

"Still
The Second
Best Thing
About Payday"

The NIH Record

DCRT Marks 30th Anniversary

By Ray Fleming

The Division of Computer Research and Technology turns 30 this month—three momentous decades that have seen the NIH campus progress from manual typewriters and punchcard data entry to computations that reveal the mechanisms of action for drugs, proteins, and nucleic acids, and which have included substantial advances in clinical research and medical practice.

It was NIH director Dr. James A. Shannon who 30 years ago recognized the future impact of computing on NIH's mission. Today the record bears out his vision. By the 1960's, early computers had made a strong impact on campus, both in administrative areas and in epidemiological and other research well suited to the data-handling capabilities of the day. Computers were being used to capacity by intramural scientists and administrators when Shannon established an advisory committee in 1962 to examine campus needs for automated data processing. The committee found that, "Computer technology represents a new and extraordinarily powerful tool within the universe of science," and on Apr. 16, 1964, the Department of Health, Education, and Welfare approved Shannon's recommendation to form DCRT. Two years later, Dr. Arnold W. Pratt was appointed as the first permanent director, a role in which he served for 25 years.

The Shannon advisory committee recommended an initial structure for DCRT that would include "An array of scientific talent competent in mathematics, mathematical statistics, computer science, programming, computer systems design and engineering, data systems analysis and design,

(See DCRT ANNIVERSARY, Page 8)

New NIH Day Care Facility To Open Next Year

By Carla Garnett

NIH recently leased space for its new day care facility, which will be located in the Executive Blvd. area. It will be managed by the Nettie Ottenberg Memorial Child Care Center (NOMCCC). This facility will accommodate approximately 220 children ages 6 weeks to 14 years. It becomes the largest leased day care center in the General Services Administration inventory.

The other NIH day care providers are Childkind, which cares primarily for infants; and POPI, which offers programs for preschoolers. These facilities will remain on NIH's main campus. The new day care center, which will provide infant care, preschool and before- and after-school care, is intended as a supplement to existing facilities.

"The new day care facility brings us up to where we should be in terms of the total number of children we are able to serve," explained Paul Horton, director of the Division of Space and

(See DAY CARE CENTER, Page 4)

Gene Therapy Reduces High Blood Cholesterol

By Frances Taylor

Using an approach that repairs the patient's faulty cells then deploys them against disease, scientists have shown that gene therapy lowers high blood cholesterol in a patient with familial hypercholesterolemia, an inherited disorder that causes fatal heart attacks and strokes early in life. Their results appeared in the Apr. 1 issue of *Nature Genetics*.

"We have demonstrated the long-term safety and efficacy of gene therapy in this patient. By so doing, we have opened the doors for the potential of gene therapy in treating various forms of inherited, lethal disorders," said Dr. James M. Wilson, director of the Institute for Human Gene Therapy at the University of Pennsylvania Medical Center. The study was supported by NIDDK and NCRR.

(See GENE THERAPY, Page 6)

Bond Drive Begins May 3

NIH will kick off its 1994 U.S. Savings Bonds campaign on Tuesday, May 3 at 11:45 a.m. on the patio of Bldg. 31A. Come out and enjoy the music of the Richard Montgomery High School jazz ensemble, or try your hand at the free raffle. A savings bond (courtesy of the NIH Federal Credit Union), and an auto emergency road kit (courtesy of Geico), are just a few of the many prizes being offered in this year's raffle.

"Secure your future today," is the theme of

(See BOND DRIVE, Page 7)

Hearing on Telemedicine at NIH

On Monday, May 2, there will be a Congressional "field hearing" on the subject of telemedicine in Lipsett Amphitheater, Bldg. 10, from 11 a.m. to 3 p.m. Reps. Jimmy Hayes of Louisiana, Connie Morella of Maryland and Don Johnson of Georgia will conduct the hearing. Additional members of the investigation and oversight subcommittee of the House science, space and technology committee may participate. All NIH'ers are welcome to attend.

Students Brave Elements To Visit NIAID Program

By James Hadley

They were a brave group. They braved record-breaking chill factors. They braved wind, ice, sleet, snow and freezing rain. All in the name of science. That is, all in the name of knowledge—to learn more about biomedical research careers.

They dodged pellets of ice as they went from seminars to interviews. This did not break their concentration or their excitement. The room was filled to capacity. Participants sat intently through seminars with subjects like



Dr. John Ruffin, NIH associate director for minority programs, greets student participants after his keynote address at NIAID's Introduction to Biomedical Research Program banquet.

"The Immune System and Its Microbial Opponents" and "What Makes a Virus Act Like a Virus." Allergies, asthma, hepatitis, AIDS, vaccines, gene therapy, parasitology and sexually transmitted diseases, among other topics, were discussed.

Students from across the United States, representing 19 states, plus Puerto Rico and Guam, took part in NIAID's Introduction to Biomedical Research Program. This 5-day whirlwind tour acquainted 59 academically talented minority undergraduate, graduate and first-year medical students with the mission of NIH, hoping to inspire students to consider career opportunities in the research arena.

The majority of the students already were quite serious about their careers when they arrived at the NIH campus. After attending NIAID's conference, the students left with solid strategies to chart the course of their career paths.

"This program opens my eyes to possibilities," said Urelaine Simon, 19, a senior chemistry major at Grambling State University in Louisiana, who wants to go on to medical school. "I always thought you had to get either an M.D. or a Ph.D. I have met many scientists

(See NIAID PROGRAM, Page 5)

The Record

April 26, 1994

Poodry Is First MORE Program Director

Dr. Clifton A. Poodry recently became the first director of the Minority Opportunities in Research (MORE) Programs Branch, NIGMS. The MORE branch is the focal point for the institute's efforts to increase the number of minority individuals engaged in biomedical research. It includes two longstanding programs, Minority Access to Research Careers (MARC) and Minority Biomedical Research Support (MBRS).

Poodry will be responsible for developing and implementing NIGMS policies and plans for minority research and research training programs. He will also serve as a liaison between NIGMS and NIH, other federal agencies, and the scientific community.

Throughout his career, Poodry has been dedicated to and involved with minority programs, particularly those concerned with Native Americans. He has served on the board of directors of the American Indian Science and Engineering Society, the board of directors of the Society for the Advancement of Chicanos and Native Americans in Science, the advisory committee on minority science education of the American Association for the Advancement of Science, and the advisory board and faculty of the Headlands Indian Health Careers Program of the University of Oklahoma. He is also a founding member of Openmind, an association for the achievement of cultural diversity in higher education.

He is committed to improving the quality of science education offered to all students. His work in this area includes service as vice chairman of the National Research Council's high school biology curriculum panel.

Poodry has a long association with NIH minority programs as well. He has been a member of the NIH general research support program advisory committee, which reviewed



Dr. Clifton A. Poodry

a MARC faculty fellowship, and he was co-principal investigator on an MBRS grant from 1975-1984.

He comes to NIH from the University of California, Santa Cruz, where he has worked since 1972, with the exception of 2 years (1982-1984) when he served as director of the developmental biology program at the National Science Foundation. He has been a professor of biology since 1983 and chaired the department of biology from 1986-1989. From 1989-1990, Poodry was acting dean of natural sciences, and since 1992, he has been acting associate vice chancellor for undergraduate affairs at the university.

A native of the Tonawanda Seneca Indian Reservation in western New York, he earned both a B.A. and an M.A. in biology at the State University of New York at Buffalo. He received a Ph.D. in biology from Case Western Reserve University.

His research on developmental genetics has been supported by NIH, the National Science Foundation, the American Cancer Society, and the Monsanto Foundation. He was also the principal investigator on a \$1 million grant from the Howard Hughes Medical Institute undergraduate biological sciences program. □

applications for funding under the MBRS program, and also has served on the MARC program subcommittee of the NIGMS minority programs review committee. In 1990, he received

Pinn Named AAAS Fellow

The American Academy of Arts and Sciences has elected Dr. Vivian Pinn, NIH associate director for research on women's health, as a fellow; she is among 184 new fellows and 26 new foreign honorary members elected in mid-March.

The academy was founded in 1870 by John Adams and other leaders of the young republic, who chartered the learned society "to cultivate every art and science which may tend to advance the interest, honor, dignity, and happiness of a free, independent, and virtuous people."

Today, the academy includes more than 3,700 fellows and foreign honorary members from a broad range of geographic, professional, and cultural backgrounds; among its fellows are 168 Nobel laureates and 62 Pulitzer Prize winners. □

New Interest Group Forms

A new molecular biology/biochemistry interest group is now forming on campus. The purpose of the group is to inform the large and diverse community of molecular biologists and biochemists at NIH about the work of their colleagues, and provide a forum for distinguished investigators in molecular biology from outside NIH.

To join this group, send the following information to Cori De Graff, Bldg. 5, Rm. 324, either by mail or fax (6-0201): name, laboratory/section, phone, fax, areas of research interest. □

The NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health and Human Services. The content is reprintable without permission. Pictures may be available on request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 1994.

