

THE NIH RECORD

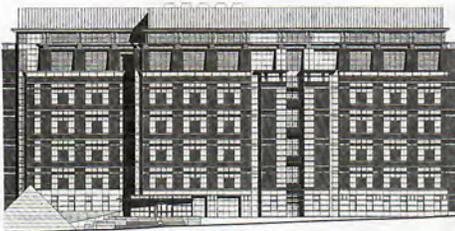
Still The Second Best Thing About Payday

'Consolidated Laboratory Facility'

Bldg. 50 To Rise From Parking Lot 13C, Starting Next Month

What is today a parking lot for some 350 cars at South and Center Drives in front of Bldg. 12 will soon be transformed into a giant hole in the Earth from which will rise in the next 3 years a new 5-story, 250,000-gross-square-foot laboratory building, Bldg. 50, that will provide renewal space formerly provided by Bldgs. 2, 3, 7 and part of 6.

The Consolidated Laboratory Facility, to use its formal name, is proceeding "on schedule and pretty much at budget," reports Architect Frank Kutlak, project officer in the Office of Research Services' Division of



Drawing of north face, Bldg. 50

Engineering Services, and 6-year NIH veteran, whose last major project prior to this was coordinating occupancy of the Conte Bldg. (Bldg. 49). The practical lessons ORS learned from construction of 49 have aided planning for both 50 and the new Clinical Research Center, he said.

On a recent weekend, the proposed Bldg. 50 outline was painted on the 13C parking lot surface, which provided a reality check as to its size and location on the site and which drew much interest and comments.

From basement to penthouse, the new building incorporates features that may make it the envy of its peers.

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HIGHLIGHTS

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U.S. Department of Health and Human Services
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'A Watershed Moment'

Vaccine Research Center Gathers Momentum

By Rich McManus

Seated at the lip of the stage in Wilson Hall on May 28, wearing a loosened tie bearing a DNA helix motif and sipping from a can of decaf Sprite, NIH director Dr. Harold Varmus introduced a cadre of intramural scientists interested in AIDS to details of a plan announced by President Clinton 10 days earlier to launch a campaign to create an AIDS vaccine at NIH within the coming decade.

"Many of you were surprised and confused to see on C-SPAN that morning (May 18) that the President was planning to make NIH the site of a new AIDS vaccine effort," he acknowledged to the crowd of about 100 scientists who had been hastily gathered to a "town meeting" discussion of the proposal's origins and future. He traced the start of the initiative to an evaluation of the NIH AIDS research effort 2 years ago by a panel of nongovernment experts chaired by Princeton's Dr. Arnold Levine. Among the 14 major recommendations emerging from the "Levine report," was that vaccine research be given a stronger priority.

Last December, at a White House meeting with the President and
SEE VACCINE CENTER, PAGE 6

2000 Poses No Future Shock

With OIRM Plan, Computers Can Count Down with Confidence

By Carla Garnett

Can your computer accurately distinguish between the years 1900 and 2000 when it sees a date like 01/01/00? If not, your information may be processed incorrectly. "00" dates are already beginning to show up as people ask their computers for 3-year projections on contracts, budgets and depreciation.

Online banking, payroll checks and calculations based on birth date, like retirement or Social Security benefits, can be affected by what is widely known as the "Year 2000 Problem." Every business, organization and institution is, or should be, casting about for solutions. But don't you worry—the Office of Information Resources Management, which is handling the NIH response, is ahead of the game.

The Sky Is Not Falling at NIH

As might be expected, the year 2000 problem is being cursed as
SEE COUNTDOWN TO 2000, PAGE 4



Michele Russell-Einhorn has joined the NIH Office for Protection from Research Risks as director of regulatory affairs. She comes from the Office of the General Counsel, HHS, where she served as the legal ethics attorney for NIH since August 1991. Before that, she lived in Massachusetts, where she practiced in the litigation department of the law firm of Brown, Rudnick, Freed and Gesmer and later, in the City of Newton law department. Prior to leaving OGC, she received an NIH Award of Merit for her work in the Ethics Division.

Bye-bye "8"

Dial 9-1 for Long Distance

As of June 30, all domestic long distance calls should be dialed as "9-1" and then the 10-digit phone number. This is a change for those members of the NIH community who are used to dialing "8" plus 10 digits for long distance access. The change is being made to eliminate needlessly routing local calls to the FTS 2000 network.

According to the ORS Telecommunications Branch, NIH is spending as much as \$8,000 per month on local calls that are mistakenly routed onto the FTS 2000 long distance network by dialing "8" plus a local area code. The new dialing pattern will prevent these unnecessary long distance charges. The elimination of the initial "8" will also free up "8" for future use by NIH as an internal phone exchange.

NIH'ers should reprogram all telephones, fax machines, and computer programs and scripts to dial "9-1" then the 10-digit number. This only applies to procedures for domestic long distance calls. Procedures for local and international calls (including Canada) are unchanged.

If you have any questions about dialing long distance or other telecommunications issues, call TCB at 5-HELP. ■



The first annual Ernst Freese Memorial Lecture of the NIH Neuroscience Series took place May 23 in Lipsett Amphitheater and featured Dr. Fred "Rusty" Gage (second from l), a pioneer in developing strategies to induce regeneration in the nervous system. He was introduced by NINDS director Dr. Zach Hall (l). The late Dr. Freese made major contributions to our understanding of heredity in the early fifties with his mutational analyses, and continued to make advances in the areas of bacterial and yeast sporulation. As director of the basic neuroscience program in NINDS, Freese was also credited with supporting and carrying out molecular neuroscience in NINDS. His widow, Dr. Katherine L. Bick (second from r), is a former NINDS deputy director. His son, Dr. Andrew Freese (r), a neurosurgeon and researcher at the University of Pennsylvania, endowed the lectureship.

NCCR Launches Shared Resources Web Site

Before your laboratory buys any more equipment, computers, or chemicals, visit NCCR's Shared Resources Database on the Web at <http://www.ncrr.nih.gov/resource.htm>. This new database offers intramural investigators the opportunity to exchange equipment, share resources, and cut procurement costs. Any biologicals, chemicals, plasticware, glassware, or equipment that are unused or no longer needed may be posted and made available to other laboratories at NIH. Also, lab groups seeking a particular resource can submit a request through this site to find out if another lab has what they need.

Describing this virtual one-stop shopping center, Dr. Michael Gottesman, NIH deputy director for intramural research, says, "The new Shared Resources Database will make it possible for NIH researchers to find equipment and research material already on the NIH campus. It will save time and money. I urge everyone at NIH to check this database prior to purchasing."

