THE NIH RECORD

Still The Second Best Thing About Payday

Dr. Michael Gottesman (above), NIH deputy director for intramural research, gives the keynote address at the groundbreaking ceremony for Bldg. 50—the Consolidated Laboratory Facility—on July 17. Below, a crane feeds whole trees to a wood chipper as parking lot 13C is cleared in preparation for the new construction. See p. 12 for more photos and details.

HIGHLIGHTS

U.S. Department of Health and Human Services
National Institutes of Health

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NINDS Leads Effort in NIH Native American Student Summer Program

By Shannon E. Garnett

NIH has long been known for the many research opportunities and experiences it provides to students during the summer months. Recently, in cooperation with the American Indian Science and Engineering Society (AISES), NIH initiated a new summer program for students—the NIH/AISES Student Summer Work Experience Program.

This first-of-its-kind program is intended to enhance awareness among Native American college students of NIH career opportunities, to provide summer work experience for the students, and to improve NIH's Native American workforce population, which is underrepresented at NIH as well as in the overall federal workforce.

NINDS played a key role in

SEE **SUMMER SCIENCE WORK**, PAGE 6

AISES summer student Anthony Parker (r) is studying gene transfer with mentor, NINDS senior staff fellow Dr. Jeffrey Medin.

ORWH Seminar Looks at Elder Issues

By Chinwe Onyekere

By the year 2040, there will be 30 million people 80 or more years old in the United States. The increased number of elderly people poses new challenges for American society. Women are frequently caught between the generations as caregivers for both the young and old. Caring for the caregiver is an important concern in women's health, and was the topic of a recent Office of Research on Women's Health seminar, "Elder Options and Care Giving."

Dr. Maureen Edwards, coordinator of the Health Education Program at Montgomery College, spoke of the legal and social implications of the growing population of elders, including the need for changes in current government programs such as Social Security, Medicare and Medicaid. She raised the question, "Who cares for the caregiver?" At a time when grandparents are taking care of their grandchildren, she explained, attention needs to be

SEE **ELDER ISSUES**, PAGE 7

Genes' Influence on Alcoholism Investigated

New, powerful gene hunting techniques hold promise for scientists pursuing the genes involved in complex diseases. This was the topic of a recent 2-day conference, "Genes and the Environment in Complex Diseases: A Focus on Alcoholism," sponsored by the National Institute on Alcohol Abuse and Alcoholism.

Finding the gene variants involved in alcoholism is the primary focus of NIAAA's Collaborative Study on the Genetics of Alcoholism (COGA), a large-scale research program based in six research centers located across the United States. At these centers, people with histories of alcoholism and their families are being extensively studied. Dr. Henri Begleiter, State University of New York, reported that, as of January 1997, a total of 9,946 people had been recorded into COGA's database.

A serious drawback in identifying the traits and characteristics associated with alcoholism is the fact that a common definition of this disease does not exist. As noted by NIAAA director Dr. Enoch Gordis, a clear description of the phenotype of alcoholism is essential to accurately identify people at greatest risk for disease. Once the phenotype(s) has been defined, it can be linked to genetic markers. COGA scientists are working to better define alcoholic phenotypes and, according to Dr. Victor Hesselbrock, University of Connecticut, four different classes of alcoholism thus far have been identified.

A person's response to alcohol appears to be one of the strongest predictors of future alcohol problems and, thus, a potentially useful marker for studying the genetics of alcoholism. Dr. Marc Schuckit, University of California, discussed findings from the COGA project which showed that sons of alcoholics had lower responses to alcohol (i.e., they needed to drink more alcohol to experience an effect). The COGA data augment earlier findings showing that children from alcoholic families may have an innate tolerance to alcohol that, when combined with certain environmental factors, could put them at greater risk for alcoholism.

In developing a whole genome screen, COGA has typed 291 markers in about 1,000 subjects, according to Dr. John Rice, Washington University School of Medicine. To date, he reported, the middle of chromosome 1 consistently has been implicated in alcoholism using two different disease definitions and two analytical methods. Other chromosomes with possible evidence of linkage include 4, 7 and 16. The next step will be to confirm the current findings using a second sample of 1,000 subjects. For those linkages that are confirmed, investigators will attempt to narrow the region of interest on each chromosome using additional markers and then examine these regions on a molecular level to identify the genes influencing alcoholism.

Before a potential gene's function can be positively linked to alcoholism, however, other factors must be considered. Gene-environment and gene-gene interactions are ubiquitous. As noted by Dr. John Blangero, South West Foundation for Biomedical Research, a gene may not have an effect unless another gene is present, or a gene may have only a small effect on its own but a large effect when combined with other genes. Scientists currently are developing powerful statistical methods to more clearly discern each gene's effect and to take into account gene-gene and gene-environment interactions. ■

Dr. Catherine Lewis is the new chief of the Biophysics Branch of NIGMS' Division of Cell Biology and Biophysics. She joined NIGMS in 1989 as a program director for the field of chromosome organization and mechanics. Since 1994, she has also handled grants relating to the biophysics of nucleic acids. At that time, she also became alternate project officer of NIGMS' Human Genetic Mutant Cell Repository. Prior to joining NIGMS, Lewis worked as a staff fellow in the physical chemistry section of NIDDK's Laboratory of Molecular Biology. She earned her Ph.D. in biochemistry from Princeton University.