NIH Record Office
Bldg. 31, Room 2B-03
Phone 6-2125
Fax 2-1485

Editor
Richard McManus

Assistant Editor
Anne Barber

Associate Editor
Carla Garnett

Correspondents:
CC, Sara Byars
DCRT, Mary Hodges
DRG, Judith Grover
FIC, Irene Edwards
NCI, Patricia A. Newman
NCHGR, Leslie Fink
NCRR, Kathleen Canavan
NEI, Linda Huss
NHLBI, Louise Williams
NIA, Vicki Cahan
NIAAA, Ann M. Bradley
NIAID, James Hadley
NIAMS, Amy Iadarola
NICHD, Carol Florance
NIDA, Karen Rogich
NIDCD, Gail Blatt
NIDDK, Eileen Corrigan
NIDR, Mary Daum
NIEHS, Hugh J. Lee
NIGMS, Wanda Wardell
NIMH, Marilyn Weeks
NINDS, Shannon Garnett
NINR, Marianne Duffy
NLM, Roger L. Gilkeson



The recently celebrated Children and Hospitals Week featured a variety of programs, both educational and fun, for pediatric patients at the Clinical Center. During a presentation on personal security and fire safety, NIH fire fighter Brian Padgett distributed fire chief hats.

The NIH Record reserves the right to make corrections, changes, or deletions in submitted copy in conformity with the policies of the paper and HHS.

The Record

NIH To Celebrate Asian Cultural Day, May 13

Everyone is invited to the 22nd annual NIH Asian/Pacific American Heritage celebration on Friday, May 13. The event will consist of a luncheon program of food and demonstrations of Asian arts and crafts and an evening program of Asian music and dance. The NIH theme for the celebration this year is "Taste of Asia."

The luncheon festivities will take place between 11:30 a.m. and 1:30 p.m. on the patio of Bldg. 31A. There will be demonstrations of bonsai, Chinese brush painting, and Kendo. Indian music (sitar and drums) will be played between noon and 1 p.m. Luncheon sales will consist of international food from China, India, Japan, Korea, the Philippines, Thailand, and Vietnam. A percentage of the proceeds will be donated to the Patient Emergency Fund at the Clinical Center.

The evening program will take place in Maser Auditorium, Bldg. 10. The main program of Asian music and dance will run from 7:30 to 9:30 p.m. Mira Yang of the Opera Ensemble will sing the National Anthem. The Dance Group from the Arts and Culture Center of Indonesia will present two Javanese court dances of Indonesia accompanied by Gamelan music. Tanghalang Philipino (Philippine Theatre) will perform Philipino

songs and dances, including the perennial favorite "Tinikling" or "Dance of the Rice Birds," in which the dancers gracefully sidestep clashing bamboo poles, imitating "Tinikling" birds as they avoid farmers' traps. There will be two Thai dances, "Krisda-Pinikharn" ("Dance of Benediction"), which is traditionally performed at special celebrations, and the "Poothai Dance," which is performed on festive occasions of the Poothai, a tribe in northeastern Thailand. The Opera Ensemble will perform excerpts from *Lan-Ying*, a new Chinese opera by Wang An-Ming. This highly emotional and passionate work has all the standard elements of a tragic opera, namely love, hate, jealousy, and blood. The Harmony Islanders will close the program with Polynesian songs and dances.

A reception in the NIH Visitor Information Center will immediately follow the program. Everyone is invited to the reception to meet the artists and to feast on Asian pastries and snacks.

The program is sponsored by the NIH Asian/Pacific American cultural committee and the Asian/Pacific Islander American advisory committee, Office of Equal Opportunity. Sign language interpretation will be provided. For more information and reasonable accommodations, contact Joan Brogan, NIH Asian Program manager, 6-2906. □



Changing of the guard: Dr. George J. Galasso (l), NIH associate director for extramural affairs, has served as president of the International Society for Antiviral Research for the past 2 years. Here he congratulates the new president, Dr. Hugh J. Field, Cambridge University, U.K., at the annual conference of the society, which met recently in Charleston, S.C.

Developmental Biology Interest Group Forming on Campus

At a preliminary meeting, a group of developmental biologists expressed a desire to form an interest group. This group might act as an "umbrella organization" for the existing mouse, frog and fly clubs that hold regular meetings and deal mostly with developmental questions; would aim to serve the communication needs of developmental biologists in other fields; and provide an opportunity for investigators of similar interests, especially at the postdoctoral level, to meet and interact. The proposed activity for the group is a 1-day meeting, once or possibly twice a year. The first meeting is tentatively scheduled for mid-July. The plan is to have one or two outside speakers, several NIH speakers, posters and refreshments.

If you are interested in being a member of the Developmental Biology Interest Group, send your name and address with fax and e-mail to either of the organizers. Indicate whether you want to participate in the planned July meeting, giving a title if you wish to speak or give a poster. To plan the July meeting, organizers need responses immediately. They are: Igor Dawid, phone 6-4448, fax 6-0243; and Joram Piatigorsky, phone 6-9467, fax 2-0781. □

Volunteers Needed at NHLBI

The Cardiology Branch, NHLBI, needs male normal volunteers age 45 and older to participate in a study assessing the causative mechanisms of certain cardiovascular diseases. Volunteers must not be taking any medication. The study includes placement of a small needle in the brachial artery and takes approximately 4 hours. Participants will be paid. For more information, call Cressie Kilcoyne, 6-8739. □

STRIDE Program Takes Applications for 1994

The NIH Training Center announces the 1994 STRIDE program, which will accept applications from now until May 27. Target positions available are:

ICD	Series	Entry Position	Target Position
NCI	GS-0335	Computer Assistant	Computer Specialist
NIAMS	GS-1187	Editorial Assistant	Writer/Editor
NIAID	GS-1106	Procurement Assistant	Contract Specialist
CC	GS-0335	Computer Assistant	Computer Programmer/Analyst

The STRIDE program is designed to provide employees with an opportunity for career change and advancement, and at the same time help NIH meet its staffing needs. The program's aim is to provide a combination of on-the-job training and academic training to prepare individuals for placement in targeted administrative positions.

To be eligible, you must be in a career or career conditional appointment for at least 1 year prior to the closing date of this announcement; be employed in a one-grade interval job series at the GS-5 or above or federal wage grade equivalent (WG); be a high school graduate or have a certificate of equivalency (GED) at the time of application; but do not have a bachelor's degree; and be employed in a nonprofessional position.

Information sessions will be held at the following times and places:

Date	Time	Place
Apr. 27	11 a.m.-noon	Federal Bldg./809
May 3	11 a.m.-noon	Westwood Bldg./428
May 5	11:30 a.m.-12:30 p.m.	EPN/Conf. Rm. G
May 9	11 a.m.-noon	Bldg. 38A/Lipsett Aud.
May 10	11 a.m.-noon	Parklawn/Conf. Rm. C
May 17	11 a.m.-noon	Bldg. 10/2C124
May 17	noon-1 p.m.	Bldg. 10/2C124
May 19	noon-1 p.m.	Solar Bldg., Rm. 1A1

Completed applications must be received in the NIH Training Center, Leadership Development Branch, DPM, EPS, Rm. 100 by May 27.

The Record

April 26, 1994

DAY CARE CENTER

(Continued from Page 1)

Facility Management, NIH Office of Research Services.

GSA estimates that employers should plan to provide day care facilities for 2 percent of their workforce. With NIH's Bethesda/Rockville locations accounting for about 16,000 employees, 320 day-care slots is the minimum number suggested. In recent years, NIH has been far short of that number: Childkind and POPI can, in total, accommodate about 90 children and have had to maintain a waiting list for several years.

The new NOMCCC day care center, to be located at 6006 Executive Blvd., claims approximately 25,000-square-feet and will cost NIH about \$625,000 per year to lease. The site is within walking distance of the many NIH'ers relocated in recent years to Executive Plaza complex buildings, Horton pointed out.

"The new center is surrounded by NIAID's extramural offices, components of NIAAA, NCI, NICHD and NEI," he said, "as well as the Training Center and NIH's divisions of contracts and grants, procurement and space management. In addition, when NIH employees currently assigned to the Westwood Bldg. are moved to the new Rockledge site in December, the new day care will be convenient to them as well."

A shuttle service to the day care facility from campus buildings is planned to provide visits by parents during the day and for drop-in care.

The new NOMCCC facility is not the only day care center in NIH's future: Employees at NIAID's Rocky Mountain Laboratory in Montana have also expressed interest in having a center for their children.

"The NIH has always been interested in providing a quality workspace for its employees," said Horton. "We have become more proactive and aggressive in looking at day care as an element of our total plan to attract and retain quality employees. Since our NIH population has been increasing, and we've basically outgrown our campus, we have been challenged to enhance the quality of life for employees working off campus as well. In light of tough economic times, day care has become a top priority for NIH'ers and for all government agencies."

Horton also noted that the NIH day care oversight committee has been instrumental in developing the plans for the new center.

"Every step of the way," he said, "they have had a voice in the preparations, from selecting the site to coordinating the new use agreements. They will continue in this role, providing guidance to us and establishing focal points for management of the facility. Even now they are working on grievance policies and procedures so that any problems parents may have can be addressed in a timely manner and can satisfy all parties concerned."

Of the 220 day care children the new center will be able to enroll, 36 slots have been designated for children under age 3. NIH'ers and PHS components located on the Bethesda

campus will have first priority to enroll their children. Should there be remaining unfilled slots, they will be offered to employees who work at other federal components. Finally, the general public will be able to apply.

Anne Schmitz, NOMCCC director, said all sorts of new programs will be offered with the increased space at the Executive Blvd. site.

NOMCCC is no stranger to caring for children of government employees, she said. It has for several years managed a day care center at Aylawn School, just off Old Georgetown Rd. and Cedar Ln. Currently, 92 percent of the children who use that facility have parents who are part of the federal workforce; 82 percent of them work at NIH. The Aylawn facility lease expires in spring 1995, at which time all NOMCCC components will move to the new site.