To post an available or desired item, simply select the appropriate path and provide information on the resource you wish to advertise or find. If you have any questions or comments, contact Mike Lenardo (fax: 2-8530, email: Lenardo@nih.gov) or Ronald Edwards (fax: 2-0006, email: Rone@nih.gov). NCCR developed this site in collaboration with NIAID, DCRT, and NIH Property. ■

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Fandom of the OPERA

Extramural NIH Lets Pixels Do More Peer Review

More than 200 members of the NIH extramural community turned out May 13 to learn from NIH's Office of Policy for Extramural Research Administration (OPERA) that reinvention is alive and well at NIH, with the strong support of its principal patron, Vice President Al Gore. Indeed, the pressures to slim down and sleeken may be more numerous now than when Gore first unveiled the National Performance Review at the outset of the Clinton administration.

According to OPERA Director Geoffrey Grant, a whole host of factors are combining to force NIH to reevaluate the way it does business with its public—mainly scientists at academic medical centers. Although reinventing government is still a watchword in Washington—"It's not dead and it's not going away," declared Gore spokesman Stephen Butterfield—it has been joined by such "drivers for change" as a stringent review of administrative costs at NIH now ongoing at the behest of Rep. John Porter (R-Ill.), a cap of 26 percent on administrative costs borne by universities, the new Government Performance and Results Act that asks "What did you get in the way of outcome from the investment of public funds?", and greater competition for federal funds, among other challenges, said Grant.

Sporting a patriotic Old Glory tie, Grant equated reinvention with electronic research administration (ERA), a method of using computers and the Internet to trim the time it takes for NIH to review applications and proposals from potential grantees, and make awards to the most meritorious submissions. Subsequent progress reporting (and in some happy cases, invention reporting) can also be accomplished via computer. With certain expedited awards, peer review-by-pixel aims to reduce the time it now takes for NIH to respond to a fine idea—what traditionally took 9-18 months to turn around might be reduced in the future to 4-6 months, Grant said.

The training seminar for extramural science administrators featured presentations by project leaders on a number of priority initiatives for FY 1997: progress reporting/scientific coding, modular research grants, receipt and referral, and expedited review/award. Presentations on IMPAC II and the ERA "Commons" project rounded out the agenda.

Despite their different focuses, each project shares a unifying, and occasionally rather touchy, point of view: beneath the euphemism of "reengineering" lurk such tough questions as "What do we really need to know from each other and when?", "Is the labor fairly divided between NIH'ers and clients in academia?" and "Can we waste as little of our time

as possible on routine administration?"

The feistiness inherent in streamlining (which NIH has cleverly turned to its advantage by asking "Why bother?" at every laborious step of the review/award process) emerged subtly during the meeting. An NIH'er stood up to ask NPR's Butterfield what rewards might accrue to the savvy reinventor. "There is no reward for effective reinventors," admitted the spokesman. "The reward that people take away from this is very much an internal one. No one is getting more money. It's exclusively a psychic reward of better serving the American people." NIH staff seem to be self-motivated to do the right thing, he said, by making sure that no more funds than are absolutely necessary are devoted to administration rather than research.

The NIH'ers proceeded from the main lecture hall at Natcher to the balcony breakout rooms to steep themselves in details of specific reinvention projects. Online demonstrations helped walk attendees through facets of ERA, screen by screen.

"Increasingly," said Grant, "we're talking about collaborative research administration...and seeking more opportunities to talk about how we're doing our work together [with universities]. We're developing business rules, and sharing activities more than ever before."

Attendees learned that reinvention is, at the very least, trying to develop better relationships between NIH and its extramural partners while reducing the time and costs of doing business for all concerned.—

Rich McManus ■

Dr. John J. McGowan has been named deputy director of the National Institute of Allergy and Infectious Diseases, where he will provide leadership for scientific and extramural policy issues and senior level interactions with other NIH components and the NIH Office of the



Director. A virologist, he started his NIH career in 1986 as one of the first staff members in what is now NIAID's Division of AIDS. He established the Developmental Therapeutics Branch and served as its first chief. Later he became director of the Basic Research and Development Program in the Division of AIDS. In 1991, he was appointed director of NIAID's Division of Extramural Activi-

ties. In that role, he was widely recognized for designing and implementing reinvention experiments that improved the grants process at both the institute and NIH levels. The Mobile, Alabama, native received the NIH Director's Award in 1991 for "superb leadership, resourcefulness and innovation."

Kaiser Plan Service Day

Kaiser Permanente Health Plan will be on the NIH campus Thursday, June 26, to assist plan enrollees who have claims or enrollment problems or questions. A plan representative will be available from 9 a.m. to noon in Bldg. 31, Conf. Rm. 7. No appointment is necessary. Assistance will be provided on a first-come, first-served basis.

COUNTDOWN TO 2000, CONTINUED FROM PAGE 1

everything from an impending disaster of monumental proportions to a ticking time bomb. Without question, it will be a most expensive and inconvenient computer bug. Businesses that can correct faulty year 2000 programming and help avert catastrophe are already raking in the money.

NIH, however, has been preparing for this since about 1991, and OIRM officials are relying on more than an ounce of prevention. According to its "Y2K" management plan, the problem "is neither a crisis waiting to happen nor a situation with easy fixes."

Explains Jaren Doherty, director of OIRM's Division of Security Standards, Policy, and Planning, "It's not technically difficult to correct noncompliant computers. We're looking at it as an NIH-wide management issue due to the interconnections

between computer systems via networks. We simply want employees to be aware of the possibilities and of the resources we have put in place to help with solutions."

Under the leadership of Tony Itteilag, NIH's interim chief information officer, and Dona Lenkin, acting director, OIRM, a five-phase strategy has been developed for seeing the agency safely through and beyond New Year's Day 2000. The first phase is awareness—communicating with employees, followed in due time by phases 2 through 5: assessment—determining which hardware and software are affected; renovation—fixing or replacing the affected ones; validation—putting the fixes to the test; and finally by Dec. 31, 1998, implementation—using the reprogrammed resources. Representatives from each ICD comprise a Y2K work group; members are available to answer individual questions about personal worksta-

tions and networks. In addition, a special Web site (<http://www.oirm.nih.gov/y2000/>) on OIRM's home page has been activated to give status reports and other information on the project.

