The 4-part series, sponsored by the women's health seminar committee of the Office of Research on Women's Health, includes current research findings by nationally recognized experts. The next seminar will focus on "Autoimmune Diseases in Women" on Mar. 21. Admission is free and open to the public. For more information, call 2-1770. □

New Computer Bulletin Board Helps Researchers Swap Materials

In mid-December, regular computer users at NIH saw something new on the Campus News /Intramural Research News menus on Gopher: the Research Materials Exchange.

Dr. Michael Lenardo, a researcher at NIAID, dreamed up the idea and mentioned it to Dr. Michael Gottesman, NIH deputy director for intramural research. Gottesman jumped at the suggestion and urged Lenardo to start the project immediately.

"It's sort of a cross between the Home Shopping Network, the lonely hearts want-ads, and a neighborly exchange of a cup of sugar or a few eggs," says Gottesman. "NIH needed some quick, informal way for scientists to exchange research materials. As budgets get tighter, we can't afford to throw things away that potentially may be useful to our colleagues, and the computer network seemed like an efficient way for people to get out the word on what they have to offer, or what they need."

Lenardo volunteered to set up and, at least initially, run the electronic bulletin board. "It's a common experience that labs where people know each other share things," he says. "We just wanted to extend that to the entire campus village."

Since the Research Materials Exchange began, Lenardo has posted about 30 items—sought or offered—on the bulletin board.

"Some of these items are quite valuable," he points out. Earlier this month, for example, offerings included a Beckman LS2800 scintillation counter and an LKB 1275 Minigamma counter. "Both with peripheral equipment and both in very good condition," wrote the offering "advertiser," R. Theodore Fletcher of NEI. Fletcher thought the exchange was just the ticket for helping him place the surplus equipment in a good home.

"When OSHA came through inspecting the corridors," he says, "we found we just didn't have enough room for everything. This equipment wasn't being used very much—it was mostly for backup. We had to get rid of it." Fletcher also put in a request to have the items surplussed, but was hoping the bulletin board would yield a taker before the items were to be hauled out to Gaithersburg, where NIH now houses surplus items.

Lenardo is responsible for posting the want-ads—complete with telephone numbers or addresses of researchers offering or seeking items—but insists that bulletin board users take it from there. This allows potential users to find out—or specify—critical details about particular items they may be urgently seeking.

Thomas Ried and Evelin Schrock of NCHGR, for example, were at the end of their rope at the end of the year. "Do you have an optical disk drive, such as a LasersafePlus 1.3 G-byte drive that we could

borrow for 1 to 2 weeks? Our order has been held up in procurement for more than 2 months and we can't do our work without it," they wrote on the exchange on Dec. 30. Schrock reports that procurement came through before any responses came in to the ad, but she still thinks the bulletin board is a good idea and wouldn't hesitate to use it again.

Lenardo and Gottesman initially envisioned the bulletin board as a place to exchange more perishable, less durable items such as reagents or unused portions of test kits. But campus-wide corridor clean-outs and the relocation of the surplus equipment warehouse have made the bulletin board even more useful. "I think it's great that the DDIR's office responded so quickly to a new idea and got this off the ground," Lenardo says. "This could help break down the barriers between people in different buildings and institutes in a very practical way—there may be an intellectual payoff as well."

The Research Materials Exchange bulletin board can be accessed through Gopher's Campus Information menu. From that menu, users select Intramural Research News, and then the exchange. Researchers seeking items or wishing to post the availability of items should e-mail their ad to Lenardo: Lenardo@nih.gov.—Celia Hooper □

Clinical Center Nurses Complete Neuroscience Internship

Eight nurses have graduated from the 1993-1994 neuroscience nurse internship program sponsored by the Clinical Center's critical care/heart, lung, and blood/neuroscience nursing service in cooperation with NINDS.

The 9-month program offers extensive, specialized preparation for registered nurses who work with patients with neurologic diseases.

"The program represents a collaborative commitment to high-quality patient care between the institute and the CC nursing department," explained Gladys Campbell, chief of the critical care/heart lung, and blood/neuroscience nursing service.

"It focuses on all aspects of clinical care for neurology patients and their families," she said. "These patients require a high level of caring and commitment at the bedside and beyond." The interns work with patients who have had strokes, those with Alzheimer's disease and Parkinson's disease, and those with various neurologic diseases, for example.

"There is a heavy physiologic component to the internship," Campbell added. "It is a grueling program that includes both didactic and clinical aspects."

All the education is put to the test at the patient's bedside under the supervision of an experienced preceptor. "The preceptors are an integral part of the internship team," Campbell said. "It's a full-time commitment for them as well."

Preceptors for this class were Cindy Hahn,

Tia Frazier, Joan Kyhos, Joanne Maroney, Priscilla Buck, and Kathleen Fitzgerald, 5 West; and Kristen McCabe, Joe Fantom, and Lisa Barnhart, 5 East.