"We're planning to offer computer training, Spanish, ballet and gymnastics," Schmitz said of NOMCCC's soon-to-be new home, where plans for an outdoor play area are currently under way as well. "We're also working on an agreement with Montgomery County Public

Schools to expand the busing services to the new facility."

In addition, Schmitz said she would like to see NOMCCC launch a program where day care children interact on a larger scale with residents of the Children's Inn. Although some children may be too ill to participate in some activities, she acknowledged, perhaps their siblings would enjoy the intergroup activity.

"Some folks at the inn have been very receptive to the idea," said Schmitz, who has been involved in planning programs for children with disabilities and special needs. "This is a very exciting time for us. We're looking at an expanding model of child care."

The new facility will open in May 1995. Tuition costs based on a sliding fee scale tied to family income will average \$200 per week for infants; \$150 per week for 2-year-olds; \$120 per week for preschool; \$70 per week for before- and after-school; and \$120 per week for the summer program. Call Schmitz, (301) 530-5550, to be placed on the waiting list. Registration will begin 3 months prior to the opening of the center. □

Last Call for Cans

Recycling Effort for Day Care Draws to a Close at Westwood

Like so many successful efforts, it started out small and eventually outgrew its accommodations. In September 1989, a group of NIH employees working at the Westwood Bldg. led by Martha Pine of NIGMS decided to do something about the lack of convenient day care facilities in that area.

After discovering that the General Services Administration will build day care facilities on federal sites with 5-year leases, the group set about raising funds for start-up costs—toys, books and other items not included in construction costs—of such an effort. Meanwhile, discussions were going on about what to do with the Westwood lease; the building was not aging well and was becoming less able to address NIH's needs.

During that time as well, recycling and protecting the environment were becoming big issues. It seemed only natural to Annette Hanopole and Nancy Vess, both of NIGMS, to combine the day care fundraising with saving Mother Earth. That's how recycling aluminum cans at Westwood got started. Close to \$2,000 later—at only about 22 cents per pound—the last can was retrieved from the Westwood Annex lobby on Apr. 22.

"We thought day care was an important issue," said Dr. LeeAnn Jensen, an NHLBI program administrator who worked at Westwood when the recycling effort began. About 2½ years ago she moved to the Federal Bldg., but as designated can receiver/van driver, continued her close ties to Westwood and the project. "It is important that NIH be able to attract and keep the best workers. We felt day care was especially important for employees at lower salary levels. We thought

our small recycling effort could give us some control over the fees charged at the new day care center. By recycling, we felt like we were accomplishing two good things at once."

For the last 4 years, Westwood employees have been diligently feeding their empty soft drink cans into centrally located collection boxes on each floor. Early in the effort, the collected cans were then toted to a nearby Safeway, which then weighed the deposits and payed out the 22 cents a pound. But the recycling project grew, individual floor collectors were organized and the trek to Safeway became infeasible. Then, Jensen and Kathryn Valeda of NHLBI began to collect the cans, load them into Jensen's van and haul them up to Montgomery Scrap in Rockville.

"There's a terrific bunch of guys up there who look for us each week," Jensen explained, adding that once the effort had earned enough, a bank account was opened to accumulate interest on the modest investment. "It's just a much better arrangement since the project had gotten so big."

Now that NIH is vacating Westwood and relocating employees closer to the main campus or the Executive Plaza area toward year's end, the recycling project has wound down. The funds collected will still benefit NIH day care, however. One idea being floated around is to use the money to establish an emergency fund for day care users in financial straits.

"The Westwood employees have a very active day care committee," said Jensen, who doesn't have children for day care yet. "There won't be any problem finding a way to put the funds to good use."



The Record

NIAID PROGRAM

(Continued from Page 1)

here who have both degrees. One of the highlights of this program for me is meeting students who are working toward the same career goals. These are friendships I'm sure will last for years to come as we do research and become collaborators." She is interested in neurological disorders.

Meeting with world-renowned scientists is exciting, say the students, but interviews with students revealed a desperate need for camaraderie among those who have an interest in science. They may be viewed as different by their peers.

"This is a great group of students," smiled Hsien-Hsien Lei, 21, a senior biology major at Stanford University. "We understand each other. We can allow ourselves to argue—yes argue, about which subject we like best: chemistry or physics. This is weird! I also enjoyed meeting scientists who are on the cutting edge. The researchers were incredibly nice. They encouraged us and made you feel you could actually do what they do." She plans to pursue a Ph.D. in epidemiology.

"The program is excellent," said Antonio Gamboa-Pinto, 28, a graduate student majoring in biochemistry at California State University, Fullerton. "This was an excellent opportunity to see how NIH works."

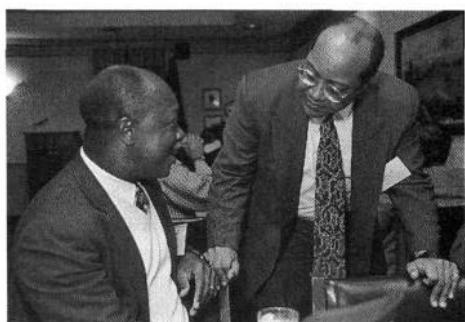
At the meeting, students heard first-hand



The 1994 "class" of NIAID's Introduction to Biomedical Research Program stands in front of Bldg. 1. Joining the group are Vincent Thomas, program director (front, l) and Angie Mease, program administrator (front, r).

Future." James Alexander, deputy director of the NIH Office of Education, talked to the students about research training opportunities in the NIH intramural program. Dr. John I. Gallin, director of NIAID's Division of Intramural Research, addressed "Opportunities for Success in the NIAID Intramural Research Program."

"The NIAID Introduction to Biomedical Research Program has been a great source of pride for us," said Dr. James C. Hill, NIAID deputy director, at the banquet for the



Ruffin (l) confers with Thomas at the NIAID program. Ruffin gave the keynote address at a banquet for students, and surprised the guests when he called out their names and home institutions from the podium.

"If this nation is to continue to be a leader in science, it is important to recognize the need to develop not just a part of our resources, but all of our resources." —Dr. John Ruffin

about scientific advances from investigators in NIAID's Division of Intramural Research as well as from the extramural staff. They interacted informally with other students and NIH staff, and met with scientists on a one-to-one basis in interviews and at a reception.

Dr. Ruth L. Kirschstein, NIH deputy director, focused on "NIH: Past, Present and

students. "We hope that we have conveyed to you, in some small way, the excitement we feel about what we do at NIH. Most of all, we are glad that each of you has shown an interest in research as a career. Your participation in this program may well be the beginning, a seed, an idea that research is something you might want to seriously pursue. We hope to see many of you back here in the future as summer employees, medical staff fellows and eventually scientists."

Banquet speaker Dr. John Ruffin, an NIH associate director who heads the Office of Research on Minority Health, surprised students all over the room when he called at random from the podium their names and school affiliations. He let them know that he was familiar not only with their institutions, but with various key personnel there as well.

"Just to see the mix of people in this room is a beautiful thing," said Ruffin. "Diversity—this is what the new world order is all about. No matter where you are from, you have to understand that we at NIH are interested in you. It does not matter where you matriculate. To build the cadre of scientists we need for the future, we need to go wherever you are—the best of the best science students. We seek world-class scientists who just happen to be from minority backgrounds. We seek knowl-



Dr. Frank M. DeFilipps of the Laboratory of Viral Diseases in NIAID's Division of Intramural Research, talks with Ganya E. Alvarado, a student at Smith College, during a reception for participants of NIAID's Introduction to Biomedical Research Program.

edge in science, not minority science. Good science is good science."

"If this nation is to continue to be a leader in science, it is important to recognize the need to develop not just a part of our resources, but all of our resources," he continued. "If we could put just one minority in each scientific laboratory, we would have 22,000 more minorities in research." □

NIH Fencers Club Notes

Dr. Novera "Herb" Spector, founder (in 1979) of the NIH Fencers Club, is among three qualifiers for the U.S. Open Fencing Championships to be held in June 1994, in Salt Lake City. Thus he continues to break his own world record for 55 successive years of qualifying for the U.S. Sabre Championship. In previous years, he competed also in national and international championships in foil and epee.

Recently, due to the efforts of Dr. Larry Pinkus of the Division of Research Grants, the NIH Fencing Club was revived, and now practices every Monday evening in the 14th floor gym of the Clinical Center. New and old fencers of all ages and both genders are invited to participate. Free lessons for beginners start at 7:30 p.m. For more information, call Pinkus, 4-7315. □

The Record

April 26, 1994

GENE THERAPY

(Continued from Page 1)

"This landmark report provides solid proof that gene therapy is an effective weapon against disease," said NCRR director Dr. Judith L. Vaitukaitis. "The results underscore gene therapy's potential to reinvent treatment for inherited diseases, many of which are currently untreatable, and the importance of providing specialized resources to spur continued growth in this promising field."

In familial hypercholesterolemia, patients inherit a defective blueprint, or gene, for a receptor protein that is found on the surface of liver cells. This protein helps the body metabolize "bad" cholesterol, called low-density lipoprotein (LDL) cholesterol. Because the defective receptor cannot effectively perform its job, blood levels of LDL soar dangerously high, leading to narrowing and clotting in the body's blood vessels.

Patients with the disorder suffer repeated heart attacks and strokes that begin at an early age and become increasingly frequent and severe. The 29-year-old woman treated in the current experiment experienced her first heart attack when she was just 16.