Microchips Off an Old Block

To many folks, Y2K may appear to be a tremendous oversight. How could the computer industry not have foreseen such a universal programming gaffe? A short history lesson puts it in perspective. Way (way!) back when every byte of computer storage was precious, a space-saving programming trick—dropping the first two numbers of the date, abbreviating, say, the year 1951 to "51"—was used. With computer advances occurring at the speed of light, who would have thought the same basic practice would be in use nearly 50 years later?

Since the olden days, computers have progressed to much faster and higher capacity magnetic media—no longer is there a need to conserve field space. Left most vulnerable are large scale systems with older applications and DOS-based machines of the 486 ilk and older; the majority of Macintosh computers will not need conversion. Indeed, many nineties generation machines already use 4-digit date technology, but many—those equipped with older microchips, but still among retail stock—do not. The Y2K challenge is to upgrade computers with old microchip technology and old applications—called "legacy systems"—in time to avoid a crisis.

Let the Buyer Beware

Doherty recommends employees do a couple of things to safeguard their computer resources and information. The first is become acquainted with your individual ICD work group representative (see sidebar). If you have concerns about a particular device's Y2K compliance status, don't try to test it yourself—you could wreak havoc with your data, or your network connections. Instead, notify your ICD rep, who'll know whom to contact for testing, and subsequent followup, if needed.

Also, if a computer purchase is imminent for your organization, make sure all new merchandise—not only computer hardware and software, but also printers, fax machines, certain cameras, automatic animal feeders and any other equipment that uses microchips to process dates—and their warranties are compliant. Specific language and guidelines for federal computers and contracts can be found online at the OIRM Web site above.

Party Like It's 1999

Finally, Doherty advises, keep informed, but relax. Neither NIH nor any other organization of comparable size and complexity is going to be ready for 2000 overnight. "It is OIRM's intention to coordinate the ICD work group and share information on this issue through every phase. The work group will help each ICD identify and correct possible problems. Our strategy is to prevent year 2000 problems before they can harm the NIH mission." ■

Year 2000 Work Group On the Job

The following employees serve on NIH's year 2000 work group and are available to answer questions on testing and upgrading workstations and other electronic devices.

ICD	Contact	Phone
CC	Warren Moyer	6-5176
DRG	Jan Levy	5-0920
DCRT	J. Cliff Smyers	6-7346
DCRT	Rick Duhn	2-1431
DCRT	Jeff Schriver	6-5693
FIC	Julie Burke	6-4625
NCI	Betty Ann Sullivan	6-1038
NCRR	Ron Edwards	6-4501
NEI	Carolyn Bealle	6-2194
NHGRI	Carol Martin	2-5348
NHLBI	Ralph Van Wey	5-0116
NIA	Maria Siegert	2-2714
NIAAA	Susan Teper	3-1300
NIAID	David Wise	6-6490
NIAMS	Brenda Vanags	6-0799
NICHD	Lynda Bennett	2-1978
NIDA	Connie Latzko	3-6910
NIDCD	Brenda Grimes	2-1128
NIDDK	Anne Robertson	6-9579
NIDR	Thomas Murphy	4-1259
NIEHS	Robert Hoppin	919-541-5786
NIGMS	Thomas Mitchell	4-2680
NIMH	Dawn Farr	3-4535
NINDS	Gahan Breithaupt	6-9244
NINR	Nancy Chamberlin	2-1446
NLM	Bob Kicklighter	2-1697
OIT/OD	David Wiszneauckas	2-0706
ORS	Linda Alger	6-1004
ORS	Richard Charles	2-3332
OIRM/OD	Jaren Doherty (Chairperson)	2-4445
OIRM/OD	Marilyn Allen (Staff Support)	2-4452



Folate RDA May Be Insufficient

A study of Irish women indicates that current dietary standards for the nutrient folate—known to prevent a devastating class of birth defects and possibly cardiovascular disease—do not take into account the increased folate requirements of a large minority of people genetically at risk for folate deficiency.

The study, published in the May 31 issue of the *Lancet* and funded in part by NICHD, shows that a much greater number of women than was previously believed are genetically at risk for an enzyme defect that causes a vitamin deficiency that predisposes them to having children with a neural tube defect—a debilitating class of birth defects affecting the brain and spinal cord.

“This challenges the assumption underlying the recommended daily allowance—that virtually everyone can take the same amount of a vitamin and do fine,” said Dr. James L. Mills, chief of NICHD’s pediatric epidemiology section.

He added that the study he and his colleagues conducted focused solely on women, but the same genetic defect, present in men, might also increase the risk for heart disease, stroke and cancer of the colon.

Neural tube defects (NTDs) are a class of birth defects affecting the brain or spinal cord. They occur in about one per thousand pregnancies in the U.S. each year. Among the most common NTDs are spina bifida, in which a piece of the spinal cord protrudes from the spinal column, causing paralysis below the protrusion, and anencephaly, a fatal condition in which the brain fails to develop normally.

Currently, the National Academy of Sciences’ recommended daily allowance (RDA) for folate is 400 micrograms per day for pregnant women and 180 micrograms for other adult women and 200 micrograms for male adults. The results of the current paper suggest that people having two copies of the abnormal gene may need more folate than these guidelines specify to compensate for their genetic deficiency. Additional studies will be needed, however, to determine exactly how much more folate they would require.—Robert Bock ■

Long, Short Sleepers Needed

The Clinical Psychobiology Branch, NIMH, needs subjects who habitually sleep 9 hours or more, or 6 hours or less, age 21-30, for a five-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. ■

Hearing Test Identifies Problems in Children With Language Impairment

A hearing test has uncovered auditory processing problems that may be at the root of a childhood language disorder that often affects school performance, according to a study reported in a recent issue of *Nature*.

The same hearing test has the potential to improve the ability to identify these children, many of whom become discouraged with school because of frequent failures tied to their language difficulties.

The language disorder, known as specific language impairment (SLI), affects approximately 3 to 6 percent of children who are normal with the exception of varying degrees of difficulty understanding and expressing spoken language. Many but not all children who have reading problems fall into this category.

“SLI has sometimes been viewed as being specific to language,” said Dr. Beverly Wright of Northwestern University, primary investigator of the study. She used a different approach. “I decided to use my background in psychoacoustics to test the ability of these children to process nonspeech sounds or sounds unrelated to language,” she explained. “Our team was astounded by what we observed.”

What they found were clear and distinct differences between the ability of all children in their study with SLI to process brief tones in special sound contexts as compared to normal children. The differences depended on where the tones were placed in time in relation to other sounds as well as on the frequencies (itches) of the tones in relation to the frequencies of other sounds.

A child who has problems perceiving rapid sounds or sounds in certain contexts will have problems learning, understanding and expressing spoken language.

