Still The Second Best Thing About Payday

Project Links Native Americans To Medical Information

Computers and the Internet—they’re everywhere, right?

Unfortunately, no. Some people have been left out of the digital revolution—the poor, the elderly, rural populations, and minorities such as Native Americans. But for one Indian community just miles from NIH, they’re right in the middle of the action.

Recently, the NIH Office of the Director and
 ridiculously

Dr. Rodney Hood, president of the National Medical Association, will be the keynote speaker for NIH’s Dr. Martin Luther King, Jr., annual observance on Friday, Jan. 12 at 11:30 a.m. in Masur Auditorium, Bldg. 10. The theme is “Achieving the Dream, Health Parity in the 21st Century.” Also, the nationally acclaimed Morgan State University Choir will provide musical tributes. For more information, contact Tor Moore at 496-8980 or Jacque Ballard at 433-3793.

Young men of the Piscataway tribe show off their heritage with traditional costumes.

NIH Gets Another Record Budget

Though the agency had to wait nearly 3 months for it, and through a string of continuing resolutions that went into the teens, NIH emerged Dec. 29 with another record-setting budget for fiscal year 2001, totalling $20.3 billion, or about $1.5 billion more than the President had requested. The increase of nearly 14 percent over last year’s mark of $17.8 billion keeps NIH on a pace legislators have set to double the agency’s budget in the period 1998-2003.

A new authorization law also directs NIH to create a new National Institute of Biomedical Imaging and Bioengineering, which will be headed during the implementation phases by Dr. Donna Dean, senior advisor to acting NIH director Dr. Ruth Kirschstein.

Every component of NIH but one will realize an increase, ranging from a high of 29.3 percent for the National Center for Complementary and Alternative Medicine to a low of 13.4 percent for NEI and NIGMS; the Office of the Director, however, loses 24.3 percent of its budget as the former Office of Research on Minority Health leaves OD for the new National Center on Minority Health and Health Disparities, which is budgeted at

At 81st ACD Meeting

Budget Was a Struggle, But New Center Plans Are Clear

By Rich McManus

Way back in the last millennium—say, about a month ago—NIH acting director Dr. Ruth Kirschstein convened the 81st gathering of the advisory committee to the NIH director amid great uncertainty over the FY 2001 budget, which was then more than 2 months overdue. But that was just a passing cloud on an agenda that included much that was crystal clear: NIH guidelines on sharing of research tools are gradually gaining acceptance, NIH’s “Results Act” report card gained first honors, the nation’s blood supply is “amazingly safe,” the new National Center on Minority Health and Health Disparities has a man and a plan, and the ACD’s recommendations on consensus development conferences have a new science-based confidence.

The President had asked for a 5.6 percent increase in NIH’s 2001 budget, and Congress, intent on its goal of doubling NIH’s appropriation within 5 years, wanted to keep NIH on track for this goal—now in its third year—by adding 15 percent. But after
Female Paid Volunteers Needed

Are you female, 18 to 35 years old, in good health and not on birth control pills? You may be eligible to participate in a study of commonly prescribed medications. The study involves multiple visits to the Uniformed Services University (next to the Naval Medical Center, across the pike from NIH) over a 3-month period.

Earn up to $880 and get a free physical exam. Call (301) 319-8204 for more information and a preliminary telephone screening.

NIGMS Minority Program Directors Honored

Four NIGMS minority program directors were among year 2000 recipients of the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. The awards recognize influential institutions and individuals who have been leaders in encouraging minorities, women and disabled persons to pursue careers in the scientific, engineering and technical labor force.

The recipients included Dr. Glenn Kuehn, a professor of biochemistry at New Mexico State University, Las Cruces; Dr. Michael Summers, a professor of chemistry at the University of Maryland, Baltimore County; Dr. Luis Villarreal, a professor of molecular biology and biochemistry at the University of California, Irvine; and Dr. Maria Elena Zavala, a professor of biology at California State University, Northridge.

Kuehn directs a Bridges to the Future program and a Minority Biomedical Research Support (MBRS) program; Summers directs an MBRS program; Villarreal directs a Bridges to the Future program and an MBRS program; and Zavala directs a Bridges to the Future program, as well as Minority Access to Research Careers and MBRS programs.

The awards were established by the White House Office of Science and Technology Policy in 1996 and are administered through the National Science Foundation. Each year up to 10 individuals and 10 institutions are honored with a $10,000 grant and a commemorative Presidential certificate in recognition of their mentoring activities.

Introduction to Clinical Research

Registration for the 2001 “Introduction to the Principles and Practice of Clinical Research” class, to be held Jan. 30 to May 22, is open until Jan. 19. Classes will be held on the NIH campus on Tuesday and Wednesday evenings from 5:30 to about 6:30 (some sessions will last until 7 p.m.). Optional breakout sessions held on Monday evenings will allow participants to explore specific topics in greater detail. There is no charge for the course, but enrollment is limited. A certificate will be awarded upon successful completion of the course, including a final exam. For more information or to register, visit http://www.cc.nih.gov/od/core.
John Scott Award Goes to NIDDK's Bax
By Anna Gillis

NIDDK's Dr. Adriaan Bax is keeping fine company. He recently joined the ranks of scientists and inventors who have won the John Scott Award. Previous winners include Thomas Edison, the Wright brothers, Jonas Salk, and Nobelist Marie Curie, John Bardeen, Baruch Blumberg and Kary Mullis.