In the 18-month study, Wilson and his colleagues surgically removed part of the woman's liver and used a special retrovirus to ferry the normal LDL receptor gene into the liver cells. The cells were then returned to her through a vein that leads directly to the liver, where they again took up residence—this time expressing the critical LDL receptor.

Within 4 months of therapy, the patient's LDL levels dropped 16 percent. Then, after starting treatment with the cholesterol-lowering drug lovastatin, her LDL levels fell again, yielding a decrease of about 26 percent from the trial's start. In addition, the patient's levels of "good" cholesterol (high-density lipoprotein or HDL cholesterol, which seems to lower risk of heart attack and stroke) rose by about 20 percent without the help of lovastatin and showed a total increase of about 27 percent from trial's start. Levels for both HDL and LDL dropped by 22 percent over the course of the trial. Researchers did not observe any immune response to the new receptor proteins—a critical issue with this therapy—or other significant side effects.

"We have not yet cured familial hypercholesterolemia, but we have shown we can lower cholesterol significantly and potentially inhibit its deadly progression," Wilson said. □

Gene Hunt Is Meeting Topic

The arthritis and musculoskeletal diseases interagency coordinating committee will meet on Thursday, Apr. 28 from 1:30 to 4 p.m. in Bldg. 31, Conf. Rm. 7; part of the meeting will be a presentation by Dr. Daniel L. Kastner, senior investigator at NIAMS, on, "From Arthritis to Kidney Stones, The Hunt for Two Genes." For more information, contact Sharon Louis, 6-0801. □

Cell Bank Maintained Under NIGMS Contract

NIGMS has awarded a new contract to the Coriell Institute for Medical Research to continue operating the Human Genetic Mutant Cell Repository. The 5-year, \$10.88 million contract will enable CIMR to collect, characterize, maintain and distribute cell lines with special characteristics and DNA samples isolated from these cell lines.

The repository contains cell lines derived from blood or skin samples taken from people with a wide range of genetic abnormalities as well as from unaffected family members. The cell lines are tested to be sure they are free of contamination from microorganisms and to verify the existence of particular biochemical or chromosomal features.

By using cell lines and DNA samples from the repository collection, scientists can study rare disorders without having to locate an appropriate cell donor. The repository also contains panels of well-characterized rodent/human cell hybrids and all the cell lines from an extensive French collection, both of which are important resources for mapping the locations of genes associated with genetic disorders in humans.

For a modest fee, a researcher may obtain cell cultures or DNA samples along with detailed background information on their origin and characteristics. Beginning in the new contract period, researchers will be able to receive continuously updated information about available cell lines and DNA samples by means of an online catalog.

Since its establishment in 1972, the repository has distributed more than 65,000 cell cultures and 9,000 DNA samples. Currently, the repository contains more than 6,000 cell lines representing nearly 400

OD Advisory Committee Implements Work Plan

The Office of the Director, Equal Employment Opportunity advisory committee (ODEEOAC) serves OD employees by increasing their awareness of equal employment opportunity issues to promote unity in the workplace. It is now implementing its 1994 work plan, recently approved by Dr. Ruth Kirschstein.

The committee's three primary goals are to educate OD managers and supervisors on the

different genetic defects, as well as DNA samples from 625 of these cell lines.

The Coriell Institute for Medical Research is located at 401 Haddon Ave., Camden, NJ 08103 (phone 800-752-3805). A printed catalog of cell lines can be obtained either from CIMR or NIGMS, Bldg. 31, Rm. 4A52. □

Plan for Research Festival 1994

Preparations are under way for the 1994 NIH Research Festival, scheduled for the week of Sept. 19-23. Dr. Richard Adamson, director of the Division of Cancer Etiology, NCI, is chairman of this year's organizing committee.

The annual festival includes several symposia, workshops and poster sessions featuring NIH intramural research. The week-long event concludes with a 2-day Scientific Equipment Show, sponsored by the Technical Sales Association.

Researchers from all ICDs are invited to submit an application to display posters at the Research Festival. The deadline for applications is 5 p.m., Friday, May 27. Prospective authors should fax their applications early—only the first 420 applications will be accepted. There will be no waiting lists for applications received after the cutoff point. Look for the poster session application forms being distributed NIH-wide.

For more information about the NIH Research Festival, call Gregory Roa, Visitor Information Center, 6-1776. □

Neurology Group To Meet

The annual meeting of the World Federation of Neurology research group on neuro-epidemiology will be held on Friday, May 6, 8:30 a.m. - 6 p.m. in Wilson Hall, Bldg. 1. □

EEO Critical Element in Their Performance

plans through briefings; to increase awareness of the OD recruitment and retention efforts (i.e., COTA and New Heights programs in May); and to increase awareness of disability issues for greater sensitivity.

Information will be disseminated via e-mail, faxes, and flyers on when and where the sessions will take place.



Members of ODEEOAC include (seated, from l) Donald Coulter, Dr. Ruth Kirschstein, Jean Makle, Randy Burke, David Snight and Rosemary Torres. Standing are (from l) Hilda Dixon, Mary Okwaro, Peggy Kinsella, Wanda Faux, Kris Kiser, Molly Eng, Prahlad Mathur, Bernadine Moore, Jane Daye, Michael Fordis, David Hubbard II, Carmen Holmes, Ana Kennedy and Elvin Brown.

BOND DRIVE

(Continued from Page 1)

this year's campaign. This slogan means something different to each of us. For some, it means setting goals such as a child's education, a down payment on a home or any other personal goal. For others, it means taking action now to be prepared for tomorrow—or 30 years from tomorrow.

In today's world of finance, you can roll with the economic tide by investing in U.S. Savings Bonds purchased through the payroll savings plan. Buying bonds this way is easy. You decide how much you want to have saved and it is automatically set aside each payday to buy savings bonds. More than 7 million Americans buy bonds this way.

Redeemable after 6 months, bonds are guaranteed a minimum interest rate of 4 percent. Bonds are also eligible for competitive market-based interest rates when held 5 years or longer. They are free from state and local income tax, and federal income tax can be deferred until the bond is redeemed or stops drawing interest in 30 years. Bonds are also safe and can be replaced at no charge if they are lost, stolen or destroyed.

Aside from their competitive interest rates, bonds help stimulate capital formation which, in turn, creates jobs. These are just some of the reasons why you might want to take a closer look at savings bonds—an American-made product that continues to work to better your quality of life and the American economy.

See your area savings bonds canvasser today and find out how you can participate in the payroll savings plan.

Don't put it off until tomorrow. Buy bonds and "Secure your future today."

EAP Video Series Continues

In May, the NIH Employee Assistance Program (EAP) will continue its "Tuesdays at the Little Theater" video workshop series on work, career and personal growth. The May topic will be "High Impact Communications Skills," with Anne Ronan on videotape.

These workshops adopt a two-part approach. At each session, a segment of the expert speaker's videotape is first shown. Counselors from EAP then lead a group discussion about the topic. The topics were selected because they address typical workplace issues faced by NIH employees.

The lunchtime, drop-in format is planned to make attendance simple. The series is free, requires no registration and is open to all employees. The workshops are held in the Bldg. 10 Visitor Information Center's Little Theater. If you have any questions, contact the EAP, 6-3164.

The May schedule is as follows. All sessions are from noon to 1 p.m.: May 3, segment 1; May 10, segment 2; May 17/18, NIH Health Fair; May 24, segment 3; May 31, segment 4.

The last workshop for this series will be July 5, 12, "How to Speak Up, Set Limits, and Say No," with Maria Arapakis on videotape. □


1994 U.S. Savings Bonds Deputy Coordinators

Org.	Name	Bldg./Rm.	Phone	Org.	Name	Bldg./Rm.	Phone
NIDCD	Mary Nuss	EPS/400 C07	6-8693	NIDR	Dorothy Costinett	31/2C27	6-7744
CC	John Slovikosky	10/1N262	6-6544	NIGMS	Sally Lee	WW/803	4-7767
DCRT	Stacey Vandor	12A/3013	6-6951	NINDS	Mary Robin Louise Waldron	31/8A46	6-2575
DRG	Amy Sikorski	WW/454	4-7013	NLM	Kim Harrison Dennis E. Black	38A/B1N17	6-6546
FIC	Bobbie Jo Wagner	31/B2C29	6-4625	NCRR	Beverly Budd Howard Bartner	10/B2L316	6-2868
OD/NCI	Eileen Keating	EPS/634B	2-4509	NCI	Debbie Jarman	EPN/604	6-5915
DCT	Steve Hammond	EPN/800	6-3080	DES	Carol Mitchell	13/2E47	6-6391
DCBDC	Teri Cecil	FCRDC 301/846-5402 Bldg. 1052, Rm. 238		DS	Deidre Turman	31/1C02	6-2801
DCE	Katie Finn	EPN/539	6-1282	DSFM	Juanita Byrd	EPS/206	6-0248
DCPC	Mike Genua	31/10A50	6-9606	DSO	Chantelle Stevenson	31/B3B12	6-6893
DEA	Debbie Jarman	EPN/604	6-5915	DSS	Susan Rae	301 North Stonestreet	6-1787
NEI	Dr. Ralph Helmsen	EPS/350	6-5301	NIAMS	Suzanne Anthony	31/4C32	6-0803
NHLBI	Leslie Herbert	FED/410	6-5594	NINR	Traci Lafferty	WW/740	4-7865
NIA	Dee Cross	31/5C32	6-5345	OD/NIH	Gene Spruill	31/3B54	6-5089
NIAID	Josephine Morris	31/7A19	6-9592	NCHGR	Linda Hall Pat Stewart	38A/613 49/4A06	2-0733 2-4575
NIDDK	Debbie Whittington Tom Johnson	31/9A47	6-5765	NIEHS	William Jirles	Rsch. Tri. Pk., N.C.	8-919-541-2637
NICHD	Dr. Joseph Keleghan	6100 Exec. Blvd. 8B07	6-4924	NIMH	LeRoy Goldman Robert Einbinder	Pkln/17C20 10/3N244	3-3175 6-4271
				NIAAA	Ann Bradley	Willco Bldg./409	3-0595
				NIDA	Elizabeth Lambert	Pkln/9A53	3-6543