Wright and her colleagues are continuing research to train children to overcome their auditory processing difficulties and thus improve their language ability and subsequent school performance.

“This research offers a fresh approach to a perplexing problem that often leads to continual failure in school,” commented Dr. James B. Snow, Jr., director of the National Institute on Deafness and Other Communication Disorders, which provided partial support for this study.—Jo Bagley ■

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. ■



DRG director Dr. Ellie Ehrenfeld (r) congratulates Dr. Marjam Behar, a DRG scientific review administrator who was recently honored at the 213th American Chemical Society national meeting in San Francisco. ACS’s divisions of analytical and inorganic chemistry held a symposium in her honor, with sessions on advances in bioanalytical and bioinorganic chemistry. Behar was presented with a certificate of achievement for “dedication and distinguished service to the science and community of analytical chemistry.” Symposium participants were members and ex-members of her present special study section-6 in the biochemical sciences initial review group, and of the metallobiochemistry study section during the 1980’s.

VACCINE CENTER, CONTINUED FROM PAGE 1

Vice President, a group that included Varmus, HHS Secretary Donna Shalala, Office of AIDS Research director Dr. William Paul, NIAID director Dr. Anthony Fauci, CDC representative Dr. Helene Gayle and Patsy Fleming of the White House AIDS Office, discussed the AIDS issue, including hope for a future vaccine. Meanwhile at NIH, a case was being made for locating a major HIV vaccine initiative within the intramural program. It was an idea championed by Paul, who had proposed it initially among colleagues at NIH, and which gathered momentum as officials here recognized that the intramural program's traditional strength has been an ability to respond quickly, and with real muscle, to major research challenges.

"Bill Paul had recommended the historical strength of intramural NIH," said Varmus, "because it can respond quickly and put experts together in a useful, directed way. It can move much faster than grantees can."

"The idea percolated among several of us for awhile as we tried to imagine how to coordinate 15 different intramural programs. Eventually, two highly enlightened ICD directors, Dr. Fauci and Dr. Klausner, agreed to launch a joint venture."

Varmus joked that, on the day of their discussion with the President, Clinton had laryngitis, and was thus disposed to listen rather than talk. "We had an excellent opportunity to catch his attention," he noted.

The idea of a Vaccine Research Center "was rolling along anyway," continued Varmus, but the timing of the announcement by the President, although anticipated by NIH officials, came as something of a surprise. "The pressure is now on all of us to achieve something."

Resources for the new "center without walls" will come from NIAID and NCI through normal budget channels overseen by the Office of AIDS Research, noted Varmus, "but there will be a substantial degree of my office's involvement. I'll be somewhat in the spotlight."

"In fact, the White House has already called to ask 'How's it going?'," he divulged. "They want to know when Clinton can come out to cut the ribbon on a new facility."

Varmus said he anticipates "additional resources for a centralized [vaccine research] effort—including space, plain old money, and primates. Requests will undoubtedly outstrip the supply." He said a resource evaluation committee will be named shortly, and will make quick decisions on requests from researchers.

"Where is the center?" he asked rhetorically. "At this hour, in this room. In the next few months, we will identify space on campus for likeminded individuals to gather. There may be some construction in the long term. We are quite committed to

finding a residence for the center."

Varmus said a position description is currently being drafted for the new VRC director, a nationwide search for whom will commence soon. "The ideal candidate would be someone with experience in fundamental science, and some practical experience in developing a vaccine." The position will be advertised for 45 days. The newly named AIDS vaccine research committee, chaired by Nobel laureate Dr. David Baltimore, will also serve as a scientific advisory committee for the VRC.

Varmus christened the May 28 meeting as the first of a series of biweekly gatherings at which interested individuals can come to hear speakers and participate in discussion groups. A 7-person steering committee (including NCI's Drs. Jay Berzofsky, Genoveffa Franchini and Larry Arthur; NIAID's Drs. Bernard Moss, Malcolm Martin and Ron Germain; and OAR's Dr. Bonnie Mathieson) will invite speakers and moderate discussions. Varmus said the meetings will likely adopt a regular site and time.

The director then invited each person in the room to rise, identify him or herself and say a few words about HIV-relevant research interests. At the conclusion of this orientation, he remarked, "There's a lot of talent, energy and expertise in the room," and pointed out that it is not the usual thing at NIH for such a heterogeneous group to focus on "a community effort." He challenged the group to find

Some Facts About the New VRC...

In reaction to President Clinton's May 18 announcement that NIH would head an AIDS vaccine development effort, NIH director Dr. Harold Varmus said, "The President has set a difficult goal for the research community, but NIH is ready to bring its scientific expertise and resources into play. Creating a vaccine that will block the AIDS virus is a formidable scientific task. There is no guarantee that we can produce a vaccine within 10 years, but recent advances in immunology and virology have increased optimism that it can be done. NIH's new Vaccine Research Center will be a vital part of the effort."

Some facts about the VRC:

➔ The Vaccine Research Center, a joint venture of NCI and NIAID, will begin by incorporating a core of scientists with interest and expertise in immunology, virology and HIV vaccine research. "No one will be dragooned," observed Dr. William Paul, OAR director. "Membership will be by a combination of invitation and recruitment of volunteers."

➔ VRC's main focus will be to stimulate multidisciplinary research from basic and clinical immunology and virology through to vaccine design and production. It will integrate modern immunological science with detailed understanding of the

Injured on the Job?

Do you have a work-related upper extremity problem or injury, i.e., carpal tunnel syndrome, tendonitis, or repetitive strain injury of the fingers, wrist, elbow or shoulder? USUHS is conducting a study that includes a \$40 payment and opportunity to win \$500 in a study lottery. Volunteers must be ages 20-60, seen by a physician within the past month and currently working. Call (301) 295-9659.

out who among them is "willing to change direction."

OAR's Paul said, "I believe this institution has an enormous amount to offer. We all believe we can make a contribution." He said that, in anticipation that the VRC would come to fruition, OAR's budget preparation for fiscal year 1998 added a total of \$10 million, split equally, to NIAID and NCI AIDS research, but acknowledged "we don't yet know what resources will be required." The total FY 1998 proposal for both intra- and extramural AIDS vaccine research is \$150 million, an increase of about 33 percent over the past 2 years.

"We hope to get a vaccine for AIDS and also for other infectious diseases," Paul said. "I applaud the willingness of our researchers to join in our discussions and effort. I'm personally delighted to see this process moving forward."

Observed NIAID's Fauci, "There is a really extraordinary amount of good will, collegiality and cooperation" on this project so far. "It's not a superficial commitment. This is a unique, two-institute phenomenon. Rick [Klausner] and I are highly committed to making this center work."