Neurology unit head nurses select the interns each year and oversee day-to-day integration of the interns into the program's clinical component. Interns work with head nurse Jody Becker on 5 West and head nurse Barbara Bowens on 5 East. "The interns also rotate through the 5th floor day hospital and the 7th floor outpatient clinic. Head nurse for those areas is Elaine Harrison.

Beth Price, clinical nurse educator for the service, provides overall program oversight and coordination.

"Through the internship, physicians who specialize in neurology are brought together with program nurses new to the neuroscience arena," Campbell said. "They contribute to building excellence in clinical nursing care

as well as seeing what nurses can contribute in such areas as protocol planning. This enhances respect among all the health-care professionals, and the patients receive the ultimate benefits."

This is the seventh class to complete the internship. It has proven to be a good recruitment tool for the CC nursing department. Three-quarters of the total 35 graduates still work at NIH, Price pointed out.



Recent graduates of the neuroscience nurse internship program sponsored by the Clinical Center's critical care/heart, lung, and blood/neuroscience nursing service in cooperation with NINDS are (seated from l) Joan M. Eaton, Jill D. Kaiser, and Stanley Brian Jones. At rear are (from l) Suzanne Burdsall, Diane Schretzman, Beth Price, Kimberly Mock, Jennifer Brown, and Angela D. Trahanis. Price, a clinical nurse educator, coordinates the program.

GOURDINE, THE COMEDIAN, DUBBED 'NIH'S FUNNIEST MAN'

(Continued from Page 1)

albeit with a blue edge (he calls it, euphemistically, "high-intensity type jokes"), came at the cost of painstaking personal research and dogged practice.

Five years ago, at a church service he calls a "healing hands revival," Gourdine got the idea for a comedy sketch. "The pastor was healing people who had moderate ailments like asthma, or a back injury. One lady had paralysis on one side of her face due to a stroke. The pastor would touch 'em and heal 'em, touch 'em and heal 'em, touch 'em and heal 'em. I got to thinking, would she touch 'em and heal 'em if they had [a gastrointestinal illness]?"

The episode in church blossomed into the prize-winning 7-minute routine Gourdine performed at the Holiday Inn. Developed with the help of coworker Dennis Crawford of the Occupational Medical Service, who, like Gourdine, is both an Army veteran and an erstwhile stand-up comic, the material went through many revisions.

"I memorized the routine with Dennis," Gourdine remembers. "We went over it and

me to give it a try. My coworkers gave me a feeling to compete. As a matter of fact, if it had not been for them, I wouldn't have entered at all. I really want to thank them for helping me compete, and come forward to be funny."

Though he doesn't go to comedy clubs, Gourdine isn't exactly untutored in the art of improvisational comedy. "I don't fashion myself after any comedian," he says, "but I'm often told that I remind people of Martin Lawrence."

Lawrence, a native of Landover, Md., is star of his own TV show, *Martin*, and has appeared in films and on record/CD. "He's acting," observes Gourdine of the difference between Lawrence and himself, "but I'm acting out my life."

Gourdine had a chance to meet Lawrence in California recently, but demurred. Still, he kept an autographed photo of Lawrence in his pocket when he performed at the Holiday Inn.

Attempting to locate himself within the pantheon of Black comics, Gourdine says, "I

"It's a stress reliever. It helps me cope with things. It turns problems into a positive rather than a negative."

over it and over it. I tried different ways of telling jokes and picked the ways that would specifically be the funniest." Crawford would videotape the practice performances and later, he and Gourdine would critique them to see how he could improve his delivery and even move better to get the humor across.

Pacing the sidewalk outside the club before his performance, Gourdine "thought of new things to say that were funnier than what I had originally planned. I never work out of a set script, except for [this] gig, where I wanted to be funny enough to win."

He also did one other thing before hitting the stage: "I prayed. Prayer helped me to walk forward on that stage."

As it turns out, touching and healing people happens to be a skill at which Gourdine himself excels at his day job in Bldg. 10.

"There's a lot of stress involved in patient care," he says. "It makes our day go much faster, easier and simpler if I can just get a smile out of our patients, and each other."

"When I come in [to work] I'm funny, and when I leave out I'm funny," he says, shrugging. "It makes the working atmosphere that much more pleasant to be in. I'm just really natural as far as what I say."

Fearful that his easygoing fun-poking might not translate into a formal performance, Gourdine didn't exactly leap at the chance to commit comedy in public.

"A coworker of mine, Alvin Skelton, told me about the [Holiday Inn] competition. He thought it would be a great idea, and urged

do a Richard Pryor-type of comedy, a down-home style. I try to take a piece of everybody. The real funny ones, you can't help but imitate them," he continues, adding Eddie Murphy as an influence.