The award, which is given by the board of directors of City Trusts in Philadelphia, recognizes Bax's contributions to structural biology. Bax, whose techniques are used by scientists all over the world, was cited for developing methods to determine protein structures in solution using nuclear magnetic resonance (NMR). In naming him, the board said, "His research has enabled the three-dimensional structures of large proteins to be obtained at atomic resolution with an accuracy that was inconceivable just a few years ago." Bax received his copper medal and $10,000 recently at a ceremony at the College of Physicians in Philadelphia.

Ad Bax is chief of the biophysical nuclear magnetic resonance spectroscopy section in NIDDK's Laboratory of Chemical Physics. A physicist by training, he has sought ways to use NMR to get better ‘pictures’ of large biomolecules such as proteins and nucleic acids since his arrival at NIH in 1983.

NMR, like magnetic resonance imaging (MRI), is a method that relies on radio waves emitted by atomic nuclei in a sample or subject when placed in a very strong magnet. Whereas MRI obtains its image contrast primarily from water hydrogens and the changes in the amount of water at various positions in the human body, NMR derives its molecular image differently. NMR investigators dissolve their sample in a liquid, usually water, and then put this into a super-strong magnetic field. The samples are showered with radio waves that are absorbed and emitted in patterns. Typical proteins emit thousands of signals, one for every hydrogen atom in the molecule. The intensity and interrelationships of the signals contain information about the distances among the various hydrogens in the molecule, provided they are close. From that information scientists reconstruct the protein's shape.

The idea is straightforward, but, in practice, identification of the individual signals is so complex that only the smallest proteins can be studied this way. Key to the advances developed by Bax and his colleagues in extending NMR to larger proteins is the replacement of the standard, "NMR-invisible" carbon and nitrogen atoms in the protein with stable isotopes that provide additional NMR signals.

Remarkably, Bax showed that these additional signals allow for new experiments that make the analysis of all the signals much simpler. The improvement can be compared to the difference between putting together a jigsaw puzzle relying just on the shape of the pieces and putting it together using the pieces' shapes and colors.

NMR structures of proteins determined simply from distances between hydrogens also tend to be of limited resolution, somewhat like a photograph that is slightly out of focus. To produce sharper images, Bax and his associate Nico Tjandra (now in NHLBI) developed another method that determines the orientation of chemical bonds relative to the magnetic field. Normally, molecules tumble randomly in solution and generally their chemical bonds are not oriented to the magnetic field. But Bax showed that alignment of proteins can be induced by adding microscopically small, disc-shaped fat particles known as bicelles to the sample. These bicelles are weakly magnetic and therefore align with the magnetic field, causing the nearby proteins to align also. This method is now used worldwide to create better pictures of a wide range of proteins.

Another advance by Bax's group allows researchers to quantify the flexibility of proteins using NMR. The methods were used in a recent collaboration between the National Institute of Dental and Craniofacial Research and NIDDK. The study of HIV protease highlighted how the enzyme changes its mobility upon binding various types of drugs.

With his first batch of scientific problems solved, Bax is looking at the next technical hurdles. "We need to make protein structure determinations faster. Right now, it can take 6 months or a year to get a structure. We also need higher quality pictures, and we would like a way to get to membrane proteins." Proteins moving and signaling through membranes are especially difficult to study using NMR because they are insoluble in water.

Bax attributes much of his success to the generous support he has received from NIDDK and NIH's HIV-targeted antiviral program. "Much of this work was based on close collaboration with the other protein NMR groups at NIH, in particular those of Dennis Torchia in NIDCR and Marius Clore and Angela Gronenborn in NIDDK," says Bax. "And none of this would have happened without a large number of very bright postdocs."

In addition to Bax, Dr. Clay M. Armstrong of the University of Pennsylvania and Dr. Mary-Dell Chilton of Novartis Agricultural Biotechnology Research, Inc., were named winners of the Scott Award. The award was created in the early 1800's with funds from John Scott, an Edinburgh druggist, who called upon "the Corporation of Philadelphia entrusted with the management of Dr. [Benjamin] Franklin's legacy" to bestow a prize not to exceed $20 upon "ingenious men and women who make useful inventions." The fund has since grown.
Grantees Win Medal of Science

Two NIH grantees were among 12 scientists awarded the National Medal of Science—the government's highest scientific honor—by President Clinton on Dec. 1.

NIGMS grantee Dr. Ralph F. Hirschmann, the Rao Makineni professor of bioorganic chemistry at the University of Pennsylvania, was honored for work focusing on organic molecules that mimic naturally occurring peptide hormones. These molecules have potential therapeutic uses because they bind to hormone receptors and because many of the molecules' properties can be optimized through appropriate chemical modification.

Psychiatrist Dr. Nancy Andreasen of the University of Iowa College of Medicine won for her groundbreaking work in schizophrenia and for joining behavioral science with neuroscience and neuroimaging. She is the Andrew H. Woods chair of psychiatry at UI and a long-time National Institute of Mental Health grantee.