Blood Safety Committee To Meet

The DHHS advisory committee on blood safety and availability will hold its second meeting Aug. 11-12, beginning at 9:30 a.m. in Lister Hill Auditorium, National Library of Medicine. The meeting is being sponsored by OAS, NIH, CDC and FDA.

The committee will continue its discussion of hepatitis C and blood transfusion and is expected to issue recommendations on whether and how the secretary should require a hepatitis C "lookback" in which people who previously received blood from donors who now test positive for hepatitis C antibodies would be identified.

The meeting will be open to the public, and time has been set aside for public comment. Presentations are limited to 5 minutes. Those interested in speaking should contact Dr. Paul McCurdy, 5-0065. ■

NIH RECORD

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Gene for Fatal Childhood Disorder Found

After decades of work, scientists at NIH have identified a gene alteration associated with the fatal childhood cholesterol disorder Niemann-Pick type C (NPC). Learning how the gene functions may lead to the first effective treatment for the disease and to a fundamental new understanding of how cholesterol is processed in the body.

The gene, known as NPC1, is located on human chromosome 18. NPC causes progressive deterioration of the nervous system by blocking the movement of cholesterol within cells. The finding opens the door to improved diagnosis and understanding of this neurological disorder, which is usually fatal by age 25, and to the design of therapies that may correct the underlying problem. The finding also may contribute to the understanding of atherosclerosis, a more common killer associated with cholesterol buildup. Atherosclerosis is an accumulation of fatty tissue inside arteries that blocks blood flow, leading to heart disease and stroke.

"This discovery is an excellent example of how research on rare brain disorders often pays off in other ways," said Dr. Zach W. Hall, NINDS director. "By identifying this gene, we not only take a crucial step forward in understanding this devastating disorder, but also gain insights into problems that affect every one of us."

The NPC1 finding is the first step toward developing a cure for NPC. "This gene reveals a new way that cells handle cholesterol," noted Dr. Peter G. Pentchev of NINDS. "It provides a fundamental understanding of a previously undefined pathway of cholesterol metabolism. Like motor mechanics, we have to know what's wrong before we can fix it." Pentchev and his colleagues at NINDS have studied NPC for almost 20 years. Other key members of the team that identified the human gene include Drs. Eugene D. Carstea, formerly of NINDS, Jill A. Morris of NINDS, and Danilo A. Tagle and Melissa A. Rosenfeld of the National Human Genome Research Institute.

Collaborating scientists, led by NHGRI's Dr. William J. Pavan, identified the same gene in a mouse model for NPC. The human and mouse gene findings appear in back-to-back reports in the July 1 issue of *Science*.

NPC develops when a person receives two altered copies of the gene—one from each parent. Carriers of the disease, who possess a single copy of the altered gene, sometimes develop subtle abnormalities in cholesterol metabolism. However, they remain healthy, and most do not know they are carriers until they have an affected child. NPC often appears at random in families with no history of the disorder, and it occurs in individuals from many ethnic groups. ■

The International League of Dermatological Societies (ILDS) has named NIAMS director Dr. Stephen I. Katz as its newest president. He will serve a 5-year term and lead ILDS at the time of its 20th World Congress of Dermatology in Paris in 2002. ILDS objectives include stimulating worldwide cooperation of dermatology and other groups interested in cutaneous medicine and biology, promoting the advancement of dermatological education, care, and sciences, and encouraging and supporting enhanced education in the developing world where skin problems cause considerable morbidity.

Calcium Doesn't Stop Preeclampsia

Contrary to prevailing medical opinion, taking high doses of calcium during pregnancy does not prevent preeclampsia in women who do not have any risk factors for the disease, according to the largest, most comprehensive clinical trial of its kind to date.

Preeclampsia is a disorder of pregnancy that can strike without warning, causing protein in the urine and high blood pressure. In turn, preeclampsia may progress to eclampsia—hypertension and generalized convulsions—which may be fatal.

The trial, reported in the July 10 *New England Journal of Medicine*, was conducted by researchers at the National Institute of Child Health and Human Development and several other academic and research institutions. Funding was provided by NICHD and by the National Heart, Lung, and Blood Institute.

"Clearly, women need some calcium during pregnancy," said the study's principal investigator, Dr. Richard J. Levine of the Division of Epidemiology, Statistics, and Prevention Research, NICHD. "But in light of the results of our study, the high doses of calcium thought to prevent preeclampsia at best provide no apparent benefit, and at worst, could cause complications in certain high-risk women."

Preeclampsia is a potentially life-threatening complication of pregnancy in which a woman may develop dangerously high blood pressure and begin excreting protein in the urine. About 5 percent of first-time mothers and 1 to 2 percent of mothers having subsequent pregnancies develop the condition. The authors note that preeclampsia is a leading cause of maternal death. Even in cases where the condition does not progress to eclampsia, the children born to mothers with preeclampsia may be small for their gestational age or may be born prematurely. This may, in turn, place them at risk for a variety of other complications of birth. ■

Long, Short Sleepers Needed

The Clinical Psychobiology Branch, NIMH, needs subjects who habitually sleep 9 hours or more, or 6 hours or less, ages 21-30, for a 5-consecutive-night sleep study. The volunteer should be very healthy, have no history of mental illness, no sleep disorders, and should not be on any medications, including over-the-counter medications and birth control. Study subjects will be paid. Contact Holly Giesen or Michael Jackson, 6-6981. ■

NIH Adopts Explicit Statements of Review Criteria

NIH director Dr. Harold Varmus recently announced that five explicitly stated review criteria will be used to structure scientific peer reviewers' written critiques and discussions of research grant applications, beginning with applications submitted on or after Oct. 1, 1997.