Conceding that he never had a reputation as a wit at Potomac High School, or in the Army, where he did a 3-year hitch in El Paso, Tex., where he learned phlebotomy, Gourdine nevertheless says, "I've been funny all my life. It's just a perspective I have on the world. A lot of my material is just from everyday, what happens to me everyday."

Though he has never considered comedy as a career option, Gourdine finds it indispensable in his life. "It's a stress reliever. It helps me cope with things. It turns problems into a positive rather than a negative."

"From the first year I was [at the CC], my coworkers have tried to get me to be a comic. I'm just happy when my patients leave out smiling about something. That's what's worthwhile to me."

Gourdine's comedy routine, more a triumph of comic acting than a series of topical jokes, won him weekend accommodations and dinner at the Holiday Inn, as well as a chance to emcee a future evening at Headliners Comedy Club. R&W General Manager Randy Schools, who says he thoroughly enjoyed the NIH night at the club, plans future "Funniest NIH'er" nights at Headliners early this spring. Just don't plan to take the stage the night the Rev. Feelgood comes to preach. □

NIDR's Baum Honored

Dr. Bruce Baum, chief of NIDR's Clinical Investigations and Patient Care Branch, was recently chosen as first recipient of the J. Murray Gavel Clinical Research Lectureship.

The Forsyth Dental Center's board of trustees established the lecture to honor Dr. Gavel, a former trustee who had a long career as a clinician and an academician. The goal of the lectureship is to focus attention on the transfer of research findings from the laboratory to the dental clinic. Baum, who is NIDR's clinical director, presented the Gavel lecture recently at Forsyth in Boston.

In his talk, titled "From the Bench to the Clinic on a Salivary Gland," Baum discussed the management of salivary disorders, aging and oral health, and the educational needs required to meet future challenges of oral health care.



His research has *Dr. Bruce Baum*

focused on oral health in the elderly and the hypofunction of salivary glands. In a recent series of experiments, he and his colleagues successfully introduced human and bacterial genes into the salivary glands of rats. Future applications of this gene transfer technology include in vivo repair of human salivary glands that are diseased or damaged, and the production of biopharmaceuticals by healthy salivary glands to treat a variety of disorders in the mouth and upper gastrointestinal tract.

After receiving a B.A. from the University of Virginia, Baum returned to his native Massachusetts and earned a D.M.D. from Tufts University School of Dental Medicine and a Ph.D. from Boston University.

Among his many honors are the Samuel Charles Miller Award & Lecture from the American Academy of Oral Medicine; the Salivary Research Award from the International Association for Dental Research; and the Carl A. Schlack Award from the Association of Military Surgeons of the U.S.

Dedicating the lectureship was Dr. Harald Loe, NIDR's director from 1983 until his retirement this past summer. □

Discounted 'Beauty & the Beast' Tickets Available Through R&W

Disney on Ice is presenting *Beauty and the Beast* at the USAir Arena on Feb. 11 at noon. Ticket price for R&W members is \$15.50 each (regular price is \$16.50). Tickets are available at all R&W locations. Call 6-4600 for more information. □



Communicators Lauded by NAGC

The National Association of Government Communicators recently announced the 1994 winners of its annual Blue Pencil-Gold Screen awards. The Blue Pencil awards are given for editorial excellence and the Gold Screen awards honor quality films and videos, and radio.

NIH'ers were recognized with nine Blue Pencil awards in nine categories, and with three Gold Screens in three categories.

The Blue Pencil winners and their categories are:

Public Service Announcement/Ad Slick—Third Place, NHLBI, for "Breathe Easier."

Brochures and Booklets for a General Audience, One to Three Colors—Honorable Mention, NINDS, for "Cerebral Palsy: Hope Through Research."

Brochures and Booklets for a General Audience, Four Colors—Second Place, NEI, for "VISION-Brochure."

Publication for a General Audience, One to Three Colors—Third Place, NIA, for "In Search of the Secrets of Aging."

Publication for a Technical Audience, Four Colors—Third Place, NHLBI, for "Curing Disease Through Human Gene Therapy."

News Releases—First Place, NIA, for "Survey Sketches New Portrait of Aging America."

Visual Design (Visual Communication via Displays, Bulletin Boards)—Third Place, NIDCD, for "NIDCD Hallway Display and Publications Rack."

Visual Design (Visual Communication via Posters, Flyers, Maps, Logos, Folders, Etc.)—Honorable Mention, NEI, for "VISION-Poster."

Promotional Campaigns/Recognition Programs—Second Place, NEI, for "VISION-Exhibit Promotional Kit."

Gold Screen award winners and categories were:

External Communications—Winner, NCRR, for "NCRR: A Catalyst For Change."

Public Service Announcement—Honorable Mention, NIA, for "Pants."