Congress established the National Medal of Science in 1959, a Presidential award for individuals "deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical or engineering sciences.” Recognition expanded in 1980 to include social and behavioral sciences. Since its inception, 374 scientists, whose achievements have spanned decades of research, have earned this honor.

FEW Chapter Honored, Sets Next Meeting

The Bethesda chapter of Federally Employed Women (FEW) received seven national awards at a regional board meeting held recently. It won outstanding chapter, among other honors. Two members, Angela Magliozzi and Genia Bohrer, received awards for their personal contributions. Magliozzi, an employee of NIAID and former chapter president and lifetime member, received the chapter merit award along with Bohrer, immediate past president and ORS employee.

The Bethesda chapter meets the second Tuesday of each month from noon to 1 p.m. on the NIH campus. It also holds bimonthly dinners, open to the public. The next dinner will be at La Panetteria on Cordell Ave. in Bethesda on Jan. 29 at 5:30 p.m. Featured will be nutritionist Sarah Blumenthal speaking on how moods affect what we eat. For more information visit www.FEWBethesda.com.

Acting NIH deputy director Dr. Yvonne Maddox and NLM director Dr. Donald Lindberg (†) join tribal leader Maurice Proctor at the dedication ceremony for the new computer facility in Waldorf.

PHOTOS: KATHLEEN CRAVEDI

the National Library of Medicine installed and dedicated a fully equipped computer laboratory with eight computers and high-speed Internet access in the American Indian Cultural Center in Waldorf, Md. The federal commitment includes all hardware, software, Internet connectivity, and training.

Dr. Donald Lindberg, director of NLM, noted that this is the latest in a series of projects sponsored by the library to connect underserved populations to health information on the World Wide Web. "We have an extensive Tribal Connections Program in the Pacific Northwest, including Alaska," he explained, "but it is especially gratifying to help those in need just a few miles from NIH."

About 8,000 members of the Piscataway Indian Tribe live in southern Maryland. Health problems of the population include high blood pressure and diabetes. "NIH has created a number of web sites with a wealth of good consumer health information," said Dr. Yvonne Maddox, acting NIH deputy director and a driving force behind the computer lab at Waldorf. "This facility is an important step in reducing health disparities and in improving the health status of an at-risk population by providing information."

Mike Miller, president of the Maryland Senate, the school superintendents of Charles and Prince George's counties, and other dignitaries made congratulatory remarks at the dedication of the "On Eagles' Wings" computer lab. The ceremony featured the richly colored costumes of the Piscataway tribe and a display of their traditional dances.

The American Indian Cultural Center, which also houses a museum and library, serves as a community focal point where local tribespeople of all ages go to learn more about their culture. The new computer facility will serve to provide information not only about health, but also about employment opportunities and other culturally relevant concerns. "Because most Piscataway tribal members do not have home computers, we're delighted that we will now be able to provide them with this community resource and with timely and up-to-date medical information," noted Natalie Proctor, the center's director.

CONTINUED FROM PAGE 1
Dr. Marvin C. Gershengorn will direct the Division of Intramural Research in the National Institute of Diabetes and Digestive and Kidney Diseases in spring 2001. His appointment marks a return to Intramural Research in the National Institute of Diabetes and Digestive and Kidney Diseases in spring 2001. His appointment marks a return to Bethesda to lead its intramural program," said director Dr. Allen Spiegel, who made the appointment. "He has achieved worldwide recognition for his work on calcitonin's receptor which influences bone metabolism. Because receptors make good drug targets, a better understanding of calcitonin's receptor could lead to improved medicines that would increase bone content in people with osteoporosis.

Gershengorn also works on an unusual receptor from herpesvirus 8. When this virus infects human cells, Kaposi's sarcoma can sometimes develop, and the gene for the receptor appears to participate in tumor development. Kaposi's sarcoma is a common tumor in certain African and European populations and among people with AIDS. Gershengorn's receptor work has earned him three patents for techniques that could aid in drug discovery, and his many awards include the Endocrine Society's Gerald D. Aurbach Lecture Award in 2000, the Solomon A. Berson Medical Alumni Achievement Award in Clinical Science from New York University School of Medicine in 1999, and the American Thyroid Association's Sidney H. Ingbar Distinguished Lectureship Award in 1998.

Among Gershengorn's plans for NIDDK: "I plan to expand research on diabetes, inflammatory bowel disease and kidney disease, and to increase collaborations between intramural and extramural scientists across many disciplines. One of my highest priorities will be to emphasize studies of the development, physiology and pathology of pancreatic islet cells so that we may better understand and treat type 1 and type 2 diabetes."

His service to the larger scientific community includes leadership roles in several societies. He is on the board of directors for the American Thyroid Association and had been on the board of the Federation of American Societies for Experimental Biology and the Endocrine Society. He also has chaired the Endocrine Society's research affairs committee. In this last role, he has testified before Congress on the value of basic research and the need to better support both young and established physician-scientists, whose numbers have decreased in recent years. He was a consultant to the congressionally established diabetes research working group and a member of the NIH endocrinology study section, and he currently is a member of the editorial boards of the American Journal of Physiology and the Journal of Biological Chemistry.

At Cornell, Gershengorn worked on the genomics initiative task force, which developed a plan to improve university efforts in computational, mammalian, plant and microbial genomics and bioinformatics, areas also of interest to NIDDK.