The Record

April 26, 1994

DCRT ANNIVERSARY: 30 YEARS OF COMPUTING FOR BIOMEDICAL RESEARCH (Continued from Page 1)

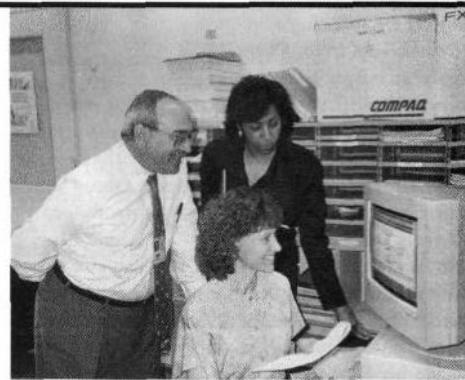
and information science..." Today, that vision of talent has been more than realized as computational biologists, computational chemists, molecular biologists and biophysicists have been added to the division's resources to help propel NIH biomedical computing into the 21st century.

The March of Computing

A decade before DCRT's founding, rudimentary computing had begun at NIH with electronic accounting machines. In 1964, the computer environment on campus consisted of two Honeywell 800 computers that ran programs and entered data. Over the next 6 years, the Honeywell computers were gradually replaced by three IBM 360 models offering integrated circuits instead of transistors, and providing data storage on magnetic tape. Today's central facility houses four IBM 3090's, a trillion bytes of disk storage, a Convex vector supercomputer, an Intel highly parallel supercomputer, and file servers for more than 200 Unix workstations scattered throughout the campus and outlying facilities. Operating 7 days a week and serving more than 19,000 users, the facility has seen a 1,000-fold growth in computing power during the last 25 years, with an average 25 percent reduction per year in costs to users.

The Convex and Intel supercomputers are state-of-the-art tools for solving computationally intensive biomedical research problems. The Convex C240, used exclusively for scientific applications, was upgraded in March 1993 and has more than 1,700 active users. A powerful Silicon Graphics Challenge XL multiprocessor serves as a front-end network communications system for the Convex compute server. The Intel iPSC/860, with its highly parallel, scalable architecture, allows immense computing tasks to be broken into smaller pieces and carried out simultaneously by multiple processors. Acquired in 1990, the Intel began operations with 16 processors or "nodes," gradually scaling upward geometrically to 32, 64 and finally 128 nodes arranged in a hypercube connectivity. Both the Intel and Convex are utilized by NIH scientists to perform operations requiring lengthy computation that would otherwise be impractical.

The last decade has seen DCRT expand dramatically beyond larger computers into an astounding array of computing platforms. Personal computers are now on practically every desk on campus. Local and wide area networks make it possible to communicate and send data between computers throughout the world. DCRT supports PCs, Macs, VAXes, and a wide variety of Unix workstations, including the Advanced Laboratory Workstation Project, an open, distributed computing system that is centrally administered via NIHnet. The number of NIH personal computer users has grown dramatically, and DCRT offers support to the ICDs in selecting, networking, and fully utilizing desktop



The Early Days: Pictured at left, Barry Madia circa 1962 (before DCRT was established), processes punch cards for the Division of Research Services. Now head of the database applications section in DCRT's Information Systems Branch, Madia (in photo above with colleagues Nanette Miller, seated, and Renee Edwards) exemplifies the long-term commitment of division employees to excellence in biomedical computing at NIH.

computers and peripherals for both scientific and administrative purposes. Examples of DCRT support include training courses, user groups like PC lead users, Macintosh support coordinators, technical LAN coordinators, and the biomedical research Macintosh users group, and consultation through the Scientific Computing Resource Center.

Advances in computer networking technology have put more and more power into the hands of computer users. In the early days,

computers were room-sized monoliths. Later, small groups of computers could be connected together to share information, and users could access the computer with terminals and over modems and phone lines. Today, computers at NIH display a high level of connectivity. Users can send e-mail around the world, access the power of supercomputers, use site-licensed software, store files in centrally maintained disks, and access thousands of databases. Accessing most of these services can be as fast

View from the Bridge

An Interview with DCRT Director Dr. David Rodbard

By Ray Fleming

*D*r. David Rodbard was appointed DCRT's second director in November 1990, having served NICHD as chief of the Laboratory of Theoretical and Physical Biology and head of the theoretical biology section. His previous positions include those of senior staff fellow and clinical associate with NCI, and biostatistician with Roswell Park Memorial Institute in Buffalo. Rodbard's interest in mathematical statistics and biophysics using computers to solve problems, especially in the area of endocrinology, led him to develop a number of computer programs that have been used throughout the world: the Logit-Log method for radioimmunoassay and, in collaboration with Drs. Peter Munson and Andre DeLean, the FLEXIFIT and ALLFIT methods for analysis of families of dose response curves and LIGAND for analysis of receptor binding data. In the following interview, Rodbard looks back over three decades of DCRT contributions and addresses the present and future of biomedical computing at NIH.

Q: What do you consider the most important changes at DCRT since you became director?

A: We have completely reorganized the division and instituted rigorous peer review of every DCRT activity. DCRT is now aligned

more closely with the needs of NIH scientists and administrative staff, and is more flexible to keep up with rapidly changing computing technology. We've initiated a single point of contact into DCRT through our Help Desk in the Technical Assistance and Support Center, and started the Scientific Computing Resource Center to give NIH staff easier access to DCRT's resources. We've reorganized our support for the central scientific and administrative computing facilities we provide, as well as for the substantial facilities owned and operated in the ICDs. We consolidated our activities that provide and maintain NIHnet, the campus networking backbone and infrastructure. And, we've put new emphasis on the development and reengineering of information systems and databases. Our scientists have sharpened their focus on the computational aspects of biology. We have a very successful initiative to apply high performance, parallel, scalable supercomputing to a wide variety of research activities across NIH, and we have several exciting collaborative research efforts ongoing with a number of ICDs.

Q: What are the current goals of DCRT?

A: We have two missions: to provide

as reading a file from a disk in the desktop computer.

Today's marketplace teems with new software; still more "shareware" is available through users groups. The question today, in fact, is not "Is there software that does X?"; it is "Which package does X best on my platform with my particular configuration?" DCRT supports hundreds of software packages on multiple platforms and offers training on the most widely used scientific packages.

Partnership for Research and Service

DCRT is far more than the sum of its hardware and software: it offers expertise, experience, innovation and leadership in applying its computer technology to NIH's administrative and scientific challenges. The division has helped develop database applications that facilitate administrative functions on campus, image processing techniques for structural and molecular biology, computer systems to automate laboratory operations, and software to aid scientific research. Two early division innovations, for example, had a lasting impact on the campus and beyond. The shared spool concept, in which a group of computers took jobs in turn from a single queue, is now an industry standard. Perhaps more well known is the NIH WYLBUR program, a user-friendly text editor of its day, which allowed mainframe users to compute interactively from office terminals rather than from punched cards in the computer center.

DCRT's database experts have made major contributions to day-to-day operations at NIH.

service, support, and facilities for computing, networking and information systems and to foster research and development at the interface of computer science with biomedicine. These two activities are synergistic. The rapid changes in computing and networking, combined with the rapid changes in biology and medicine, are giving rise to new fields: computational biology, computational molecular biology, computational chemistry, and even computational neuroscience. At this particular "hotspot" of research, we can play a critical role. We've done so in the past, we're there today, and we will be there tomorrow.

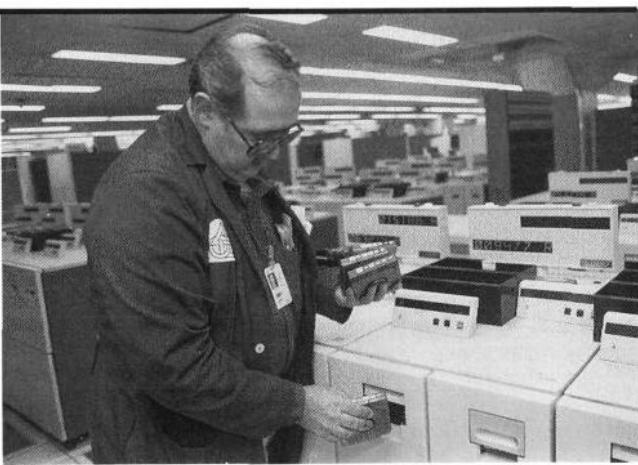
Q: What do you regard as the major accomplishments of DCRT over the past 30 years, and especially during your "watch" of the past 3 years?