Daily Radio Show—Honorable Mention, NHLBI, for "Healthbeat."

The honorees received their awards at a banquet last month in Alexandria, Va. □

Comparison Subjects Needed

Neuroimaging research project requires female subjects, ages 18-45. Limited radiation exposure as part of single photon emission computed tomography (SPECT) procedures is involved. Study includes screening evaluation, SPECT scan, and MRI scan. Intravenous access needed, no arterial line necessary. Opportunities exist for participation in other studies. Payment provided for participation. Located on the campus of St. Elizabeths Hospital in Washington, D.C.; ample parking is available. Accessible by Metro. If interested, call Dr. Eric Watsky, the Neuroscience Center at St. Elizabeths, (202) 373-6112. □

SADBUS No More

Lindsey Retires After 35 Years of Federal Service

If, after 35 years of federal service—more than 30 at NIH—and having worked since age 11, a person is entitled to mixed emotions when facing retirement, then Nat Lindsey, the small and disadvantaged business utilization specialist (SADBUS) for research and development programs at NIH's Division of Contracts and Grants, qualified recently. He retired on Dec. 30.

"I'm looking forward to the leisure time of retirement," he said, "but I'll miss the camaraderie and the friends I've made over the years."

Since 1964, when Lindsey began at NIH as a nursing assistant with the arthritis institute, his career has crossed from bedside to laboratory to office. In addition to his clinical work, he has moved from positions as a laboratory aide and lab technician in the Laboratory of Biochemical Pharmacology, to his most recent SADBUS post, which he started in 1980. In between, he was one of NIH's first STRIDE interns in the program's 1972 inaugural class. He took courses in psychology at American University while working in the Employee Health Service's troubled employee and alcohol and drug rehabilitation programs at NIH.

After graduating STRIDE in 1974, Lindsey took his first desk job in DCG.

"NIH is a changing place," he observed, reflecting on his career. "I particularly enjoyed the early years, when I worked with patients. NIH used to have more of a college-like atmosphere. You could walk around campus and see nothing but green grass and trees. Now, you see a lot more cars and parking lots. You also don't get the sense of closeness with the patients and researchers that you used to get."

As good as the old days seem to Lindsey, some positive changes have occurred over time at NIH: for one, the Bethesda area is now inhabited enough to warrant regular Metro bus and rail schedules. Lindsey remembers when the only public transportation servicing the NIH community ceased after rush hours. That put he and other shift workers who were without their own cars in somewhat of a bind. Residing in southeast Washington at the time, he used to have to thumb a ride or hike from campus to Friendship Heights in order to catch the nearest bus to his home, after working the 4 p.m. to midnight shift. Lindsey bought his first car—a Ford Pinto—in 1972. "I drove that car until it nearly fell apart," he recalled, smiling.



Nat Lindsey

Although he says adjusting to retired life will be difficult at first, Lindsey thinks he'll eventually get used to it. Already, plans for hard manual labor—refurbishing a Georgia farmhouse he and his wife bought some years ago, but have never gotten around to attending to, and a family business venture with one of his 8 siblings—are intruding on what should be a peaceful, laid-back retiree's conscience. In addition, he plans to look into volunteering for a Meals-on-Wheels program, traveling with his wife (she retired at the same time), and a possible consultant position.

"I really do intend to take in some museums, to go to the National Zoo and see the plays I've never gotten around to," he said, somewhat convincingly, "but I also know I've got this workaholic inside me that won't let me really enjoy myself."—Carla Garnett □

Parking Group Seeks Members

Last year the Office of Research Services recruited NIH employees to sit on the NIH parking and transportation working group. The group's mission is to address parking and transportation issues systematically, and to generate and evaluate ideas and approaches to transportation management and policy. Current membership includes a cross-section of employees: representatives from many different ICDs who work both on and off campus, drive to work and take public transportation, etc. It is hoped that maintaining such a diversity of employees will foster creative debate and solutions. Typical topics of discussion include enforcement of traffic and parking regulations, reliability of the shuttle service, feasibility of establishing an "emergency ride home" program, strategies for reducing single-occupancy vehicle trips to campus, and enhancements to the Transhare program.

In order to expand its role and to allow for more in-depth analysis of issues, the group is looking to expand its membership (as well as replace some members who can no longer participate). If you are interested in participating in this group, provide the following information to Heidi Munger by mail (13/2W48) or fax (2-0017) by Tuesday, Jan. 31: name, ICD, job title, primary mode of transportation to work, work address and phone, and a few sentences on why you are interested in serving on this group. □

Normal Volunteers Needed

Normal volunteers are needed for a sleep/MRI study. Participation involves sleeping at the NIH campus for two nights in the winter and two nights in the summer. It may also involve two MRI scans. Volunteers will be reimbursed. Call NIMH's Clinical Psychobiology Branch, 6-0500. □

The NIH Life Sciences Education Connection



Is oat bran good or bad? Does finding a gene mean finding a cure? Helping the public to better understand health and science issues like these was the focus of a recent PHS forum titled, "Strategies to Increase Public Understanding of Health and Science."