A native New Yorker, Gershengorn graduated from City College of the CUNY in 1967 and the New York University School of Medicine in 1971.

Consumer Liaison Group Needs Members

NCI is seeking nominations for five new members of the NCI director's consumer liaison group (DCLG). A federally chartered advisory committee, the DCLG consists of 15 consumer advocates who are involved in cancer advocacy and reflect the diversity among those whose lives are affected by cancer. The group helps identify appropriate advocates to serve on program and policy advisory committees, advises and makes recommendations to the NCI director and serves as a channel for consumer advocates to voice their perspective on a wide variety of issues, programs and research priorities. New members will be appointed in July 2001 and must be U.S. citizens.

Nominations can be made by organizations, including local/regional and national groups, or individuals, including self-nominations. To receive a nomination package, send your name, advocacy/voluntary organization affiliation (if any), address and phone number to: Liaison Activities, NCI, c/o Palladian Partners, 1010 Wayne Ave., Suite 1200, Silver Spring, MD 20910, fax (301) 650-8676. Nominations must be postmarked by Feb. 15.
Dr. Herman Edskes has been selected as the winner of the second annual Norman P. Salzman Memorial Award in Virology; Edskes and his mentor Dr. Reed Wickner are with the National Institute of Diabetes, Digestive and Kidney Diseases. The Foundation for the National Institutes of Health and the virology interest group feted Edskes during a recent virology symposium honoring Salzman in the Cloister. Edskes presented his winning paper entitled "A protein required for priom generation: [URE3] induction requires the Ras-regulated Mks1 protein." The award commemorates Salzman, a pioneer in the field of molecular virology whose career spanned 33 years at NIH.

ACD MEETING, CONTINUED FROM PAGE 1

extensive negotiations between the President and Congress "largely on issues having nothing to do with NIH," a vote on the NIH budget hadn't come up as of the Dec. 7 ACD meeting.

"We've made some wonderful plans, but at the moment they are all basically on hold," said Kirschstein. Because of election indecision, the request for the NIH FY 2002 budget was also delayed until a new administration takes office, so Kirschstein cautioned that budget hearings for the spring would undoubtedly be pushed back.

Reporting on how well the world has welcomed year-old NIH guidelines on the sharing of research tools was Dr. Maria Freire, director of the Office of Technology Transfer, who said that despite international interest in the recommendations, she is concerned that many scientists are as yet unaware of them. She debunked a variety of myths about the principles NIH is promulating, including that they discourage patents, prohibit exclusive licensing, undermine commercialization and harm small biotech companies. "Hopefully, we are putting these concerns to rest," she said.

She noted that problems remain in sharing between for-profit and not-for-profit institutions-"All agree that problems of negotiation persist," she said.

Committee member Dr. William Brody, president of Johns Hopkins University, said there is incredible pressure on his institution to transform ideas into industry, but it doesn't come from his board. "It comes from the governor and from the mayor."

Almost weekly, I get calls asking me, "What new links are you forging with industry?"

Dr. Lana Skirboll, NIH associate director for science policy, summed up NIH's straight-A report card, required by the Government Performance and Results Act, in 55 areas, noting that NIH has a pluripotent capacity to provide evidence of its success: "I asked the Office of Management and Budget, 'Do you want our accomplishments in a notebook, a briefcase, a wheelbarrow, or a truck? I can give it to you any way you want.'"

The glowing report, not formally due until this month, was no surprise to advisor Rebecca Eisenberg, a professor of law at the University of Michigan. "The results of these kinds of surveys are often a no-brainer. Isn't there some way we could tap the expertise [of the blue-ribbon panel that collected information for the GPRA report] for double-duty?"

Certainly the most amusing, as well as inspiring and ultimately consequential, report came next from Dr. Harvey Alter, cowinner of the 2000 Lasker Award for clinical research. Embellished by slides, poetry, philosophy, comedy and science, his account of almost 30 years of study that has resulted in virtually eliminating the risk of hepatitis C from the nation's blood supply had something satisfactory for everyone. A member of the Clinical Center's department of transfusion medicine for virtually his entire career, he credited NIH's open and collegial atmosphere with allowing him to follow serendipity, an excellent mentor (Nobel laureate Dr. Baruch Blumberg) and his own dogged persistence along the trail from discovering what was known as the Australia antigen (later known as the hepatitis B surface antigen) through indirect characterization of what later turned out to be the hepatitis C virus.

"I am very privileged to have spent almost my entire career at NIH," he said. "It was easy to foster collaborations—you didn't need any CRADAs or MTAs in those days, you just did it. Long-term studies with unpredictable outcomes were allowed to go on; most of what we were doing probably wouldn't be funded on the outside. NIH has been an incredible place for me to work."

He described two routes to total elimination of hepatitis C virus from the blood supply—one relying on detection of nucleic acids, the other on an inactivation process using the chemical psoralen plus ultraviolet A light. As it stands, the risk of acquiring HCV via transfusion is now 1 in 350,000; the risk of HIV is 1 in 1 million; and the risk of hepatitis B is 1 in 109,000, he reported.

Next, Dr. John Ruffin, NIH associate director for research on minority health, walked the advisors through S. 1880, the Senate bill that on Nov. 22 authorized creation of the National Center on Minority Health and Health Disparities. As director-designate of the new center, he explained the bill's particulars and how NIH will construct the center.