A: For many years, DCRT has been at the forefront of large-scale mainframe computing. Our staff developed a "multispooler" software which was incorporated by the entire industry. Our computer center has been utilized by many agencies of the federal government; in fact, we served as a Federal Data Processing Center for some time. Even today we process the DHHS payroll, the PHS grants payments, DRG's grants databases and many other major systems, including modelling for the Clinton administration's

(See RODBARD, Page 10)

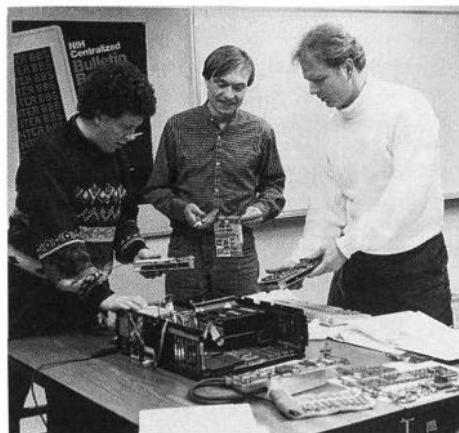
Computing Facilities:

Ken Miller of the Computing Facilities Branch loads tapes to run on one of the branch's four IBM 3090 mainframes. The branch also boasts a Convex supercomputer, an Intel highly parallel supercomputer, and file servers for more than 200 Unix workstations.



In the late 1970's, DCRT's Data Management Branch developed the first phase of the administrative database (ADB) system. This phase automated ordering, receiving, and paying for material at NIH, greatly simplifying what was once an unwieldy financial management process. Similarly, the clinical information utility, developed in the mid 1970's by DCRT and Clinical Center staff, extracts clinical data from all major Clinical Center systems and reorganizes the data to make it available to investigators in a timely, accurate, and easy-to-use form.

In the 1970's, DCRT staff worked with NHLBI and the CC's nuclear medicine department to develop a system to collect cardiac scintillation images and display them as moving pictures of a beating heart on a video screen. The technique, which resulted from a mainframe algorithm, is now a routine clinical procedure repeated hundreds of thousands of times each year. About the same time, DCRT staff were developing 3-D visualization techniques for the structures of proteins and nucleic acids. Similar efforts continue today. Recently, DCRT scientists have collaborated with NIAMS to determine the 3-D location of the major capsid proteins of the herpes simplex



PCs, Macs, Inside-Out: The inner workings of a personal computer are exposed in a recent DCRT training class. In addition to offering courses on a multitude of computer-related subjects, the division consults in selecting and using personal computers and workstations.

virus (type 1), helped NIDDK to determine the structure of the protein calmodulin from multidimensional NMR spectral data, and assisted NIA in studying Alzheimer's disease progression from PET images.

Division staff have also undertaken many efforts to bring computer technology into clinical and laboratory operations. In the 1970's, DCRT computer engineers developed the "Distributed Laboratory Data Acquisition and Control System," which connected laboratory instruments to a central computer that stored and processed the collected data. Today, the division continues to engineer solutions to research problems. Recent examples include collaborations with NCI on the automated DNA sequencing of cDNA subtraction libraries and on flow cytometry/advanced data analysis.

DCRT scientists have also developed scientific software that is in use around the world. The MLAB (Modeling LABoratory) software package allows users to define models and specify data to fit a curve, solve differential equations, and produce plots. CHARMM, a macromolecular modeling system developed at Harvard and DCRT, has versions that run on a variety of computing platforms, including workstation clusters and parallel supercomputers. DNAdraw prepares and plots publication-quality representations of DNA sequences. Other computer programs include LIGAND, ENZYME, ALLFIT, EXPFIT, FLEXIFIT, and programs to characterize hormone pulsatility.

The New DCRT

If a 30th birthday is cause for reflection on the past, it is also a time to assess the future. Under the leadership of Dr. David Rodbard, who assumed DCRT's reins in November 1990 following Pratt's retirement, DCRT has completely reorganized to meet the research and service needs of NIH in the coming years. All division laboratories and branches were restructured into two offices: the Office of Computational Biosciences (OCB), which will address computationally intensive questions in the biosciences, and the Office of Computing Resources and Services (OCRS), which

(See DCRT ANNIVERSARY, Page 10)

The Record

April 26, 1994

DCRT ANNIVERSARY

(Continued from Page 9)

aggressively pursues key technology solutions while continuing to maintain and improve DCRT's service and support.

OCB comprises the following:

- ◆ the Computational Bioscience and Engineering Laboratory, which is pioneering the application of highly parallel, scalable supercomputing to biomedical research and clinical medicine—from protein structure to radiotherapy planning;
- ◆ the Laboratory of Structural Biology, which brings together biophysicists, computational chemists, biostatisticians, biomathematicians, and other computer specialists to study the fundamental laws and physical forces governing the interaction of macromolecules;
- ◆ the Physical Sciences Laboratory, which emphasizes practical applications of biophysics and biomathematics in such areas as medical image processing, macromolecular assembly and NMR spectroscopy.

The OCRS is made up of six groups:

- ◆ the Customer Service Branch, which serves as DCRT's central point of contact for technical information, computer support, and

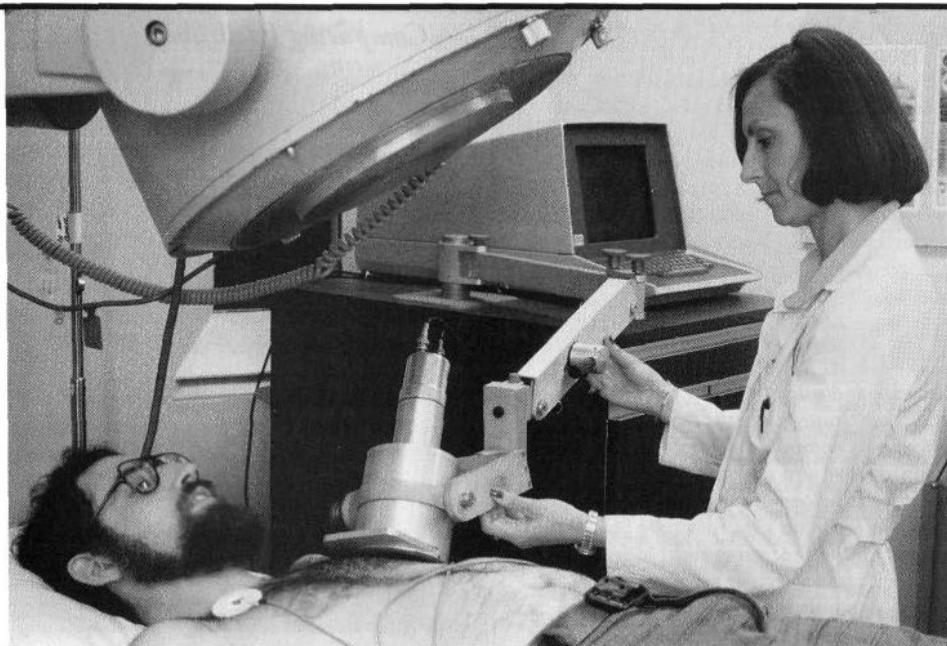
(Continued on Page 11)

RODBARD REVIEWS 30 YEARS OF DCRT

(Continued from Page 9)

health care reform planning. In terms of impact on the delivery of health care, DCRT's pioneering work in computerized cine-ventriculography was a major contribution to cardiology. The division contributed to the training of a large number of medical students through the Computers in Clinical Medicine Elective; many of those students have gone on to distinguished careers combining computers and medicine. DCRT developed a wide range of software, from the NIH central accounting system, the administrative database, and—more recently—the ADB information system, to programs for statistical and radioimmunoassay analysis, mathematical modelling, curve fitting, image processing, and sequence analysis and display. We were also pioneers in the development of computer graphics systems for displaying macromolecules, systems that have spawned a growing industry.

There has been excitement at every level. DCRT scientists have lent a helping hand to literally hundreds of NIH research projects. Sometimes our contributions are small; sometimes they are large and critical. Years ago we pioneered the development of computerized "voice answer-back" that provides computer-driven advice to physicians or paramedical personnel over the phone. We were also instrumental in developing a "talking terminal" for use by the visually impaired. For years we have supported the fluorescent activated cell sorters, large-scale sequence efforts, and other initiatives involving data acquisition and



Computers in Cardiology: In the 1970's, an ECG-gated scintillation probe (c) and camera (above) were combined with computers to provide motion-picture and graphic data of the heart. The collaborative efforts of DCRT, NHLBI, and the CC resulted in the widely used "cine-ventriculography" system.

laboratory automation.

Several accomplishments come to mind when I consider the past 3 years. DCRT has developed theory and experimental methods for measuring forces between molecules, which has tremendous implications for the study of molecular interactions. We have exploited the power of massively parallel supercomputing to attack problems in such biomedical areas as protein structure determination, computerized reconstruction of viruses, image processing, multiple sequence alignment and gene linkage analysis. The division has designed, installed, and supported NIHnet, providing access to many information services such as Gopher and Mosaic, and developed one of the first practical approaches for the central support of distributed computing over the network.

In all of this, I have been mightily impressed by the enthusiasm, dedication, and commitment of our DCRT employees: the computer operator, the person at the "Help Desk," the authors of our "How to..." publications, computer specialists, engineers, administrators...

Q: What does the future hold for biomedical computing?