He told the assembly of scientists, "We will be relying very heavily on the input of your ideas on directions, projects, themes. Don't hesitate to offer ideas."

Representing NCI director Dr. Richard Klausner,

pathogenesis of HIV infection, development of immunogens and vectors, and new approaches to vaccination.

➔ Physical, financial and human resources for the VRC will be provided by NCI and NIAID, whose AIDS research funds are allocated by OAR in consultation with the institutes. In FY 1998, OAR has proposed \$10 million for the VRC.

➔ At first, the VRC will be a "laboratory without walls," while lab space is sought in the vicinity of the NIH campus to bring scientists together. Later, as scientists are recruited from outside, NIH will consider building a structure on campus to house the VRC.

➔ NIH's response to the Levine report's instruction to bolster vaccine research is not limited to the VRC. A new grant program administered by NIAID will encourage novel approaches to AIDS vaccine work; about \$6 million in grant awards will be made later this year. Also, NIH and other administration officials are working with industry to overcome discouraging obstacles to investing in an AIDS vaccine. President Clinton has also said that he will try to enlist other nations in the vaccine effort during an economic summit in Denver this month.

Dr. George Vande Woude, a special advisor to Klausner, said, "This is a watershed moment for the institutes at NIH to provide an environment for this talented body of scientists to work together. I'm very touched by it. After many, many years here, it's impressive."

"This is the time, and this is the place to develop an HIV vaccine," declared Dr. Michael Gottesman, NIH deputy director for intramural research. "We'll do everything we can to make it easy, and possible, to make this center a reality."

Varmus said an email net will link interested intramural parties in the VRC, and emphasized that membership was by no means limited to those present; indeed, all of the officials who spoke welcomed helpful input from any quarter.

In response to a series of questions from the audience, Varmus and others assured that precedents exist for collaborating with industry on an eventual product, and that he and Paul can devote discretionary funds to the VRC. Varmus said ancillary goals on the way to creating an AIDS vaccine might include cleverer ways of making use of the human immune response so that vaccines might eventually be crafted for such diseases as tuberculosis and malaria. ■



NIH recently signed a memorandum of understanding with the Hispanic Association of Colleges and Universities (HACU), which administers a National Internship Program that will place about a dozen high achieving college students from Hispanic serving institutions in 10-week summer internships here. On hand for the signing ceremony are (from l) Ileana Trevino, acting director of NIH's Office of Equal Opportunity, NIH deputy director Dr. Ruth Kirschstein, HACU president Dr. Antonio R. Flores, and HACU governing board chair Dr. Thomas Arciniega. Now in its sixth year, the internship program has offered opportunities to more than 850 students nationwide.

Overweight Kids, Parents Needed

Healthy overweight children and normal weight children with two overweight parents are needed for an NICHD study investigating body composition and the causes of overweight: African American and Caucasian boys and girls, ages 6-10. There will be two visits, one during the day and one overnight. Participants receive a thorough evaluation for medical causes of overweight including a physical exam, blood tests, metabolism tests, and x-rays. This is not a treatment study. Participants will be paid. Call 6-4168 for more information. ■

BLDG. 50, CONTINUED FROM PAGE 1

Anticipating Tenants' Needs

When it was dedicated in 1994, Bldg. 49 was one of the first modern buildings at NIH for many years; DES carefully planned its design, construction and occupancy with the involvement of its future users. A year after they moved in, occupants were surveyed "to get feedback on what we did right, what we could have done better, and what we did not do so well," Kutlak reports. "Generally, we did pretty well, but some overall needs emerged: the users needed more localized break areas, they really wanted windows in their labs, and needed larger personal workstations and storage. This was a consistent theme and we got the message loud and clear."

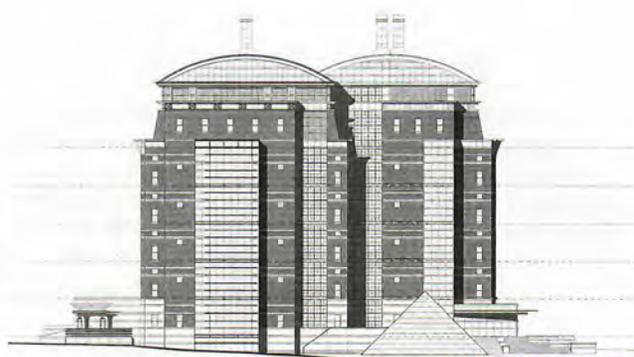
So Bldg. 50, whose principal occupants will hail from NIAID, NHLBI, NHGRI, NIDDK and

NIAMS, will feature more scattered break rooms with windows located on building corners, personal workstations adjacent to lab benches and plenty of windows in the labs.

The lab modules themselves will be designed on an "open plan" concept with personal workstations at windows on the outside walls. The lab space on each floor will be organized into "neighborhoods," six to a floor, to preserve the feel of the older, smaller buildings where most of the occupants are now, and avoid the Bldg. 10 "megabuilding concept." Each neighborhood will have six lab

modules and equipment support spaces. At the end of each lab peninsula bench is an aisle separating the lab bench from the personal workstations, which are located on the exterior walls with large windows; this responds to user requests for adequate workstations, computer space, and daylight in the labs. There will also be two corner offices in each neighborhood for principal investigators.

A main central vending and break room with microwave ovens will be located on each floor, with additional dedicated coffee/break areas at each neighborhood, all with large windows; and each floor will have two small balconies offering access to the outdoors. There will also be some 600



Planned east side elevation of Bldg. 50

lockers—"Just like high school," jokes Kutlak—so each building occupant can securely store personal items.

There is an "interstitial" space (intermediate walk on mechanical levels between the primary occupied floors) so DES maintenance workers can access utility systems without entering the labs. What Kutlak dubs "a double decker bus" concept is another lesson learned from Bldg. 49, which provided a mechanical corridor but shared it with the scientists. "However the sharing didn't work out between the two groups as well as envisioned," he said. So in Bldg. 50, scientists will have their circulation and service corridor on the main floor and the maintenance staff will have their own separate corridor in the interstitial space above.

The first floor of the brick and glass building will feature a central lobby, off of which is a large conference suite—capacity around 200—that can be subdivided into 4 rooms. A breakout and vending area is adjacent to this conference suite. "We learned from Bldg. 49 of the need for book return bins, mail boxes, telephones, Fed Ex boxes, newspaper vending machines, trash cans and recycling containers in the lobby," says Kutlak, "and in Bldg. 50 we are providing them in an alcove adjacent to, but visually screened from, the lobby."