The issue of more explicit statements of review criteria grew out of recommendations by the rating of grant applications committee, and was originally raised to focus the review of grant applications on quality of science and affect it might have on the field, rather than on details of technique and methodology.

These new statements of review criteria are part of a continuing effort at NIH to improve the peer review system, ensure that it keeps pace with changes in science and continues to identify high quality scientific projects for funding.

While using the criteria to structure their critiques and discussion, reviewers will continue to assign a single, global rating to each scored application. The rating they assign should reflect the overall affect the project could have on the field; the emphasis on each criterion might vary from one application to another, depending on the nature of the application and its relative strengths. These criteria statements should be of major interest within NIH, specifically to program directors and councils as they seek to develop research programs and funding plans. The criteria will apply to all unsolicited research project grant applications and will form the basis for review of other related grant mechanisms.

The criteria have been posted on the World Wide Web on the grants page (http://www.nih.gov/grants/peer/rgacriteria.htm) for easy access by the scientific community.

Officials here hope the criteria will not only help focus reviewers on the more global, overall impact of the research, but may encourage greater focus and succinctness in the investigators writing the applications. Use of these criteria will be monitored and reviewed after approximately 1 year, at which time any necessary modifications will be considered. The opinions of reviewers, applicants, and NIH staff will be solicited, and debate and discussion will be welcome.

Review Criteria

(Instructions to reviewers)

The goals of NIH-supported research are to advance our understanding of biological systems, improve the control of disease, and enhance health. In your written review, you should comment on the following aspects of the application in order to judge the likelihood that the proposed research will have a substantial impact on the pursuit of these goals. Please address each of these criteria, and consider them in assigning the overall score, weighting them as you feel appropriate for each application. Note that the application does not need to be strong in all categories to be judged likely to have a major scientific impact and thus deserve a high priority score. For example, an investigator may propose to carry out important work that by its nature is not innovative but is essential to move a field forward.

(1) Significance: Does this study address an important problem? If the aims of the application are achieved, how will scientific knowledge be advanced? What will be the effect of these studies on the concepts or methods that drive this field?

(2) Approach: Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative tactics?

(3) Innovation: Does the project employ novel concepts, approaches or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?

(4) Investigator: Is the investigator appropriately trained and well suited to carry out this work? Is the work proposed appropriate to the experience level of the principal investigator and other researchers (if any)?

(5) Environment: Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed experiments take advantage of unique features of the scientific environment or employ useful collaborative arrangements? Is there evidence of institutional support?

Treatment for Panic Attacks

People currently experiencing spontaneous panic attacks and/or significant social anxiety may be eligible for a collaborative NIMH/USUHS treatment outcome study evaluating nondrug treatments for panic and anxiety. For more information call Audrey Kowmas at USUHS, (301) 295-3651.

25th Asian/Pacific Islander American Heritage Program a Success

The 25th annual NIH Asian/Pacific Islander American Heritage Program was a great success. In the opening ceremonies, Tony Itteilag, NIH deputy director for management, welcomed the large crowd on the Bldg. 31 patio. He noted that the lunch programs have provided both culinary and cultural enrichment to the NIH community over the years. He also paid tribute to Asian and Pacific Islander Americans for their significant contribution to NIH efforts at protecting and improving the health of the nation.

Despite threatening clouds and gusty winds, the crowd eagerly relished the dishes from China, India, Japan, Korea, the Philippines and Thailand. The Tai Yim Kung Fu School displayed their athletic abilities and a sense of humor in a Chinese lion dance. The crowd also enjoyed a demonstration of Chinese noodlemaking, a Japanese exhibition of a samurai sword, kimonos, and a Korean exhibition of costumes and crafts. Also featured were a bonsai exhibition and a demonstration of Chinese calligraphy. Korean drummers provided exciting music for the event.

Anthony Itteilag (c), NIH deputy director for management, welcomed guests to the 25th Asian/Pacific Islander American Heritage Program recently. He is flanked by program coordinators Prahlad Mathur (l) and Dr. Victor Fung.

The celebrations continued with an evening program in Masur Auditorium, Bldg. 10. A happy, festive mood was established by the Chinese lion dance, which traditionally is performed to drive away evil spirits and bring good luck and protection. Dr. Victor Fung was master of ceremonies and Dr. Wendy Baldwin, NIH deputy director for extramural research, presented opening remarks and paid tribute to past programs and to the Asian committee members responsible for the annual heritage program. The NIH Asian and Pacific American Organization presented its 1997 outstanding achievement awards to five people for their accomplishments in science and/or equal employment opportunities activities: Drs. Shue Yann Cheng of NCI, Rashmi Gopal Srivastava of NEI and Yi-Fu Shue of NHLBI, Norman Krasnegor of NICHD, and Elaine Lamirande, formerly of NCRR.—**Prahlad Mathur**

A variety of Asian delicacies were available for lunch on the patio.

The Chinese lion dance is performed on the Bldg. 31 patio by representatives of the Tai Yim Kung Fu School.

PHOTOS: BILL BRANSON

Jim Sullivan exhibits the art of bonsai.

A trio of Korean drummers performed during lunch.

Normal Children Sought

NIMH is recruiting healthy, normal behavior girls and boys ages 5-18 for a safe, noninvasive brain imaging study; Asian and Hispanic Americans are especially needed. They should not wear braces or have learning disabilities, and will be paid. Leave a message with day/evening phone numbers at 6-3175, ext. 2.