"In all reality, we've had about 10 years to think about how to run such a center," said Ruffin, who has headed the Office of Research on Minority Health since it was created in 1990. The center's main priority is health disparity research; unlike ORMH, it will have authority to conduct and support research and training activities.

"The focus is on racial and ethnic minorities," Ruffin explained, "and the medically underserved, including poor whites living below the poverty line in rural Appalachia, for example."

The NCMDH must craft a strategic plan and budget in its first year, a process Ruffin says is crucial to the center's usefulness: "If we do this..."
right, we'll be successful in the long run. We've gotten out of the blocks very fast on this.

The center will not only collaborate with all institutes and centers, it will also have formal ties to NIH's Office of Behavioral and Social Sciences Research (which will have a permanent seat on its advisory council) and the Agency for Healthcare Research and Quality, which will help assess which populations suffer health disparities.

The center's proposed appropriation in FY 2001 is around $117 million, or about $20 million more than funded ORMH in FY 2000. Although plans require final clearance by the department and Kirschstein, Ruffin said the center would have an OD, and divisions of research, community based research and outreach, and scientific planning and policy analysis.

Dr. Cecil Pickett, executive vice president for research at Schering-Plough Research Institute, who is one of six new ACD members, threw Ruffin a fastball: "I'm of the opinion that throwing more money at this problem isn't going to solve it.

Ruffin assured him that, as an extension of the research clout of the IC's, the new center "can make things happen faster" in narrowing health disparities.

Another newcomer, Dr. David Burgess, professor in the department of biology at Boston College, asked, "Can even $20 million [in new money] make a dent in the indices of disparity?"

Unruffled, Ruffin replied, "If we're really friends with the IC's, the money will start flowing to us from them, rather than always from us to them. Then we can really start making progress."

Quipped Kirschstein, noting her long-term interest in this topic over the course of a lengthy NIH career, "The only thing I don't know how to do is print money."

The last speaker on the agenda, Dr. Barnett "Barry" Kramer, director of the revamped Office of Medical Applications of Research, gave an overview of the office, including more sophisticated criteria for sponsoring consensus development conferences. Asked whether the conferences, which aim at influencing physicians' behavior, actually affect medical practice, Kramer was quickly defended by Dr. Yank Coble, a Jacksonville, Fla., physician who serves on the ACD: "They're called consensus development conferences, not consensus finalization conferences...I've been involved with them for 20 years and I can tell you that I find them extremely valuable."

In other news, Kirschstein anticipated naming new directors of the National Eye Institute and Office of Equal Opportunity soon. Also, new legislation on children's health, passed on Oct. 16, mandates a pediatric research unit within the Office of the Director, with oversight on such topics as autism, fragile X syndrome, juvenile arthritis and diabetes, and other illnesses. In addition, the Public Health Improvement Act, a consolidation of some 10 different bills (many addressing emergency threats to health) passed in November, gives NIH research directions, but is not tied to any appropriation process, "leaving it hanging there to be done," noted Kirschstein. Lastly, members of a new human stem cell review group will soon be named; the group will report to the Center for Scientific Review. OSP director Skirboll said NIH does expect some stem cell research applications on the next receipt date of Apr. 15, 2001.

Tae Kwon Do Beginner's Class

The NIH Tae Kwon Do Club is offering a beginner's class for adults and mature teens starting Feb. 26. The class will meet in the Malone Center (Bldg. 31C, B4 level, next to the NIH Fitness Center) from 6 to 7 p.m. on Mondays and Wednesdays, and will continue for 2 or 3 months until participants can be integrated into the regular club training. Dues $40 (3 months), $30 uniform. Interested persons are welcome to watch regular training sessions. For more information call Andrew Schwartz, 402-5197 or visit the club web site at http://www.regov.org/r/cw/nihtaekwondo.html.

Diabetic Volunteers Needed

Seeking diabetic volunteers ages 18-65 on oral diabetic medications or diet-controlled, for screening of vitamin C blood level. Must be off vitamin C supplements at least 1 month prior to screening of blood level. Payment of $25 for blood level determination. Possible eligibility for further studies dependent on vitamin C level. Contact Gail Sullivan at 496-3244.
NIH Library Offers Training

The NIH Library in Bldg. 10 invites all employees to attend training classes on how to use electronic resources effectively, including how to access full text journals, order and receive articles via email, and how to set up a recurring literature alert service. For details, call 496-1060 or access http://nihlibrary.nih.gov/seminars/ seminars.htm.

RECORD BUDGET, CONTINUED FROM PAGE 1

$130.2 million in FY 2001.

NIH was also obliged to part with $5.8 million of its new budget, which reverts to the Department of Health and Human Services because the former Office for Protection from Research Risks, which had been part of OD, is now the Secretary’s Office for Human Research Protection.