Some Special Spaces

Around July 1, when ORS takes the site for construction, passersby will notice that excavation will be deeper than usual—26 feet to be exact. This is because the basement will also have a complete interstitial level. It will contain the mechanical and electrical support spaces, a rabbit and rodent facility with an animal biosafety level 3 suite, an isolation area and two transgenic procedure rooms. There is also a specialized high performance electron microscopy suite. Also, not directly beneath the building, but underground adjacent to it, will be a special nuclear magnetic resonance (NMR) facility that will house several gigantic NIDDK and NHLBI magnets for NMR spectroscopy; a 1 giga-Hz machine (not even built yet) will be hoisted into place using a removable roof hatch and a special rolling-beam crane built into the ceiling that will enable scientists

A Building, by Any Other Name...

There was a day when Bldg. 50, then in earliest planning stages, went by the name Bldg. 237. That's because it would replace the research lab space provided by Bldgs. 2, 3, and 7.

In general, those are still the source labs for future 50 occupants, but added to their number are NHGRI and, more recently, about one-third of the current occupants of Bldg. 6.

"The relocation of people from Bldg. 6 offers an opportunity for renovation of the original Bldg. 6 in the future," said Frank Kutlak, architect and project officer for Bldg. 50. "Most of the existing older buildings have 30 to 40 percent more people and equipment than their original mechanical systems can handle."

Current plans call for Bldgs. 2 and 3 on either side of Bldg. 1 to be renovated not as labs but as administrative offices, befitting their proximity to top administrators in 1.

to move and replace magnets with relative ease in the future. To prevent powerful magnetic fields generated by the NMRs from wreaking havoc on credit cards, pacemakers and metal objects, the NMR lab will be capped by a pyramidal structure that will prevent pedestrians at ground level from straying into the NMR fields.

In response to requests from users, the basement of Bldg. 50 will also include showers and lockers just off the elevator lobby for use by cyclists and joggers.

Much attention is being paid to the ground level appeal of 50 since it lies at a major entrance to the campus just west of the Medical Center Metro stop. The distinct pyramidal planes atop the NMR facility will greet visitors from the Metro stop, while a treed "civic plaza" will form the north face of the site.

"There will be an NIH information kiosk, lots of mature trees, seating areas and activity spaces leading up to a grand staircase to the building," Kutlak said. Tucked neatly into the area will be bike racks and boxes, a trellised walkway leading up the hill toward the Clinical Center and perhaps a small water feature.

At the south side, facing Bldg. 12, there will be a trellised terrace with a small amphitheater seating area (sitting atop the animal facility below) that will offer a pleasant outdoor space between Bldgs. 50 and 12.

There will be no cafeterias or R&W gift shops in the new building, noted Kutlak, because the budget and program did not permit them; but there are several such facilities located in nearby buildings.

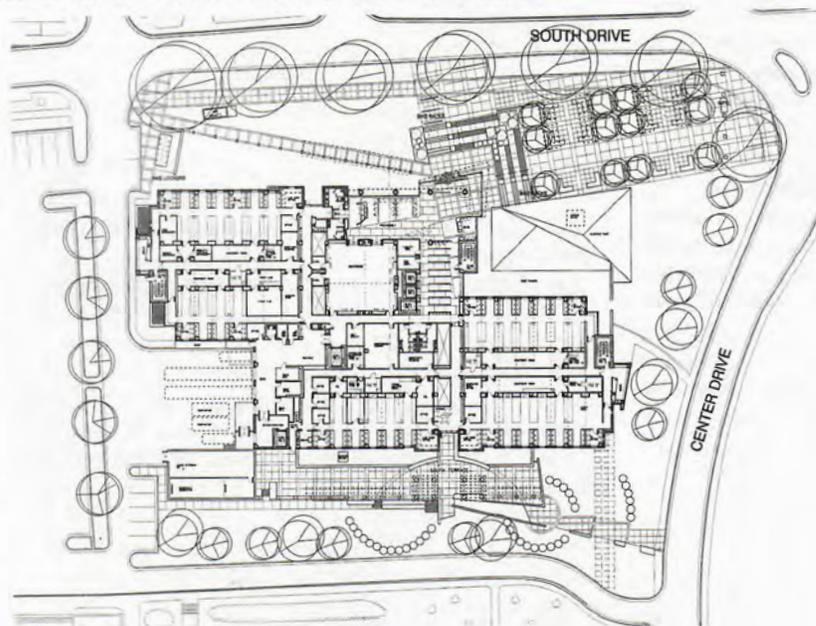
In addition to a deeper than usual basement, Bldg. 50 will have a higher than usual roof, or penthouse, because of a sophisticated air handling technology called "heat wheels" located there. "This energy recovery system, which relies on Teflon-coated wheels to extract and transfer energy from exhausted air to condition incoming air, will enable Bldg. 50 to save a significant amount of energy," said Kutlak. Further savings are expected from a network of "occupancy sensors" that will turn the lights off in rooms when no one is in them, as well as high-efficiency lighting fixtures, a variable air volume mechanical system and variable speed motors for pumps and fans. "Energy conservation at every opportunity has been an important design consideration in this project," he emphasized. "Laboratory buildings with once-through air and their 24-hour schedules have traditionally been energy hogs and we are trying to do everything reasonable and feasible to minimize this in Bldg. 50."

Order of Construction

Construction of Bldg. 50 will proceed in two phases: Phase 1 begins in July with site preparation work including fencing and demolition of the existing site, and relocation of major existing utilities—an 8-foot storm sewer bisects the site and

must be redirected, as must high voltage electrical lines and a sanitary sewer that crosses the parking lot. Then will come total excavation of the basement and construction of caisson foundations—the concrete stilts that reach down to bedrock to support the building's weight.

"In the next few weeks we'll be posting signs on all three entrances of lot 13C warning that the site will be taken for construction in early July," said Kutlak. ORS will also provide information on alternative parking recommendations. The roadway in front of 12A will be open throughout construction and afterward, but it will permanently become one-way for all traffic. Phase 1 construction is scheduled to



take about 7-8 months and will be completed in February 1998.

Phase 2 design development drawings, which define the concepts of the building including the structural and mechanical/electrical systems, walls, finishes, lab case work and the overall exterior appearance, have just been completed, Kutlak reports.

"The final phase 2 working drawing phase will be finished in late October 1997, and construction of the actual structure will begin around February 1998," he said. The building is slated for completion of construction in June 2000, followed by a few months of coordinated gradual occupancy. By fall of 2000 it should be fully occupied and operational.