SUMMER SCIENCE WORK, CONTINUED FROM PAGE 1

creating and implementing the project, serving as the lead institute in the beginning stages, helping to plan, establish, and promote the program, and recruiting students. Claudia Palumbo, an NINDS personnel management specialist, initiated the NIH-wide agreement with AISES for the students' summer internships. Other institutes involved in the program include NCI, OD OEO, NEI, NIAAA and NIDR.

The purpose of the 10-week program is to expose students to all aspects of work at NIH including research, development, technology, administration, and management, and to encourage students to pursue careers relevant to NIH's mission.

Anthony Parker, an undergraduate majoring in molecular and cellular biology and fish and wildlife science at the University of Arizona, is studying gene transfer with Dr. Jeffrey Medin, a senior staff fellow in the section on molecular and medical genetics, Developmental and Metabolic Neurology Branch, NINDS. So far, Parker's project has involved setting up gels, cloning, separating DNA, inserting markers into DNA, and extracting DNA from gels.

"I can't say enough positive things about the program," said Parker. "My mentor, Dr. Medin, is absolutely fantastic. I came here with basically no research training and everybody has been so patient, helpful and professional. The support is just great."

Participants in the program are American Indian and Alaskan Native American college students who are active in their schools and communities and who have demonstrated success in college. They are recommended to the program by their advisors and professors.

Other federal agencies, including the departments of Commerce, Energy, Agriculture, Transportation, and the Central Intelligence Agency, are also initiating similar programs.

A pre-med student considering specializing in emergency, surgical, or pediatric medicine, Parker recently participated in a workshop on research training opportunities at NIH for high school and undergraduate students. "I'm going to do everything I can to encourage students to apply to the program," he said. "It's outstanding."

AISES is a nonprofit organization that promotes community development by bridging science and technology with traditional Native American values. Through its educational programs, AISES provides opportunities for Native American students to pursue studies in science, engineering, business and other academic areas. Each year representatives from NINDS attend and participate in AISES's annual meeting.

In addition, NINDS is supporting two other efforts to attract, motivate, and encourage Native American students to pursue careers in biomedical sciences: the National Native American Youth Initiative in Health, Biomedical Research, and Policy Development, and the NINDS Summer Program in the Neurological Sciences.

"NIH's summer programs have proven to be very successful efforts for students of diverse backgrounds to pursue careers in science," said Levon O. Parker, NINDS minority and special concerns program officer. "The primary goal of these programs is to build a cadre of scientists for the future."

For more information on the AISES program or other NINDS summer student programs, contact Levon Parker, 6-5332.

Gene Therapy Conference

A gene therapy policy conference entitled "Human Gene Transfer: Beyond Life-threatening Disease," will be the first in a series of conferences hosted by NIH. Each will be devoted to a single issue relevant to scientific merit and/or safety as it relates to human gene therapy clinical trials. The inaugural conference will be held Thursday, Sept. 11, from 9 a.m. to 5 p.m. at the Bethesda Holiday Inn, located at 8120 Wisconsin Ave. in Bethesda. For more information or to register for the conference (no cost), visit the web site http://www.nih.gov/od/orda.

Dr. W. Sue Shafer has been named deputy director of the National Institute of General Medical Sciences. She will continue to serve as director of the NIGMS Division of Extramural Activities, a position she has held since 1989. She came to NIH in 1974 as a health scientist administrator in the Cellular and Molecular Basis of Disease Program, NIGMS. In 1978, she became chief of the instrumentation section of NIGMS' Physiology and Biomedical Engineering Program. In 1983, she joined what is now the National Center for Research Resources as chief of the Office of Program Planning and Evaluation, and in 1987 she moved to the National Institute on Alcohol Abuse and Alcoholism, serving first as deputy director of the Division of Basic Research and then as the division's acting director. She returned to NIGMS in 1989. She has a strong interest in the instrumentation needs of the biomedical research community and has worked to increase the number of minority scientists engaged in biomedical research.

The roof over the south side of the Clinical Center's B-wing recently became host of the essential maintenance and safety project, which, among other goals, is installing upgraded airhandling equipment atop the hospital's many wings.

ELDER ISSUES, CONTINUED FROM PAGE 1

paid to the health status of the grandparent. She emphasized seven traits for living well: optimism, adaptability, a sense of control, resilience, meaningful projects, meaningful relationships, and self-esteem.

Marie Infante, a nurse and attorney, explained legal and management issues facing the elderly. Advancing technology is keeping people alive longer and, in turn, is raising issues about the needs of the elderly. The living will is an issue Infante says is important for the elderly community and their families. She discussed the intricacies of a living will, a document that clarifies the patient's wishes to be resuscitated, removed from life support, or other life-determining situations. Infante emphasized that it is important to get expert advice on how to structure such a will. There is a difference between power of attorney and durable power of attorney;

More than 25 organizations offered information at an expo that was part of "Elder Options and Care Giving," a recent ORWH seminar.

an expert should explain such differences and other information, so that the whole family understands details of the document.

Ellen Greenberg provided information about the variety of living arrangements for the elderly. Director of information services and the senior helpline of the Jewish Council for the Aging, she discussed a number of uncommon living arrangements such as small groups of elderly living together. She said interested caregivers should ask plenty of questions and acquire as much information as possible. Greenberg noted two living options in detail: retirement communities and assisted living, each of which serve differing needs. Retirement communities appeal to people looking for independence with services like transportation, while assisted living arrangements appeal to people who need more care services such as housekeeping and meals.