A summary of the appropriations bill included the following highlights: provides $75 million for extramural facilities construction grants; provides $500,000 for the Foundation for the NIH; provides $48.27 million for the operations of the Office of AIDS Research; provides $47.3 million within the buildings/facilities category for the National Neuroscience Research Center, which is to be named in honor of Rep. John E. Porter (R-IL), who is one of the godfathers of the effort to double NIH's budget within 5 years; permits the NIH director to enter into and administer a long-term lease for facilities for the purpose of providing laboratory, office and other space for NIA and NIDA biomedical and behavioral research at the Bayview campus in Baltimore; expands the intramural loan repayment program for clinical researchers from disadvantaged backgrounds to the extramural community; raises the salary cap for grantee scientists to executive level I from level II (the 2000 Executive Schedule annual rate is $157,000 for level I and $141,300 for level II); and extends the authority for the Physicians Comparability Allowance for 5 years.

In an interesting semantic move, the bill clarifies that the acting director of NIH may continue to serve under this title rather than principal deputy director (a designation required—by a different statute—for acting directors who have served in that status for more than 228 days) until a new director of NIH is confirmed by the Senate.

The bill also boosts from $60 million to $100 million the funds to be used by the National Center for Research Resources to commit to its IDEA (institution development and enhancement award) grants, which go to 24 states (and the Commonwealth of Puerto Rico) that don’t traditionally get much NIH grant money.

The appropriation bill further encourages NIAMS to support loan repayment for researchers working in the areas of childhood rheumatic diseases, and describes NIH’s plan to provide $2.267 billion in AIDS research funding.

NIH is also asked to fund a National Academy of Sciences study of its own structure; the study is to determine if the current NIH structure and organization is optimally configured for scientific needs. House and Senate appropriations committees expect to receive a report with recommendations 1 year from the date of confirmation of the new NIH director.

NIH must also prepare, by July 2001, a listing of therapeutic drugs that are FDA-approved, have reached $500 million per year in U.S. sales and have received NIH funding.

Conferees strongly urged NIH to implement an intensified research effort regarding autism consistent with the Children’s Health Act of 2000. The NIH director is asked to report to the House and Senate appropriations committees by Mar. 1, 2001, on a plan for establishing the Centers of Excellence on Autism program authorized in the act.

The legislation also urges the NIH director to designate the plaza in front of the James Shannon building (Bldg. 1) the “Paul G. Rogers Plaza” (acknowledging the former congressman who was a great friend to NIH) and to commemorate it in his honor.

The new vision objectives in Healthy People 2010 were chosen to receive the 2000 Outstanding Project Award from the vision care section of the American Public Health Association at its recent meeting. For the first time since its inception in 1979, HP 2010 includes a set of objectives to improve the visual health of the nation. NEI’s Rosemary Janiszewski accepted the award from Dr. R. Norman Bailey of APHA on behalf of the vision community that has worked over the years to include vision in HP 2010. Members of the vision working group were also present to receive recognition for this achievement. For more information on the Healthy People 2010 vision objectives, visit the web site http://healthyvision2010.org.

VRC Web Site Debuts

The Dale and Betty Bumpers Vaccine Research Center recently launched its new web site—the address is http://www.vrc.nih.gov. The VRC is a unique venture within the intramural research program. Jointly funded by the National Institute of Allergy and Infectious Diseases and the National Cancer Institute, the VRC is spearheaded by those two institutes and the NIH Office of AIDS Research. The VRC is dedicated to improving global human health through the rigorous pursuit of effective vaccines for human diseases.

Hypertensives Needed for Study

Seeking volunteers with high blood pressure ages 18-55 to participate in insulin studies. If you are on medication to control blood pressure, you must be able to be off your medication for two 1-week periods and be able to monitor your blood pressure daily while off the medications. Payment of $300 with completion of two separate outpatient studies. Contact Gail Sullivan at 496-3244.
Alice Deal Junior High School and NIH are developing a substantive and beneficial partnership; the school was adopted by the NIH Office of the Director last June and the two entities have worked together successfully ever since. NIH acting director Dr. Ruth Kirschstein, acting deputy director Dr. Yvonne Maddox, deputy director for intramural research Dr. Michael Gottesman and OD EEO Manager Hilda Dixon recently attended an "Hour of Science" presentation and luncheon prepared by Deal students.

In just 6 months, the partnership has led to a series of events and meetings involving NIH offices and staff who have volunteered time, talents and equipment. The OD personnel office hired Deal student Katie Compton for the summer. "Personnel was so impressed with her that Katie is coming back to work with them during the holidays and winter break," Dixon stated. Also during the summer, Dr. Philip Chen of the NIH Office of Intramural Research and Dave Wizsneaukas and Sue O'Boyle of the Office of Information Technology met with teachers at the school to determine ways to assist them in improving their science labs and integrating computers more fully into the Deal curriculum. OIT then prepared surplus computers for operation. The equipment was contributed by the Office of Extramural Research and Office of Equal Opportunity.

In a recent PTA meeting, Gottesman said, "We hope to be able to enhance the school's educational programs in science as best we can, inform students about career opportunities in the health sciences, provide specific education about health issues, and provide resources such as computers and computer support, and appropriate surplus equipment. For the NIH, this is a chance to expose an outstanding and diverse student body to the mission of the NIH, the opportunities available in government service, and the possibility of a career in biomedical research and/or administration."

The school's Career Day featured several NIH'ers, including former Deal student Rich Drury (OD), Dr. Christopher Taylor (NIAID), Dr. Ted Blakeney (NICHD) and Judit Camacho (NIGMS). NIH Medical Arts and Photography Branch staffers Alice Hardy and Gene Moseley visited the school's Video Production and Filmmaking class, showed a video on NIH and talked with students who are scheduled to visit the MAPB office this month; interactive workshops are scheduled to follow.