The forum, held at the Bethesda Ramada Inn, was the second in a three-part series for PHS staff in science education, health education, and public affairs.

Dr. Bruce Fuchs, senior science advisor for science education in NIH's Office of Science Education Policy, opened the forum with an overview of the state of public understanding of science, including a discussion of how people acquire information about science. His address was titled, "Science Education from Tabloid to Text Book."

Dr. Francis Collins, director of the National Center for Human Genome Research, gave the morning keynote address: "Genetics: Future Revelations and Their Meaning for the General Public."

A panel of participants led a discussion, "How Do We Help the Public Understand 'Interim,' Inconsistent, or Ambiguous Scientific Information?" Participants included Marty Davis, deputy assistant secretary for health (communications), HHS; John Schwartz, science writer, *Washington Post*; Dr. Michael Eriksen, director, Office on Smoking and Health, CDC; and Fuchs.

After conference participants attended a networking lunch and small group strategy sessions, Yolanda George, deputy director, directorate for education and human resources at the American Association for the Advancement of Science, gave the afternoon keynote address, "Strategies to Increase Science Literacy in Minority Populations."

Individuals interested in receiving additional information on this forum and other upcoming events may contact OSEP, 2-2469.

'Spirit' Tickets Available

Indoor soccer is back at the Baltimore Arena. R&W has tickets to two games—Sunday, Feb. 25, Baltimore Spirit vs. the reigning NPSL champs of Cleveland, and Sunday, Mar. 19, when the Spirit will play St. Louis. Both games begin at 6:05 p.m. Tickets are \$11, regularly \$13. Call 6-4600 for more information. □



NIDDK's Edward Steers Retires After 31 Years

After 31 years with NIDDK, Dr. Edward Steers, Jr., is switching hats—from researcher and deputy director of the Division of Intramural Research (DIR) to fulltime historian and author.

He came to NIH in 1963 as a staff fellow in NIDDK's Laboratory of Chemical Biology after receiving his Ph.D. in biology from the University of Pennsylvania. His early research focused on isolating and characterizing various forms of the enzyme B-galactosidase from *Escherichia coli*, in collaboration with Dr. Christian B. Anfinsen, the 1972 Nobel Prize winner in chemistry. Their work led to the purification and subsequent characterization of several forms of beta galactosidase.

In his first decade at NIH, Steers also helped identify and characterize the variable surface antigen system in paramecia and collaborated with Dr. V.T. Marchesi of NIDDK in the discovery and characterization of spectrin, a major structural protein associated with the red blood cell membrane.

"I found research creative and tremendously satisfying," Steers says. After he was promoted to deputy director of DIR in 1986, he missed working in the lab, but "the compensation was that the new job allowed me to get into everyone's lab," he said.

The new job also presented one of the major challenges of his career. "Gramm-Rudman had just gone through, and it forced us to reorganize the administration to handle the new demands on a drastically cut operating budget."

Although some would be content to juggle personnel, space and contracts with less money, Steers also saw himself as an ombudsman and a facilitator. "Regulations stifle creative science. I tried to serve as a liaison between the scientists and the administration and buffer them from the maze of government regulations," he said.

Dr. Gary Felsenfeld, physical chemistry section chief in NIDDK's Laboratory of Molecular Biology, says Steers was very successful. "He should be remembered both as an administrator and a scientist. I still hear his name mentioned at conferences. He never forgot that, whatever he had to do to meet regulations, the most important thing was to create science. Without first class science, it didn't matter how many regulations were followed," said Felsenfeld.

Steers and his wife have built a retirement retreat in the woods near Berkeley Springs, W.Va., where he says he's going to have to "learn how to relax." As a Civil War buff, amateur historian, and Lincoln student, he has 12 months of reading and writing planned. He currently has several manuscripts in the works, including a monograph on the 156th New York Volunteer Infantry. A prolific writer and researcher on the Civil War era, Steers has published two booklets, *The Escape and Capture of John Wilkes Booth*,

and *Everlasting in the Hearts of His Countrymen: A Guide to the Memorials to Abraham Lincoln in the District of Columbia*. He also wrote a monograph, *Lincoln: A Pictorial History*.

An avid explorer of Civil War sites, Steers sometimes finds artifacts such as dogtags or other personal items that reveal the human stories behind the national drama. "Learning about the soldier who fought in the battles makes the era and its history come alive.



Dr. Edward Steers, Jr.

There's an enormous rush when you get a signal from a metal detector and know something is there. It's been 125 years since it's been touched, and there is an instant connection between the soldier who dropped it and you."