The last speaker, Judy Kramer, director of publications for the Anxiety Disorders Association of America, shared her perspective as a caregiver for her parents. Offering a personal account of her successes and mistakes as a caregiver and dealing with such challenges as obtaining Medicare coverage, elder living options, and balancing time between children and parents, she was able to explain what worked better for her in certain situations so that the audience could learn from her experiences.

In addition to the seminar, an expo allowed more than 25 organizations, including the American Association of Retired Persons, the Jewish Council for the Aging, and the National Council on Senior Citizens, to disseminate information concerning elder issues.

"Alzheimer's Disease," the next ORWH Women's Health Seminar, will be held at 1 p.m. on Thursday, Sept. 25 in Lipsett Amphitheater, Bldg. 10. For details, call 2-1770. ■

Dr. William Bara-Jimenez, shown at right with NINDS clinical director Dr. Mark Hallett, has joined the human motor control section of the NINDS Medical Neurology Branch as a senior staff fellow. He is conducting electrophysiological studies of human motor control and learning advanced electroencephalogram research techniques. His fellowship is partially funded by the Restless Legs Syndrome Foundation. "We at the National Institute of Neurological Disorders and Stroke are delighted to be partners with the Restless Legs Syndrome Foundation in sponsoring this promising physician-scientist and in furthering research on restless legs syndrome," said Dr. Zach W. Hall, NINDS director.

Sailing Lessons Offered

Space is still available in the fall session of the NIH Sailing Association's popular basic sailing class, which starts Wednesday evening, Aug. 20. Cost is $110 plus $35 membership dues. Course includes 6 evening classroom sessions, a Saturday morning orientation at the marina and 3 or 4 weekday afternoons on South River near Annapolis, with two students and one instructor in the club's boats.

Students completing basic training qualify to sail these boats for low charter fees. Application forms (class and club membership) and more information on the sailing club are available at the R&W activities desk in Bldg. 31, Rm. B1W30.

Heat Shock, Future Shock at NIA's 8th Shock Lecture

By Michael Miller

Shocking doesn't adequately describe the nature of the talk given by guest lecturer Dr. S. Michal Jazwinski at NIA's 8th annual Nathan W. Shock Memorial Lecture on Aging.

Words like enlightening, informative and entertaining seem more appropriate. As part of the introduction to the lecture, it was humorously mentioned that *Esquire* magazine once gave Jazwinski one of its Dubious Achievement Awards. Based on Jazwinski's cloning of the LAG1 longevity gene in yeast, and the misquoted extrapolation that humans could live 600 years, *Esquire* expressed its befuddlement at what might be done with all of the resulting 600-year-old people, or tons of very old yeast. Jazwinski's lecture, however, was one that commemorated and advanced the understanding of Dr. Nathan Shock's landmark research and interest in aging.

Jazwinski, professor of biochemistry and molecular biology at Louisiana State University Medical Center in New Orleans, prefaced his talk, "Longevity, Genes, and Aging: The View Provided by a Genetic Model System," by discussing the history of aging research and some of the rather antiquated ideas about the science of aging that date to the 16th century.

Jazwinski's research is done mainly in yeast cells, which can divide only a limited number of times, thus allowing researchers to observe and calculate the lifespan of individual cells. He has identified nine genes that play a role in lifespan in yeast, and he spent a good part of the lecture identifying those genes and the interactive role they play in the life of a yeast cell.

Two of the most important genes he discussed were the RAS1 and RAS2 genes, which function as nutritional sensors whose role is to achieve a sort of cellular homeostasis. RAS1 seems to shorten lifespan while RAS2 prolongs it. By genetic manipulation in his lab, Jazwinski can overexpress RAS2 in yeast, which can lead to an extension of lifespan. Another gene, PHB1, may be essential for long life. Jazwinski has concluded there is an additive effect among a number of genes that extend lifespan, suggesting more than one pathway to longevity.

Heat shock, with its fascinating implications for humans, was the next topic. In experiments with yeast, Jazwinski found that inducing heat tolerance led to a longer lifespan. However, if heat shock was administered chronically, lifespan seemed shortened.

Jazwinski says, "many people believe that chronic stress contributes to human aging, especially brain aging, and only additional research will tell us if chronic stress in yeast will broaden our knowledge of chronic stress in humans."

In conclusion, Jazwinski brought various disparate theories of aging together. In addition to genes and heat shock, telomeres, the tips of chromosomes, have been mentioned as possible determinants of aging and cancer. Jazwinski doesn't believe that telomere shortening, as such, is the key aspect of their role in determining longevity. He thinks a cell's organization, which is essentially the way various pathways a cell uses to survive integrate with each other, is determined genetically. Disruption of this organization is what leads to aging.

As part of his endeavor to help all of us avoid "future shock," Jazwinski is currently studying the nonlinearity inherent in the dynamic process of aging. As evidenced by the probing nature of the questions at the end of his talk, everyone at NIA is eager to see what revelations about aging Jazwinski comes up with next. ■

Bone Workshop Moves to Masur

Due to tremendous response, NIAMS's 2-day scientific workshop on Bone and the Hematopoietic and Immune Systems will be held Aug. 5-6 in Masur Auditorium, Bldg. 10. To register and for special accommodation needs, e-mail amsconf@od.niams.nih.gov, fax: 0-6069, or call Sharon Nouzari-Louis, 6-0801. Preregistration is required.