During the most recent "Hour of Science," science department students gave several presentations; cooperative learning workstations displayed robotics and automation; flight technology; light and fiber optics; bridge engineering; rocketry and space; extraction of DNA (onion cells and bacteria); gel electrophoresis; computer lab Powerpoint presentation on the structure of DNA; transcription analysis and restriction enzyme analysis.

Kirschstein and Maddox were particularly impressed with Josh Perlis' DNA experiment. "Dr. Kirschstein and I recognized the level and quality of the experiment and we found that very inspiring," Maddox said.

Gottesman concluded, "It was an extremely valuable and enjoyable visit. The students are highly motivated and extremely involved in their science studies. The teachers are skilled and creative in their approaches and the school leadership has created a nurturing and open environment for intellectual growth. I am sure that all of the NIH visitors came away with the impression that this would be a very useful partnership and all of us had some ideas as to how we could help."

The NIH team dined on a tasty lunch prepared by students in the department of family and consumer sciences' foods and nutrition classes; the meal was served at the "Le Deal Cafe."

The hour of science also spread to other school departments: video production and filmmaking students Aaron Laporte and Brandon Lyles recorded the NIH visit, parts of which will be included in the Alice Deal student newspaper.
National Wheelchair Basketball Athletes Bring Sports Passion to NIH

For only the second time in recent memory, the parking lot in front of Bldg. 1 was cleared to make way for street ball. The Maryland Ravens, a team of nationally ranked wheelchair athletes, played a vigorous game of basketball against a squad of enthusiastic NIH Police. Earnest but new to the game, the police soon showed themselves to be unprepared for the physical and cognitive demands of wheelchair propulsion and play. The exhibition game inaugurated NIH's annual observance of National Disability Awareness Month.

On behalf of NIH, Stephen A. Ficca, director of the Office of Research Services, greeted the Ravens and opened the exhibition to a spirited crowd. The Ravens easily trounced the NIH squad 51 to 49, despite the police starting out with an unearned 40-point lead. While wheelchair basketball is similar to the running game, it is also characterized by its own unique style. The high-intensity sport reveals its own system of attack, possessing a unique dribbling rule to accommodate the movement of athletes in wheelchairs. Everyone thoroughly enjoyed the game. A second game (see sidebar below), pitting the Ravens against another NIH squad, Double Helix, was held later in the Clinical Center.

For more than 25 years, the Ravens have made working with children with disabilities their primary off-the-court objective. Throughout the year, players are available for personal appearances: hospital visits, speaking engagements, school visits and other community service. The goal of these

First-Person Account
Experiencing Wheelchair Basketball

The evening portion of the recent disability awareness program featured a wheelchair basketball game between the Maryland Ravens and the Double Helix, a coed, multiethnic, multi-generational group of employees from the National Institute of General Medical Sciences. Double Helix was formed in 1998 in response to a challenge to play the Ravens as part of that year's disability awareness activities.

The game this year was played on the half-court gym on the 14th floor of Bldg. 10. In contrast to the outcome of the 1998 game, where Double Helix failed to score a single point, this year the NIH'ers lost by only 3 points. The closeness of the game was due to an innovative scoring approach in which Helix was awarded 3 points for every basket scored and the Ravens were awarded only a single point for each basket. All players used wheelchairs in the game.

Despite Helix's advantage, the game was exciting for both the audience and participants. As is their forte, the Maryland Ravens displayed superb ball-handling abilities, deft passing, accurate shooting, and an impressive defensive game that literally kept Double Helix off balance. As captain of the home squad, I noted that in spite of the scoring advantage and the far superior play of the Ravens, we kept the game close through luck and the teamwork of Helix players Judit Camacho, John Matala and Liz Mullican, all of whom scored at least two or more baskets, which was amazing given that none of them had played wheelchair basketball before.

Although the game was enjoyable, the highlight of the evening was wheeling back to Bldg 1. Once the game ended, Helix traveled in wheelchairs from the gym to the front of Bldg. 1 in order to return borrowed wheelchairs to the van. This unscheduled event provided another opportunity for our team to appreciate the challenge of using a wheelchair. The experience of traveling a different path—the difficulty of finding a wheelchair-friendly path that includes only downhill terrain was in itself illuminating. In that short trip, I learned how to rely on others in meeting the physical demands of continuously pushing and in accommodating my newly expanded personal space. I also experienced firsthand how to fit three wheelchairs and two
The Ravens beat both NIH squads—indoors and out.

appearances is to use the players' role-model status as prominent members of the Maryland sports and disability communities. Through Combined Federal Campaign #3067, contributions to the Maryland Ravens, Inc., help promote personal development, citizenship and leadership among youth with disabilities.

The planning committee for the disability awareness program presented plaques of appreciation to the NIH Police, the Maryland Ravens and the Double Helix for helping make this a successful experience for the NIH community.—Anne Philips and Carlton Coleman

University of Chicago Honors Gellert

Dr. Martin F. Gellert, a senior investigator in NIDDK's Laboratory of Molecular Biology, received an honorary doctor of science degree from the University of Chicago recently. The degree recognizes his outstanding contributions to the scientific understanding of DNA recombination and replication, and antibody diversity. According to the university's citation, Gellert's “bold forays into DNA enzymology over three decades have shown us how DNA can be broken and joined, twisted and rearranged, in the cellular choreography that underlies essential processes in phenomena as wide-ranging as the replication of genomes to the development of the human immune system.”