"It's a very aggressive design and construction schedule," Kutlak allows, "but we're all pretty well organized. The overlap of phase I construction and phase 2 working drawings saves several months and allows us to build phase 1 now and then start the phase 2 construction in the early spring, which

View from above: The exaggerated "Z" shape of the new lab building can be seen clearly in this architectural rendering, which also shows where space has been planned for bike lockers (top left corner) and racks (top, along South Dr.). Circles at the site perimeter indicate tree placements. See the July 1 Record (and sidebar, next page) to find out how the coming parking crunch will be addressed.

Where to Park?

Temporary lots will add about 400 parking spaces to offset those lost by Bldg. 50 construction. Opening in early July, these will be south of parking lot 41B, east of the Natcher Bldg., near NLM, by the Pepco substation at Bldg. 17 near the Pike, and in front of the Cloisters. More parking plan details will appear in the next *Record*.

BLDG. 50, CONTINUED FROM PAGE 9

maximizes the year and hopefully allows us to get the building enclosed before winter of 1998. There has been a cohesive effort by all of the various NIH and ORS groups in the planning and design of the project (see sidebar below)."

The 'War Room'

Most of the Bldg. 50 activities are centered in a construction trailer, TR30B, which has a conference room whose walls are covered with drawings, flow charts and schedules. These story boards, or "card tricks," are color-coded to denote responsibility for each task and together yield a schedule to which multiple NIH teams, design consultants, and eventually the construction contractors, must adhere. "The schedule is computerized and we stick to it. We have tried to anticipate every activity in the project. That way, there's no 'Omigosh, my term paper is due tomorrow!'" Kutlak noted. "It is very intense. Each step of the way is calculated and evaluated. Now that we have essentially established it, it's just a matter of monitoring, controlling and maintaining it."

He likens each day of the project to games in a baseball team's season and stresses that if the season comes down to a final game, each previous game, including the first game of the year, was as critical as the final one. "All too often projects start out slow, people are not focused and waste precious time in the beginning, only to be compressed at the end. We are specifically avoiding this by pressing on the front end of the schedule," he said.

Several milestone events have marked the Bldg. 50 journey thus far: a series of "value engineering

Let's Hear It for the Team Players

A "process action team" composed of representatives of all the ORS support groups (safety, fire prevention, telecommunications, DSFM, MEB, FPP, DCAB, security) as well as the ICD representatives, logistics and contracting, has contributed to and reviewed the Bldg. 50 program and design progress.

A few people who deserve special credit are John Vilgos, chief of the DES Maintenance Engineering Branch, who has taken the time to attend field trips and planning sessions on mechanical issues; Cyrena Simons, the DES science design coordinator, who has led the lab design and programming efforts and served as spokesperson to the ICDs; and Barbara Taylor of Acquisitions Branch C, who as contracting officer has made special efforts to keep all of the contracting issues moving.

The project is being designed by Hansen Lind Meyer Architects with GPR Lab Planners and Ross, Murphy, Finkelstein Mechanical Engineers. CRSS Constructors is the government's construction quality manager, which is assisting Kutlak with the supervision and scheduling of the design and construction.

Drs. Ed Korn (NHLBI), Tom Kindt (NIAID), Jeff Trent (NHGRI), Henry Metzger (NIAMS) and Ira Levin (NIDDK), as well as Dr. Michael Gottesman and Steve Ficca, have also participated in NIH management oversight of the design process to date.



Future site of the new lab facility

sessions" held to ensure value in the design has "already saved quite a bit of money and time." Other planning sessions have realized benefits; for instance, by having the NIH electrical shop order the PILC (paper insulated, lead covered) high voltage electrical cable now, before it is actually needed, the project saved the 3-month delay it would have taken the contractor to special order the unique product during the phase 1 construction period.

"We've also had several meetings with the principal investigators, and we meet monthly with ORS upper management, the ICD's, and scientific directors to keep them apprised of our progress," Kutlak said. The design team solicited some 2,000 comments from NIH reviewers on the recent phase 2 design development submission alone.

A "process action team" comprised of reviewers from many disciplines has monitored all phases of planning and design. "This team serves as a two-way communication tool so we can keep everyone at NIH fully informed of the design and keep our design team informed of the needs of the various groups to avoid changes later," Kutlak explained. "We also have a veterinarians committee, composed of the various ICD vets who will be using the animal facility, that has participated in the programming and design of the vivarium."

With the aid of DCRT's Network Systems Branch, Kutlak maintains five different listservs with interested parties, including NIH'ers in neighboring buildings, so that everyone will be aware of activity that might affect their worklife. A Bldg. 50 Web site on the ORS home page is a wealth of information (<http://building50.dcrn.nih.gov/building50>) and is due for major revision this month. Once construction gets significantly under way, a digital camera will yield real-time photos of the structure on the Web site as it rises.

Kutlak beams with quiet pride at the accomplishments of the entire project team. "Getting to design and build such a major state-of-the-art building happens only once in a career for an architect. In fact, most architects don't ever get that kind of unique opportunity," he said. "It's very rewarding." ■

NIGMS' Monaghan Retires After 40-Year Government Career

Ruth Monaghan recently retired after 40 years of government service, 35 of which were spent with the National Institute of General Medical Sciences and its predecessor. At the time of her retirement, Monaghan, the last of NIGMS' founding employees, was deputy chief of the Grants Administration Branch and supervisor of its National Research Service Award Payback Service Center.



Ruth Monaghan

"Ruth Monaghan was one of the most skilled, knowledgeable, and genuinely helpful grants management officers at NIH. She was always available for advice both to grantee institutions and to investigators, and this advice was given in the most pleasant manner," said Dr. Ruth Kirschstein, NIH deputy director and former director of NIGMS.

Monaghan began her NIH career in 1957 after briefly working for the Department of the Navy. Starting as a GS-4 secretary in what was then the National Institute of Neurological Diseases and Blindness, she worked for the executive secretary of the neurology training committee.

Two years later, Monaghan transferred to the newly created Division of General Medical Sciences. It was there that she found her niche in the field of grants management.

In 1960, she moved to the Bureau of State Services in Washington, D.C., as a grants assistant. She transferred back to NIGMS shortly after the institute was established in 1963. For the next 34 years, Monaghan dedicated herself to working with NIGMS grants, holding progressively more senior positions.

Reflecting on her career at NIH, Monaghan claimed it was "simply a matter of working up the ladder" and "doing whatever needed to be done and fielding whatever problem happened to come up."