NINR Adds Five to Advisory Council

Five new members recently joined the National Advisory Council for Nursing Research: Drs. Dorothy Brooten, Steven A. Finkler, Mary L. de Leon Siantz, Judith H. LaRosa and Ada M. Lindsey.

Brooten, of Case Western Reserve University and the Institute of Medicine, is a nationally recognized expert on the prevention and care of low birth weight infants.

De Leon Siantz's expertise is in minority health issues and mental health nursing. She teaches at Indiana University School of Nursing.

Finkler is a professor at New York University and edits *Hospital Cost Management and Accounting*.

NINR director Dr. Patricia Grady (fourth from l) welcomes new members to the National Advisory Council for Nursing Research. They are (from l) Drs. Mary de Leon Siantz, Dorothy Brooten, Ada Lindsey and Steven A. Finkler. Absent is Dr. Judith LaRosa.

LaRosa is professor at Tulane University and project director of the Tulane Cancer Center and associate project director of the National Science Foundation's Louisiana Experimental Program to Stimulate Competitive Research.

Lindsey, of the College of Nursing, University of Nebraska Medical Center, brings research experience in physiology, and issues of coping and self-care of cancer patients. ■

The Gut: The First 100 Years

The first 100 years of achievements in gastrointestinal (GI) motility are chronicled in "The History of GI: Focus on Motility" exhibit currently on display at the Visitor Information Center, Bldg. 10.

The exhibit consists of three multimedia panels, "Over a Century of Research," "Current Practices," and "Future Applications." The first provides an historical view of early observations on film of the alimentary tract and patterns of movement in the gut. Mechanisms that control gut motility and images of how the gut works after a meal are also highlighted in the first panel.

The second panel focuses on diagnosis and treatment of abnormal esophageal and colonic movement such as acid reflux and constipation. Panel three highlights areas for future research in gastroenterology and related fields, including the development of pharmacologic agents to treat motility disorders, the genetic influences of motility disorders, and brain/gut interactions.

The exhibit, developed by the American Motility Society under a grant from Janssen Pharmaceutica Inc., will be at the VIC through the summer. Prior to coming to NIH, the exhibit was displayed in the Main Hall of Union Station during the annual meeting of the American Gastroenterological Association, which was held this spring at the Washington, D.C. Convention Center. Dr. Joseph Szurszewski, professor and chairman of the department of physiology and biophysics at the Mayo Clinic and a member of the NIDDK National Advisory Council, brought the exhibit here. ■

"The History of GI: Focus on Motility" exhibit

Day Care Board To Conduct Surveys

The NIH day care oversight board will be conducting three surveys related to day care in the NIH-sponsored day care facilities (Executive Child Development Center, Parents of Preschoolers, Inc., and Childkind). The surveys include an NIH day care survey, a parent survey and a staff survey.

The day care survey will request information from all interested persons in order to assess the current and future day care needs of NIH employees. Information from the survey will be used in planning for the expansion of day care on and off campus. The survey also requests information on the need for adult day care, summer programs, sick child care, before and after school programs, etc.

The day care survey will be distributed by email to everyone with PC access as well as desk to desk. Only one response per family should be submitted, and answers should be returned anonymously.

The parent survey will be addressed to the parents of children enrolled in the three NIH-sponsored day care facilities. The staff survey will seek input from the staff providing day care at the centers. Both will be conducted through the day care centers as part of the board's efforts to assess the quality of day care currently provided in those facilities.

Questions about the NIH day care survey may be directed to G. Bohler, chair of the oversight board, 6-9231. Questions about the parent and staff surveys should be directed to Dr. Ilan Kirsch, 6-0047.

NIEHS Keeps AAALAC Accreditation

Celebrating 25 years of successful compliance with animal welfare regulations, the National Institute of Environmental Health Sciences' animal research program has been granted "continued full accreditation" by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International, a private nonprofit organization that promotes the humane treatment of animals used for scientific research purposes through a voluntary accreditation program.

NIEHS has participated in the program since 1972. "The fact that we received full accreditation without a single suggestion for improvement is quite an accomplishment," noted Dr. Diane Forsythe, a veterinarian who is chief of the institute's Comparative Medicine Branch. "This award would not have been possible without the full cooperation of our government employees and contract workers."

To earn accreditation, a research program must undergo periodic internal assessments and rigorous evaluations by independent panels of experts from around the world. An accredited program must conform with the principles outlined in the *Guide for the Care and Use of Laboratory Animals* (National Research Council, 1996).

"Accreditation is a sign of quality—it symbolizes an institution's commitment to responsible animal care and use," said Dr. John Miller, formerly of NIH and now executive director of AAALAC International. "At the same time, it enhances the overall quality of science and promotes the validity of the research for which the animals are used." ■

BIG Ice Cream Day

The NIH chapter of Blacks In Government will bring Baskin Robbins Catering to NIH for a BIG Ice Cream Day on Thursday, July 31, at Bldg. 31, Bldg. 10, Executive Plaza, and Rockledge II. Tickets at $1.50 each will be sold at those locations July 29 and 30. Baskin Robbins carts will carry 6 of their 31 flavors, in cup or cone.

Update on Bldg. 10 Garage Repairs

Repairs are due to begin on the P1 ramp mid-August and continue through October. The deterioration of the structure has accelerated and will involve repairing more concrete than previously estimated. Also, workers will replace the electrical snow-melt system with a new "environmentally friendly" glycol system.