Gellert's major accomplishments include the discovery of DNA ligase in 1967 and DNA gyrase in 1976. Ligase, the enzyme that seals together pieces of DNA, has since become a basic tool of gene splicing. Gyrase, an enzyme found in bacteria, is responsible for supercoiling DNA. Gellert and his associates discovered gyrase while they were working on "a bacteriophage recombination system that needed a mystery factor to work." When they showed that a class of antibiotics could inhibit DNA gyrase, their mystery factor, "all of a sudden what we were doing was of interest to companies," says Gellert.

For the past 10 years, he has conducted experiments to learn how humans and animals produce millions of infection-fighting antibodies from a handful of gene segments. The vertebrate immune system can recognize and respond to an infinite number of foreign bodies, or antigens, thanks to V(D)J recombination. V, D and J refer to segments of DNA that are broken and reassembled into many different combinations to make genes for immunoglobins (antibodies). Gellert has determined many of the basic principles that govern how the fragments rejoin.

V(D)J recombination, which is quite unusual, was central to the evolution of the vertebrate immune system. When the V(D)J recombination process is flawed in humans, it can lead to a severe hereditary immune deficiency.

Gellert is especially proud of his V(D)J work: "Now, we understand a lot about how genes for immunoglobins are put together."—Anna Gilliss

NIDDK's Dr. Martin F. Gellert (l) received an honorary doctorate during Don Michael Randel's (r) induction as president of the University of Chicago.

CIT Computer Classes

All courses are on the NIH campus and are given without charge. For more information call 594-6248 or consult the training program's home page at http://training.cit.nih.gov.

Introduction to Programming

Introduction to Statistics

1/22-25

1/23-24
The Bethesda Little Theatre gave its 18th annual Holiday Program at NIH on Dec. 14 in Masur Auditorium, Bldg. 10. The free show was the BLT's thanks to the NIH community for its support during the year. The revue included caroling, dancing, a sing-along and favorites of both the Christmas and Hanukkah seasons. As has become tradition, emcee was Ben Fulton (below, l) and Nelva Reckert gave her solo rendition of "Rockin' Around the Christmas Tree."

PHOTOS: RICH MCMANUS

NCI Launches New Version of Web Site

On Jan. 8, NCI launched a new version of the NCI Research Resources Web site http://cancer.gov/resources. Designed to help basic, clinical and epidemiological researchers to find the resources they need, the site includes listings of more than 100 products and services developed and available from NCI. The site is integral to NCI's commitment to provide the research community with tools and infrastructure to speed cancer research; it was featured in the Nov. 10, 2000, issue of Science.

Resources listed alphabetically are grouped into 11 categories and include tissue banks, repositories of chemicals and biologicals, genomic maps, animal resources, drug molecule databases, statistics on cancer incidence, analytic software, cancer communication resources and much more. A search engine and a listing of resources by NCI division are both available. Related links point to useful NCI and NIH web sites. Contact information for NCI program directors is also listed. The original launch of the web site took place at the 91st annual American Association for Cancer Research meeting in April 2000. The new look for the navigation bars on the site will direct users to updated listings. An enhanced search function and a listerv to request information about new resources are also new features. Bookmark the site and return often to find new listings on the NCI Research Resources Web site.

RML Employees Honored for Fire Emergency Contributions

A few months ago, the wild fires that devastated Montana's Bitterroot Mountains also created smoky conditions and potentially dangerous air quality at NIAID's Rocky Mountain Laboratories (RML) in Montana. Although the town of Hamilton was never threatened by flames, work schedules of RML staff literally depended on which way the wind blew.

"Dealing with such an unusual situation was quite a challenge," said Pat Stewart, chief of administration and facilities management at RML. She directed multiple contingencies for about 6 to 7 weeks until early fall rains extinguished the fires.

Stewart and her team were able to offer some relief from the thick smoke in the area by installing special air handling filters on the HVAC system and providing respirators and portable air purification equipment in the laboratories and offices.

In addition, they scheduled counselors to be available to help employees cope with the stress accompanying the possible evacuation from their homes and the possible loss of life and property. Special briefings were also arranged to keep staff apprised of the fire situation in the area.

"Despite the emergency situation surrounding all of us during the summer months, everyone pulled together as a group and kept operations on the campus running smoothly. The support from NIAID senior staff at the Bethesda campus was incredible, and I appreciate all the assistance we received from our Maryland coworkers," Stewart said.

During the crisis and despite liberal leave, most RML employees reported to work as usual, with key life-and-safety personnel present at the compound around the clock.

Recently, NIAID director Dr. Anthony S. Fauci held an awards ceremony teleconference to honor the RML employees. He also presented awards to a number of RML staff who made contributions above and beyond their normally assigned duties; awardees included Stewart, Kaye Bergman, Kevin Mora, Lynda Kieres, Leona Padrotti, Mark Mora, Randy Williamson, John Carlson and Dr. Marshall Bloom.