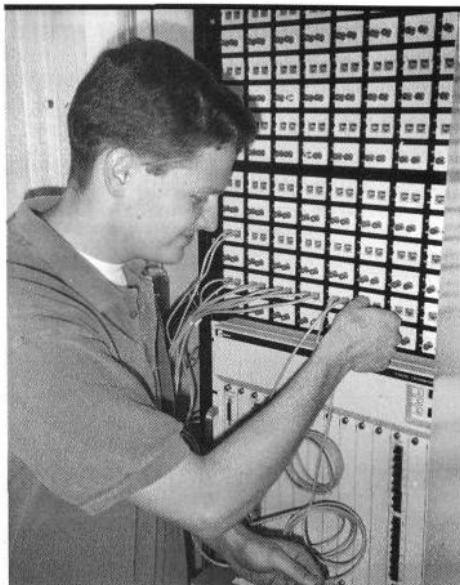
A: The "real" information revolution is just now about to begin. Computers will become 100 to 1,000 times faster, making it possible to design drugs on a quantum mechanical basis. Faster networks will allow us to send images from the radiology department to the nursing stations and clinics. Virtual reality will permit surgeons to train and to plan specific therapies much as jet pilots and astronauts go through their paces in a flight simulator.

I see scientists collaborating through videoconferencing—geography will no longer be a limiting factor. They will be able to obtain the input of colleagues throughout the world, combining techniques, ideas and information in unprecedented ways using collaborative laboratories, or "collaboratories."

I think we'll see breakthroughs utilizing the information generated by the Human Genome Project. Predicting protein structure and function from raw sequence data will become possible, with progressively better accuracy. But such advances will only come about by combining facilities with a multidisciplinary team of computer scientists and biomedical researchers to pursue the rapidly expanding field of computational biology.

On the hardware side, micro- and mini-computer, mainframe, vector-supercomputer and massively parallel supercomputer technologies will begin to merge, exploiting the advantages of each. Systems will become so user friendly, you won't need to know or care what kind of a system you are running on—your problem may be farmed out to several computers over the network. As computer power and usage increase, costs will continue to drop, fueling more development and innovation. Computing, networking and information systems are the keys to our national competitiveness, to reinventing government (with more "electronic government"), and to the next round of affordable advances in basic science with applications to clinical medicine.

The Record



Networking: The mid-1980's saw DCRT design a pilot local area network linking computers in two adjacent buildings. Today, NIH network connections like the ones here being attended to by DCRT's Jeff Hancock link thousands of NIH'ers with their colleagues across the campus and around the world.

(Continued from Page 10)

training through its Technical Assistance and Support Center (tel: 4-DCRT; e-mail: 4DCRT@nih.gov);

- ◆ the Network Systems Branch, which designs, develops, and supports all network facilities and services related to NIHnet, the campus network backbone infrastructure;

- ◆ the Computing Facilities Branch, which supports the IBM 3090 mainframes, Convex vector supercomputer, Intel highly parallel supercomputer, and the Advanced Laboratory Workstation Project;

- ◆ the Distributed Systems Branch, which consults on the effective selection and use of personal computers, workstations, local area networks, and associated technology. The Scientific Computing Resource Center (SCRC) offers a wide range of advanced scientific hardware and software tools, and is staffed with consultants.



Medical Imaging: Bonnie Douglas, Distributed Systems Branch, conducts research in the alignment of 3-D cardiac PET data in collaboration with Clinical Center investigators.

DCRT Anniversary Symposium Features Doolittle, Karplus

To commemorate DCRT's 30th anniversary, the division will sponsor a symposium, "Computing: From DNA to Protein Structure," in Masur Auditorium on Monday, May 2 from 9 to 11:45 a.m. The event features Dr. Russell Doolittle of the University of California, San Diego, and Dr. Martin Karplus of Harvard University.

Doolittle is a pioneer in the use of computers for analysis of DNA and protein sequence databases and for studies of molecular evolution. He is the author of numerous articles in the areas of protein chemistry and biochemical evolution, and will speak on "The Computer as Biology's Telescope (Sequence Analysis and Molecular Evolution)."



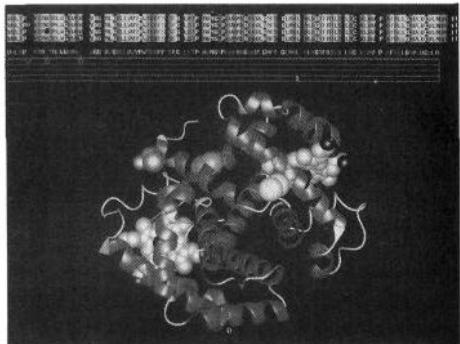
Dr. Russell Doolittle

Karplus' research is in theoretical chemistry, including the electronic interpretation of NMR and ESR spectra of molecules, the development of techniques for evaluating molecular properties, and the formulation of detailed models for chemical reactions. His recent work is concerned with molecules that play important roles in living systems, and his talk is entitled "Dynamics of Proteins: From the Native to the Denatured State and Back Again."

For more information on the symposium, contact the DCRT Information Office, 6-6203; e-mail: rfleming@pop.nih.gov.



Dr. Martin Karplus



Molecular Structure: The structure of the α and β chain dimers of three human hemoglobin variants, with a multiple sequence alignment of the β chains. Such computer-generated molecular graphics, a staple of DCRT computational biologists, can help scientists see the effects of mutations on the properties of proteins.

- ◆ The Information Systems Branch, which supports the NIH administrative database, central accounting system, clinical information utility and the child health information portfolio system, and also serves as a campus resource for database design, systems analysis, and programming.

Moving Forward

For the last 30 years, DCRT has brought increasingly advanced computing resources to bear on the challenges of biomedical research. Today, a technology generation in the rapidly changing field of computing may last a matter of months, resulting in frequently changing opportunities for synergy between bioscience and computing. This synergy has made the two disciplines inseparable—computing is essential to the biomedical research enterprise.

Scientists in DCRT's Office of Computational Biosciences continue to redefine what is possible in the arena of computationally intensive biomedical research. Highly parallel, scalable supercomputing offers researchers new power to manipulate information to answer formerly unanswerable questions in cellular and molecular biology, biochemistry and biophysics, and genetics and genomics. The Intel machine also has greatly increased the speed of image processing research. Best of all, this technology is accessible to all NIH researchers. ICD scientists can open the door to collaboration by contacting the SCRC (tel: 4-DCRT; e-mail: scrc-help@helix.nih.gov) and explaining their research needs to the consultants there, or by contacting appropriate scientists and engineers throughout the division.

Another ongoing opportunity is the development of "interoperability" in NIH's diverse computing environment.

Interoperability means that computers of different sizes, speeds, and operating systems would function together like one large, integrated computer. Information is available to individual users when needed, wherever it's stored, as is software and computation power. DCRT's OCBS is developing and supporting new hardware and software to implement this client/server paradigm. Advances are particularly promising in database technology. Existing mainframes will soon be regarded as large database servers, complementing the functions available to the desktop user. Improvements are planned that will upgrade and reengineer the user interface of existing database applications used for administrative functions at NIH. The resulting improvement will increase the usefulness of the software.

(Continued on Page 12)

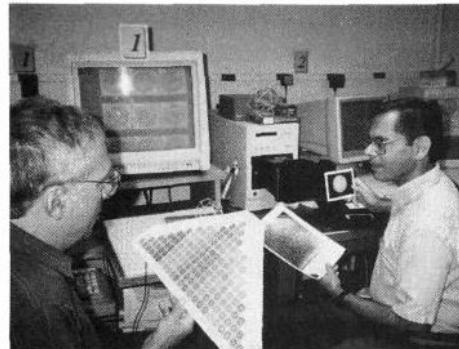
The Record

April 26, 1994

DIVISION OF COMPUTER RESEARCH AND TECHNOLOGY LOOKS TOWARD NEXT 30 (Continued from Page 11)

Hand-in-hand with these first two opportunities is the stewardship of NIH's computing and network infrastructure. DCRT requires technical knowledge to maintain existing systems and vision to anticipate applications for new technology, within the constraints of extremely limited resources. The Intel iPSC supercomputer is facilitating breakthroughs in computational biology, and demand for mainframe services continues to grow at NIH. NIHnet transfers data among 250 NIH local area networks on and off campus and connects the campus to international computer networks; this network has already become a major campus infrastructure component and is continually expanding. Networking also facilitates developments in distributed computing, like DCRT's Advanced Laboratory Workstation Project.

DCRT staff take pride in their accomplishments. Looking toward the future, they also can still find challenge and purpose in the original committee report that encouraged the creation of DCRT, as well as the most recent report of the DCRT ad hoc board of counselors. Computers are still "extraordinarily



High Performance Computing: Dr. Benes Trus (r), Computational Bioscience and Engineering Laboratory, collaborates with an NIAMS team headed by Dr. Alasdair Steven in studying the herpes simplex virus structure. DCRT's Intel high performance computer is used in the reconstruction of virus electron micrographs.

powerful tools within the universe of science." The role of computing and networking in the conduct and management of biomedical research is continuing to expand at an exponential rate. □

Albert Guckes Bids Farewell to NIDR

Dr. Albert D. Guckes retired from the Public Health Service Commissioned Corps Apr. 1 after 27 years of service. Since 1989, he had served as the chief, patient care and clinical studies section and deputy clinical director at the National Institute of Dental Research. He initiated NIDR's clinical research program on dental implants.

He leaves NIDR to become director of the graduate program in prosthodontics at the University of North Carolina School of Dentistry, fulfilling a longstanding wish to be formally involved in academics. Said Guckes, "This is a wonderful opportunity at an excellent school. I should be able to combine teaching, research and clinical practice—something I expect to be a real challenge."

"I will certainly miss the people at NIH and the stimulating environment here," he said. "I have especially enjoyed working with the implant team. I feel we really have accomplished a great deal."

During his tenure at NIDR, Guckes began clinical research on dental implants, including studies on full jaw implants and single tooth implants for adults. Since 1989, he has also directed a protocol on dental implants for youngsters with ectodermal dysplasias (ED), a group of genetic diseases in which teeth may be malformed or congenitally absent.