During the P1 ramp closure, P1 level permit holders will be redirected to the P2 level entrance and up the interior ramp to P1. Colonial Parking, which manages attendant-assisted parking on P3, will provide support on the P2 level, directing and assisting P1 permit holders.

More traffic control measures are being considered to handle anticipated congestion. Flyers will be distributed, signs will be posted and email will be sent at least 3 weeks before closure. The P1 ramp guard will move to the P2 level adjacent to the interior ramp leading to P1.

NINDS's Eugene Streicher Retires

By Shannon E. Garnett

Dr. Eugene Streicher, codirector of NINDS' Division of Fundamental Neurosciences and Developmental Disorders (DFNDD), recently retired after 46 years of government service, 43 of those with NIH.

Dr. Eugene Streicher

"Gene Streicher represents the very best of NIH," said NINDS director Dr. Zach Hall. "When I was a young investigator and had grant trouble, someone said to me 'Call Gene Streicher, he will help you.' And he did. That story—multiplied a hundred times—explains Gene Streicher's impact on neuroscience research, and the remarkable esteem in which he is held by several generations of neuroscientists."

A native of Brooklyn, Streicher earned his B.A. and M.A. degrees from Cornell University in 1947 and 1948 respectively, and his Ph.D. in physiology from the University of Chicago in 1953.

His government career began with military service in the U.S. Navy from 1945 to 1946. In 1948 he served in the medical division of the Army Chemical Corps as a physiologist. He began his NIH career in 1954 as an NIMH research physiologist, later joining NINDB (now NINDS) in 1962. There, he served first in the clinical neuropathology section of the intramural program and since 1964 in the extramural program. He was appointed director of the Division of Fundamental Neurosciences (now DFNDD) in 1979.

"The scope of the effect that Gene has had on basic neuroscience research as well as clinical neuroscience research is immeasurable," said Dr. Don Jewett, professor emeritus at the University of California, San Francisco, in an open letter to the institute. Streicher's division supported Jewett's work on the basic physiology of the auditory pathway of the brainstem, which has led to improvements in testing hearing in infants. Streicher also lent early support to the Neural Prosthesis Program, which has helped individuals with paralysis and sensory impairments.

"The outstanding basic neuroscience that he fostered led to wonderful advances in clinical neuroscience," said Dr. Charlotte McCutchen, NINDS medical officer and health scientist administrator.

In his most recent position as DFNDD codirector, he led a program of research grants, contracts and fellowships that supports basic research in fundamental, cellular, molecular and systems neuroscience and in basic disciplines such as neuroanatomy, neurochemistry, neurophysiology, developmental neurobiology and neurogenetics.

"As division director in both tough times and good times, Gene has provided a steady and fair hand in guiding the development of NINDS extramural support in the fundamental neurosciences," said Dr. Robert Baughman, DFNDD acting director. "His integrity, thoughtfulness, lively sense of humor, and above all his kindness and supportiveness, especially for young investigators, are legendary. Over the years his list of grantees is a who's who of the founders and bright young stars of neuroscience."

Streicher has memberships in many professional societies including the Society of Experimental Biology and Medicine, the American Association for the Advancement of Science, the American Association of Neuropathologists, and the Society for Neuroscience.

Among the many honors and achievements he has garnered throughout his career, Streicher recently received the annual Education Award of the Association of Neuroscience Departments and Programs for his outstanding contributions as a mentor, advising and developing the careers of neuroscientists, and as a representative of institutions that help advance neuroscience research.

"He is a quiet man who does things in a quiet way, but with a tremendous impact," McCutchen said.

In fact, if it had been left up to Streicher, he would have retired quietly as well, with no fanfare. However, that was not to be. Friends, family, grantees—past and present—and colleagues made up the standing-room-only-crowd in a conference room of the Federal Bldg. recently to pay tribute to "probably one of the most loved people in the institute," according to McCutchen, who has worked with Streicher for 6 years. "The room was filled with love and laughter as we shared memories of working with Gene. He is a wonderful man—a rare breed."

Streicher's immediate retirement plans include traveling with his wife to Montana and China. ■

Garden Club Meets, Aug. 6

The NIH Garden Club will meet Wednesday, Aug. 6, at noon in Bldg. 31, Conf. Rm. 7. The agenda is crowded with garden subjects and new members are always welcome to drop in and join the fun. The main topic will be propagating new plants with soft and hardwood cuttings. Bring your own tips and success stories to share. There will also be a "plant swap"—bring a plant and then take one home. Be sure to tag plants with name and basic cultural requirements. The club will also plan visits to nurseries and one another's gardens. For details, contact Karen Helfert, kh21k@nih.gov. ■

Chicano and Native American Science Students Visit NIH

Under the auspices of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), Chicano and Native American college students from across the country visited NIH July 10-11 to explore its vast academic and research facilities and the diverse opportunities it offers for internships and careers in microbiology. The graduate and undergraduate students major in biomedical and life sciences, mathematics and chemistry. According to Dr. John F. Aldarete, president of SACNAS and faculty member of the

SACNAS group at Natcher conference hall includes (front row, from l) James Alexander, acting director NIH Office of Education; Dr. Michael Gottesman, NIH deputy director for intramural research; Dr. John F. Aldarete, president of SACNAS, from UT-San Antonio's department of microbiology; and Marc S. Horowitz, director of the NIH Loan Repayment and Scholarship Program.

Health Science Center of the University of Texas at San Antonio, the visit is a first for his organization and said the potential is "awesome" for future projects between SACNAS and NIH.