Seeking to re-experience the emotions and sensations of the young men who fought the war, Steers has slept in the old trenches in Spotsylvania and Cedar Creek. "At midnight, there's no difference between 1864 and 1994—the insects sound the same, the stars are the same, and the wind and air are the same," he says.

"He's a Renaissance man who knows the details of small things," Earl Laurence, acting deputy director of NIDDK, says of the scientist-historian who was his former colleague. "The scientists I speak to are usually very interesting when they're talking about crystallography or endocrinology, but very few scientists can move to a different field, such as Lincoln's assassination, and be so informed. It's fascinating."

As to the work he is leaving behind, Steers says, "I consider myself lucky. Science is one of the few remaining creative arts where you can still earn a decent living. I've gotten paid for 30 years for doing what I'd want to do anyway. Not many people have such opportunities." □

Financial Planning Courses Open

The Financial Strategies for Successful Retirement course is being sponsored at NIH by the R&W. The course is a 10-hour, four session generic educational seminar that is designed to help prepare financially for life after work. Absolutely no obligations or commitments are expected of attendees, who will learn to generate a steady income, protect assets from erosion, minimize taxes, and maximize returns. The course is scheduled for Saturday mornings (10-12:30 p.m.) in February and will be repeated in March. Tuition is \$69 for students and spouses. Half of the tuition will be donated to NIH charities. Call (703) 560-0573 to register. □

NCRR's Chadwick Honored

Dr. Richard S. Chadwick, head of the biomechanics group in NCRR's Biomedical Engineering and Instrumentation Program (BEIP), has been elected a fellow of the American Institute of Medical and Biological Engineering (AIMBE). This honor recognizes his pioneering work in the application of engineering mechanics principles to research in biology and medicine, especially to the cardiovascular system and hearing, as well as his efforts to improve communication between the biomedical and engineering communities.

Since coming to NIH in 1980, Chadwick has developed a series of mathematical models showing the relationship between the heart's structure and its function. These models view the heart as a complex structure of cardiac muscle cells embedded in a collagen matrix, rather than as a uniform mass, and allow scientists to better understand how the heart contracts and how blood flows in the heart's microcirculation. His most recent heart model can predict how muscle cells will reorient when exposed to abnormal fluid loads of congenital heart disease.

In collaboration with Dr. Kuni Iwasa at NIDCD, Chadwick has applied mechanical principles to uncover how cochlear outer hair cells control sound waves and improve tuning in the ear. These cells change their length in response to changes in transmembrane potential induced by sound waves. By measuring the hair cells' mechanical stiffness and inferring the active force, these scientists discovered that the outer hair cells are strong enough to actively control the ear's ability to differentiate frequencies. Chadwick also organizes NCRR-supported national and international workshops and symposia to alert members of the biomedical community to the many contributions that engineers and physical scientists make to biomedical discovery. "There needs to be an increased awareness of the value of using physical science methods in biomedical research," he said.

Chadwick will be officially inducted at AIMBE's March 1995 annual meeting, to be held at the National Academy of Sciences in Washington, D.C. AIMBE was established in 1992. Its principal purpose is to establish a clear and comprehensive identity for this burgeoning field, by recognizing superior contributions to biology and medicine by engineers and applied physical scientists. □

R&W Sponsors Photo Sessions

The R&W will sponsor several family photo sessions in the Medical Board Rm., Bldg. 10. The dates and times are as follows: Friday, Feb. 17, 4-8 p.m.; Saturday, Feb. 18, 10 a.m.-6 p.m.; and Sunday, Feb. 19, 10 a.m.-6 p.m. Finished portraits will be ready in approximately 2-3 weeks. Sign-up by Feb. 10. Call the activities desk, 6-4600, for reservations or more information. □

McLachlan Leaves NIEHS for Tulane Post

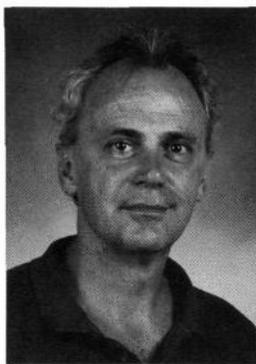
By Thomas Hawkins

After a 21-year NIEHS career during which he progressed from research associate to scientific director, Dr. John A. McLachlan has accepted directorship of the Tulane-Xavier Center for Bioenvironmental Research and also a post as professor of pharmacology at Tulane University in New Orleans.

He leaves NIEHS on a high wave, after serving as scientific director longer than any of his predecessors, and having developed and implemented many new initiatives including a major reorganization of the institute's intramural research program, the establishment of a clinical program in collaboration with the University of North Carolina at Chapel Hill and Duke University, and the establishment of education and outreach efforts including summer internships and an annual environmental career symposium for high school students and teachers. As scientific director serving under three NIEHS directors—Drs. David P. Rall, David Hoel (who served as acting director), and Kenneth Olden—McLachlan supervised a workforce of approximately 700 scientists and support personnel in 19 different laboratories and branches, and oversaw a yearly budget in excess of \$90 million. His hallmark was his emphasis on basic research while facilitating the application of fundamental findings to toxicology testing and human studies.