She fondly remembered her "early days" at NIH, including the period of time she worked in the Stone House for NIGMS' predecessor. She reminisced about the days of grants management prior to computers, calling it "awing" how far the field has progressed.

"We used to make multiple award statements with carbon copy paper, then later on ditto," Monaghan explained. "Some days we would come home covered in ditto ink. We went from ditto to photocopying to computers."

She served on the committee that developed the first *PHS Grants Manual* as well as the committee that did the original conversion of award statements to a computerized system. She also played an

integral part in the start-up of the NIGMS Minority Access to Research Careers Program.

Former coworker Dr. Charles Miller, who worked with Monaghan for more than 30 years, remembered her as "a highly dedicated person who gave tremendous assistance over the years.

"Ruth has been a key person in grants management and its dealings with all aspects of the institute," he said.

Dr. Sue Shafer, director of NIGMS' Division of Extramural Activities, said, "Ruth's knowledge and ability in the field of grants management brought a positive attitude to stewardship and accomplishing our mission," adding that Monaghan has been a great resource around NIGMS over the years. "If there was a problem or a new job, Ruth was always sent in to the rescue," said Shafer.

Monaghan received numerous awards during her career, including an NIH Merit Award in 1980 and an NIH Director's Award in 1992.

As for the future, she looks forward to having more time to "enhance her cooking skills," and plans to take a part-time job with a local business. She has always loved to travel, so future plans will undoubtedly include some small trips, and maybe one as far away as Australia.—Susan Athey ■

FIC Establishes International Intranet

In collaboration with ICD international representatives, FIC has established an international intranet site at: <http://silk.nih.gov/public/eue1juy.@www.bookmark.html>. The site contains links that will allow users to find addresses, telephone numbers and country codes worldwide; links to NIH international programs; links to grant-related databases and research opportunities that could be useful for NIH scientists, both domestic and foreign; and travel information, including travel warnings, the *World Fact Book*, Centers for Disease Control and Prevention travel information, embassy addresses and home pages, online language translation, a world clock, currency converter, foreign per diem rates, and even subway maps from around the world. For more information, call Irene Edwards, 6-2075.

DCRT Courses and Programs

All courses are on the NIH campus and are given without charge. For more information call 4-3278.

Configuring Windows 95 for PARACHUTE Network Access	6/18
Database Technology Seminar	6/20
BRMUG Macintosh Users' Group	6/24
Structural Motifs at Protein Interfaces	6/25
DHCP for Dynamically Allocating IP Addresses	6/26
NIH Data Warehouse: Budget and Finance	6/27

Female Volunteers Needed

The Behavioral Endocrinology Branch, NIMH, is seeking female volunteers ages 18-45 to participate in a 5-month study of the effects of reproductive hormones on brain and behavior.

Volunteers must have regular menstrual cycles with no changes in mood in relationship to menses, be free of medical illnesses and not taking any hormones or medication on a regular basis. They will complete daily rating forms and be asked to participate in one of several protocols. Payment will be in accordance with the duration of each visit and the type of protocol. For more information, call Linda Simpson-St. Clair, 6-9576.

NIH Celebrates National Police Week With Picnic on Patio

NIH's Division of Public Safety marked National Police Week on May 15 with exhibits, demonstrations and a shrimp fry on the patio of Bldg. 31A. Themed "The NIH Community and Police Working Together," the event gathered police officers, fire fighters and other emergency personnel from NIH as well as several other local and federal jurisdictions including the Maryland Department of the Environment's Hazmat Team, the Department of Agriculture and the National Institute of Standards and Technology. Displays on security devices and auto safety by Geico insurance, tours of emergency response vehicles, and demos by NIH's bomb and drug canine teams highlighted the event. Sponsored by the NIH Federal Credit Union, the lunch raised \$372 for the Friends of the Clinical Center.



NIH Police Officer Troy Garland helps Arlene Zonts of the Office of Management Assessment add to her collection of security materials. The doors of the Mobile Command Center were also opened to the curious.



Gail Becker (l) of Crime Prevention consults with Jean Brooks of Emergency Management; Naval Policeman Tony Bigham prepares NIH Transhare "super sippers," one of several giveaway items offered along with information pamphlets throughout the event.



NIH Police Officer James Kowal (l) greets colleagues from American University's bicycle police squad, Ofcs. Peter Feltham (c) and Andrew Morabito. Police units from George Washington and Howard universities and the Naval Medical Center also attended.



Authentic Louisiana Shrimp Fry: NIH Det. Jody Luke (l), his wife, Tammy Luke, also an NIH employee (and a Louisiana native) and Sgt. Lawrence Brown, prepare some 50 pounds of the succulent seafood. As usual, the lunch was by far the best attended display.

Chamber Music Concert, June 22

The Rock Creek Chamber Players will perform at 3 p.m. on Sunday, June 22 in the 14th floor assembly hall at the Clinical Center. This free public concert, sponsored by the recreation therapy section, will include Crusell's quartet in E flat major for clarinet and strings; Villa-Lobos' *Bachianas Brasileiras* No. 1 for eight 'cellos; Webern's *Four Pieces*, op. 7, for violin and piano; and J.S. Bach's cantata *Jauchzet Gott*, with soprano Jane White, trumpet, strings and continuo. For more information call (202) 337-8710. ■

Alzheimer Disease Family Study

If you are over 55 and have a first-degree relative (parent or sibling) with confirmed Alzheimer's disease (AD), you may wonder if your risk of the disease is increased. NIMH's Geriatric Psychiatry Branch is doing a long-term study of potential risk factors in first-degree relatives of AD patients. Evaluation includes memory testing and medical screening, to be repeated biannually. Normal controls, especially women 50-60, are also needed. If interested, come to a meeting Tuesday, July 8 at 12:30 p.m. in Bldg. 10's 4th floor clinic. Call Judy Friz for more information, 6-0948. ■

AALAS Seminar Set, Sept. 10-11

The 24th annual National Capital Area Branch AALAS Seminar will be held at Turf Valley Hotel & Country Club in Ellicott City, Md., on Sept. 10-11. This year's seminar is entitled, "Future Vision: Laboratory Animal Science—The Next Generation." A variety of sessions will be offered, including posters, workshops, and a look at women's contributions to science, engineering, invention and math. Abstract submission deadline is Aug. 1 with Dr. John Bartholomew, 6-9733, barthoj@dir6.nichd.nih.gov. Room reservations are available at 1-800-666-TURF before Aug. 15. For more information call seminar chair Dr. James Raber, 2-3909, fax 2-0035. ■