A meeting between SACNAS staff and students and NIH's deputy director, Dr. Ruth Kirschstein, and NIH deputy director for intramural research Dr. Michael Gottesman, was a chance for discussion of ways to improve the intramural program, particularly in following up and training minority students for careers in NIH and keeping them here as research scientists. The SACNAS group offered many suggestions, including training grants for minority students, increased funding for minority scientists, a distinguished minority lectureship and sabbaticals for minority scientists. ■

DCRT Courses and Programs

All courses are on the NIH campus and are given without charge. For more information call 4-3278 or consult DCRT's home page at http://csb.dcrt.nih.gov/training/index.html.

PC Troubleshooting	7/30
Docking and High Throughput Drug Discovery	7/31
Configuring Windows 95 for PARACHUTE Network Access	7/31
Introduction to HTML	8/4
Netscape for the PC	8/5
Windows NT Overview	8/5-6
LISTSERV Electronic Mailing Lists	8/6
Electronic Forms Users Group	8/6
Advanced Features of HTML	8/7
Using SAS to Publish Web Pages	8/7
Macintosh Shortcuts and Techniques II	8/8
Relational Database Design	8/11
Using Photoshop for Acquiring Scientific Images	8/12
WIG - World Wide Web Interest Group	8/12
DB2 & Oracle Data Definition, Manipulation & Control	8/13-14
Database Technology Seminar	8/15
Configuring Windows 95 for PARACHUTE Network Access	8/18
Account Sponsor Orientation	8/19
Java	8/19-22

NIAAA's Joseph Weeda Dies

Joseph J. Weeda, Sr., who spent 21 years with the National Institute on Alcohol Abuse and Alcoholism, died June 28 from complications of diabetes. He was 53.

He joined NIAAA as a grants management specialist in 1976, and was promoted to chief of NIAAA's Grants Management Branch in 1983. During his government career, he received several special achievement awards in recognition of his outstanding performance as the institute's grants management officer. Before joining the government, Weeda was an accountant at George Washington University, where he later held the position of assistant comptroller. Subsequently, he was an assistant comptroller at Marriott Corp.

Born in New York and reared in Washington, D.C., Weeda graduated from Benjamin Franklin University and Strayer College. He is survived by his wife, Penelope, two daughters, a son, a stepson, his mother, two brothers, and a sister. ■

Mid-Pike Parking Lot Repaired

The Montgomery County government's division of traffic and parking services is currently repairing the Mid-Pike Plaza parking lot. The first phase includes constructing four kiosks, two for NIH employees. The next phase is to repair potholes, smooth, seal and stripe the lot. New signage will be erected during September. Construction barrels and flagging will direct commuters to available parking areas on the lot. This project should be completed by mid-September.

The Office of Logistics Management appreciates NIH'ers' patience and cooperation and assures customers that shuttle service will continue, uninterrupted. If you have any questions or concerns, call their hotline, 6-5326.

Preschool Teacher Laurie Odenheim Mourned

Laurie Odenheim, a teacher at the NIH Preschool for 18 years, passed away on Tuesday, July 8, in her sleep. Laurie was a skilled musician who spoke several languages. She touched the lives of many children and their families at NIH and will be greatly missed. School officials will be planting a tree in her memory at the preschool on July 31 at 5 p.m. The school invites friends and alumni to join them at that time to remember Laurie.

Groundbreaking for Bldg. 50 Follows Tree-Clearing Effort

Nifty 50 Fact

Some 5,000 truckloads of soil must be removed during excavation for Bldg. 50. The site was a swamp years before it became parking lot 13C, and was filled in with soil dug out during construction of the original Bldg. 10 in the late forties. So the dirt is making its second trip in 50 years, noted Dr. Michael Gottesman, NIH deputy director for intramural research, who gave the keynote address July 17.

If the science that's conducted in it is as hot as the day ground was ceremonially broken for its construction, Bldg. 50 has a rich future indeed. The Consolidated Laboratory Facility—a structure that will be about the same size as the Conte Bldg.—will house some 560 scientists from five institutes, plus space for the Director's Reserve. Bldg. 50 will complete the round-robin renovation of lab structures on campus begun in the early eighties and feature the latest in amenities. "It represents a transition for NIH," said Dr. Ruth Kirschstein, NIH deputy director. "It will take us from the past into the future." Among the officials wielding spades on July 17 were (from l) Dr. Michael Gottesman and institute representatives Drs. Ira Levin (NIDDK), Edward Korn (NHLBI), Thomas Kindt (NIAID), Eric Green (NHGRI), Anthony Fauci (NIAID) and Stephen Katz (NIAMS).

***Who knew** there were so many trees that had to be removed from parking lot 13C in order to prepare for Bldg. 50 excavation? Here a power chipper spews out an ever-rising mound of mulch as whole trees are fed into its maw.*

As the chipper spits out a stream of mulch, a power loader (l) adds more downed trees to the conveyor belt feeding the contraption.

A workman prepares fencing along the perimeter of the Bldg. 50 worksite.

A root ball from an upturned tree sits outside where cars used to bake in the lot across from Bldg. 12A (rear).

Seminar on Bid Protests

The Bethesda/Medical chapter of the National Contract Management Association is hosting a brown bag lunch seminar entitled, "Reinventing Bid Protests," on Wednesday, Aug. 20 from 11:45 a.m. to 1 p.m. in EPN, Conf. Rm. H. Speaking will be Barbara Robbins, HHS Office of General Counsel. For more information call Sharon Miller, 5-3783.