During McLachlan's early years at the institute, not everyone would have spotted him as scientific director material, despite his high energy and incisive intellect. He has often joked about his wearing Birkenstock shoes and being a hippie. His star rose with his scientific successes and solid leadership as head of the developmental endocrinology and pharmacology section in the Laboratory of Reproductive and Developmental Toxicology, beginning in 1976. He later became the laboratory chief, a post he retained until his departure for Tulane.

As a scientist, McLachlan is internationally known for his research on diethylstilbestrol (DES) and the health effects of other environmental chemicals that behave like estrogens. He was one of the first to recognize the global health implications of environmental estrogens both in terms of research and policy. Using a mouse model, he confirmed the association between maternal use of DES and cancers and malformations of the female reproductive tract in offspring, and further identified



Dr. John A. McLachlan

malformations in male offspring as well. His recent findings on the ontogeny of the estrogen response and the role of growth factors and related signalling pathways in estrogen action continue to provide provocative new ideas for biology and medicine. He has helped organize several international conferences on estrogens in the environment, starting in 1979, with the most recent held last January in Washington, D.C. He has delivered over 120 invited lectures and published more than 150 research and overview articles in the scientific literature.

In a memo to NIEHS employees announcing his decision, McLachlan said, "Like many of you, I have spent most of my adult life at the institute and regard it, and you, with utmost respect and affection. It will be hard to go, but the new opportunities and challenges afforded at Tulane excite and energize me."

Olden called McLachlan "a wonderful human being, a world class scientist and a first rate manager. Most importantly, John is a good friend. John deserves considerable credit for the greatly improved quality of the intramural program over the past 5 years. He will do an outstanding job in his new assignment, and his cheerfulness and enthusiasm will be missed. Working with John has been a joy." □

NIH Receives 1994 Contractor of The Year Award from D.C.'s ARC

The District of Columbia's Association for Retarded Citizens recently presented NIH with the 1994 D.C. ARC Contractor of the Year Award in the government category. During the past year, NIH provided training opportunities for nearly 300 persons in D.C.'s ARC facility-based employment and training center programs. And, for more than 20 years, the NIH/D.C. ARC partnership has provided these same opportunities to literally thousands of persons with mental retardation. Several institutes at NIH participate in the program including NHLBI, NIDR, NIMH, NICHD, CC, NLM, NIAID, and DRG.

The contract work performed by NIH assists D.C. ARC in providing paid training opportunities in the areas of mailing and distribution services; warehousing, shipping and receiving; sign and rubber stamp making. According to ARC, the training in these areas, besides imparting job skills, serves as a foundation on which to build work adjustment skills such as timeliness, attention to detail and interpersonal interaction, which are crucial to successful employment in the competitive arena.

Along with NIH, awards were presented to the Washington Financial Group, Inc., Catholic University, and the Army and Air Force Exchange Service at Walter Reed Army Medical Center. □

Exhibit at NLM Through May 5

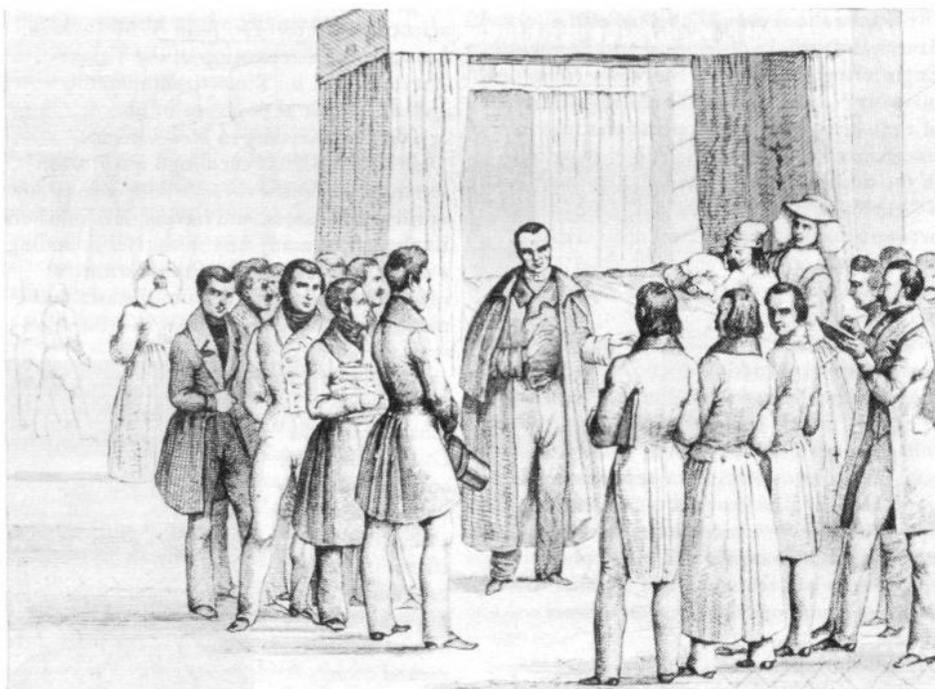
Revolutionary Medicine in Post-Revolution Paris

A new exhibit entitled "The Birth of Clinical Medicine: Paris 1794-1848" will be on display in the main lobby of the National Library of Medicine from Jan. 23 through May 5.

Prepared by NLM's History of Medicine Division staff from rare works in its collection, the exhibit will illustrate the revolutionary advances that took place in the medical world of Paris in the decades following the French Revolution. These include the development of the link between clinical diagnosis and autopsy, the working out of the pathology of tuberculosis, invention of the stethoscope, developments in medical education, and reforms in hospital design and administration.

The leading medical figures of this period include Bichat, Pinel, Corvisart, Laennec, Broussais, and Pierre Louis. Their teaching attracted many foreign students, including those from the young American republic, who pursued a medical education at the Faculty of Medicine, private courses, and the hospitals of Paris. Some of the important writings of the French physicians were translated into English by their American students such as the translation of Pierre Louis's *Recherches anatomico-pathologiques sur la phthisie*, published in Boston in 1836. Thus, the new developments of the Paris School influenced the course of medicine throughout the world.

Among the items on display will be



Etching by Alexandre Lacauchie, showing bedside teaching in a hospital setting, a practice that was introduced during this period in France.

Laennec's *De l'auscultation mediate, ou, Traite du diagnostic des maladies des poumons et du coeur*, 1819, in which use of the stethoscope is first described, and Cruveilhier's monu-

mental atlas, *Anatomie pathologique du corps humain*, 1829-42, documenting in full color lithographs the recent discoveries in pathological anatomy. □

Chamber Music Concert Set

The Rock Creek Chamber Players will present a free public concert featuring music for bassoon and other wind instruments on Sunday, Jan. 29 at 4 p.m. in the 14th floor assembly hall, Bldg. 10. The program, sponsored by the Clinical Center's recreation therapy section, will include a sonata by G. Telemann for bassoon and keyboard; Beethoven's Serenade for flute, violin, and viola; Poulenc's trio for oboe, bassoon, and piano; a trio by Shostakovich for flute, clarinet, and piano; and a quintet for winds by Milhaud. For more information, call (202) 337-8710. □

Nobelist Gilman To Speak

Nobel laureate Dr. Alfred Gilman, chairman and professor in the department of pharmacology at the University of Texas Southwestern Medical Center, will give the Wednesday Afternoon Lecture on Jan. 25 at 3 p.m. in Masur Auditorium, Bldg. 10. His topic will be "G Proteins and Regulation of Adenylyl Cyclases." The talk is sponsored by the NIH postdoctoral fellows. For more information, call Hilda Madine, 4-5595.

NIH Bicycle Facilities To Be Expanded

As most NIH employee cyclists have noticed by now, the grounds maintenance and landscaping section, DES, has added 94 new high security U-shaped racks to campus this year. These racks, which were endorsed by the NIH Bicycle Commuter Club, are designed to provide greater security by permitting the use of any type of lock, and more than one lock.

The locations of the new racks in weather-protected areas include:

- Pedestrian exits in multilevel parking garage 8,
 - Bldg. 10 garage,
 - Natcher Bldg. underground garage,
 - Bldg. 31, A-wing,
 - Bldg. 10, north side and sundeck entrances.
- New racks in uncovered areas are located:
- Between Bldgs. 49 and 30,
 - Between Bldgs. 7 and 9,
 - Bldg. 6, south side,
 - Bldg. 6B, north side,
 - Clinical Center Library entrance.

Beginning in the spring, employees will see an additional 90 U-shaped racks popping up at convenient locations across campus.

In addition, 20 enclosed individual bicycle lockers will be placed at Bldgs. 1, 12, and 18T. Lockers will be available for all NIH registered bicycles on a first-come, first-served basis. Cyclists must provide their own lock, and must remove their bicycle and lock each day. Any NIH cyclist who has not registered his or her bike may do so through the Division of Security Operations. Registration is completed at the police desk, Bldg. 31, Rm. B3B17, Monday through Friday, 9 a.m.-3 p.m., by presenting bicycle make and model, serial number, and any other information pertinent to an individual bicycle.

For more information about bicycle commuting options, contact Jay Miller of the Bicycle Commuter Club, 6-6941. □