"The patients I'll remember most are the children and adolescents with ED. They are very self-conscious and are aware that having a nice smile is a big part of a pleasing appearance," he said.

"I will never forget one patient we had in the implant program. She was a young lady with ED who was very concerned about her smile.

After we treated her she went on to compete in the Miss Texas Teen beauty pageant."

In addition to initiating the implant studies, Guckes points to strengthening the NIDR Oral Medicine Staff Fellowship Program as one of his accomplishments. The program gives

clinical staff fellows an opportunity to learn to diagnose and manage oral diseases and conditions in medically compromised individuals such as those with AIDS, cancer, and cardiovascular diseases.

Guckes joined the commissioned corps in

1965 and has served continuously except for a 1-year break in the late 1960's. He has had PHS assignments in Boston, New Orleans, Kings Point, N.Y., San Francisco, and Seattle. In 1982, he became chief of the NIH commissioned officers dental clinic and stayed until 1989, when he joined NIDR.

Guckes completed his undergraduate work at Dickinson College and earned his D.D.S. from Temple University School of Dentistry in his native Philadelphia. He later studied at the University of Washington School of Dentistry, where he earned an M.S.D.

Among his many honors and awards, he especially appreciated the Outstanding Patient Service Award from the National Foundation for Ectodermal Dysplasias.—Mary Daum □

John Killen Named Director of NIAID's Division of AIDS

Dr. John Y. Killen, Jr. has been selected as director of the Division of AIDS, NIAID. He had been acting director of DAIDS since June 1993, following the resignation of Dr. Daniel F. Hoth.

"For the past 7 years Dr. Killen has made many significant contributions to our NIAID leadership team," says Dr. Anthony S. Fauci, NIAID director.

"I look forward to his continued leadership and strong commitment to the linkage of

science and management as we strive to meet the research challenges we face in this important field."

Killen came to NIAID in September 1987 as assistant director for clinical trials. In March 1988, he was appointed deputy director of DAIDS.

Prior to joining NIAID, he served for a year, beginning in August 1986, as medical director of the Whitman-Walker Clinic, a major community-based provider of AIDS services in Washington, D.C., and held a faculty position of assistant clinical professor of medicine at George Washington University School of Medicine.

He began his NIH career in 1980 at NCI as senior investigator in the Clinical Investigations Branch of the Division of Cancer Treatment. His responsibilities included implementation, evaluation and supervision of clinical trials on cancer therapy conducted by NCI's cooperative clinical trials group.

From 1981 to 1984, he headed the medicine section of that branch. When he left NCI, he was deputy chief and program officer for the entire cooperative clinical trials group.

Recipient of the PHS Special Recognition Award (1990) and the NIH Director's Award (1989), Killen is a member of the American College of Physicians, the American Society of Clinical Oncology, the International AIDS Society and the American Association of Physicians for Human Rights.

He earned his medical degree from Tufts University School of Medicine in 1975. He completed his internship at Georgetown University Hospital in 1976 and his residency there in 1978.

He was a clinical fellow in Georgetown's division of medical oncology from 1978 to 1980. He is board certified in medical oncology and internal medicine. He graduated magna cum laude with a bachelor's degree in biology from Kenyon College in 1971. □



Dr. Albert D. Guckes

The Record

page 13

April 26, 1994

Miami Project Honors NINDS

NINDS recently received the Distinguished Public Service Award from the Miami Project to Cure Paralysis (MPCP), an international center for spinal cord injury research at the University of Miami School of Medicine. Dr.



NINDS acting director Dr. Patricia Grady (l) accepts the MPCP award from Dr. Mary Bartlett Bunge, professor of cell biology and anatomy, neurological surgery, and neurology at the University of Miami School of Medicine.

Patricia A. Grady, NINDS acting director, accepted the award at the center's recent Salute to Scientific Progress donor recognition celebration.

The MPCP applauded NINDS for its careful planning and for its mission to encourage rapid progress in the field of neuroscience. According to a statement by MPCP announcing the institute's award: "It is critical to actively pursue neurological research efforts that may bring about the alleviation of human suffering caused by neurological injury and disease. The MPCP is proud that its research efforts have earned support from the NINDS and join with this institute in taking up the challenge to find more effective ways to heal the injured spinal cord." □

The International Electrophoresis Society, at its annual meeting held recently in Charleston, S.C., presented the Best Poster Award to

Dr. James K. Selkirk, leader of the carcinogenesis mechanisms group in the Laboratory of Molecular Carcinogenesis, NIEHS. The poster entitled, "Mouse Cells with Null P53



Mutation Have All P53 Protein Isoforms Deleted and Lose Negative Growth Control," was coauthored with Drs. B. Alex Merrick and Chaoying He. The selection committee based the award on the nature of the research as well as the quality of the gels and analytical treatment of the data. The award was presented by Dr. James E. Myrick of CDC, who is president of the Electrophoresis Society.

NEI's Underwood Leaves for WHO Post

Dr. Barbara A. Underwood has accepted a senior scientist position in the nutrition unit of the food and nutrition division of the World Health Organization in Geneva, Switzerland. In her new post, she will augment international understanding of the importance of micronutrients to human health. She will also be able to increase awareness within the international community of the devastation that results from vitamin A deficiency and to influence global policies and make important contributions toward the worldwide prevention of blinding malnutrition.

"Although we will miss Dr. Underwood's contributions to the international programs of the National Eye Institute," said NEI director Dr. Carl Kupfer, "the World Health Organization will provide a more focused forum for her efforts to rid the world of blinding malnutrition."

Underwood is an internationally recognized expert on nutrition who has more than 30 years of experience working on research projects in developing countries with WHO, the United Nations, the U.S. Agency for International Development, and numerous international organizations and domestic agencies. She has made many technical contributions to improve efforts by the International Vitamin A Consultative Group and the International Union of Nutrition Scientists in preventing nutritional blindness and general malnutrition in children in the developing world.

Underwood is the author of more than 150 publications in basic and applied nutrition and

nutritional biochemistry. She has been particularly successful in the development and evaluation of cost-effective community-based methods to prevent blinding malnutrition. Her scientific investigations have helped

determine the health consequences of subclinical vitamin A deficiency and their prevention by improved diet.

Recently she has been involved in several collaborative studies,

including a study on vitamin A deficiency in children in Recife, Brazil, and an investigation of vitamin A deficiency and metabolism in Hyderabad, India. She has been project technical advisor of a study in Nepal that is testing three intervention strategies to reduce the prevalence of vitamin A deficiency. She has traveled to several countries in Latin America, Asia, and Africa to assist groups conducting surveys to assess the magnitude and severity of vitamin A deficiency and to consider intervention strategies.

Underwood has worked at NEI since 1982, first as Kupfer's special assistant for nutrition research and international programs and, since 1989, as assistant director for international program activities. □

NIA's Matilda White Riley Honored by Radcliffe

Dr. Matilda White Riley, senior social scientist at the National Institute on Aging, received an honorary degree recently from Radcliffe College during ceremonies marking

the 100th anniversary of the college's charter.

Riley, 83, received the honorary doctor of science degree for her work opening up new perspectives on aging and for her contributions to public policy.



Dr. Matilda White Riley

The author of definitive works, including *Sociological Research* and a highly acclaimed three-volume work, *Aging and Society*, she is credited with creating the sociology of age as a scientific field.

The citation describes Riley as a "passionate champion of productive aging," noting that she has "given us the wonderful assurance that physical and mental decline in the aged is not inevitable—a message that you yourself

triumphantly exemplify."

"I am especially pleased with this honor from Radcliffe," said Riley, who graduated from there in 1931 and whose mother also attended the college. "It not only recognizes my work, but is tribute to the fact that aging is not a disease, but a process that can be rewarding and dynamic throughout the life course."

After graduating from Radcliffe, she and her husband Dr. John W. Riley, Jr., also a sociologist, became part of the original group of students in Harvard's graduate program in sociology. At Harvard, she became the first research assistant in the new sociology department. Riley taught at Rutgers University from 1950 through 1973, and then became the first woman named full professor at Bowdoin College in Maine. Following her tenure in the 1980's as associate director of NIA for behavioral and social research, she was named to the senior scientist position in 1991.

The recipient of many awards and prizes, Riley is a member of the Institute of Medicine and the American Academy of Arts and Sciences. She is former president of the American Sociological Association. □

The Record

April 26, 1994



The NIH Life Sciences Education Connection

It's not every day that an organization gets to celebrate its 50th anniversary in sunny California and have more than 15,000 people attend. But that's exactly what happened during the first week in April when the National Science Teachers Association (NSTA) hosted its annual national convention in Anaheim.

This year's theme—"Science for All Cultures: A Golden Opportunity"—was reflected not only in the general makeup of the national and international attendees but also in the information that was shared throughout the 2,000 sessions that were offered.

NIH and the other PHS agencies were among nearly 2,000 exhibitors disseminating science education materials at the 4-day conference. The Office of Science Education Policy (OSEP) coordinated an exhibit on behalf of the PHS life sciences education and science literacy board. Many of the NIH institutes contributed materials that were well received by the attendees.

One of the highlights of the conference included a panel by three Nobel laureates entitled "Teaching and Learning: Reflections on Science," in which Drs. Leon Lederman, Rudy Marcus and Arthur Kornberg discussed their perspectives on science and science education.

Next year's national conference will be held in Philadelphia on Mar. 23-26. The deadline for submitting proposals for this conference is May 1, 1994. For more information on NSTA conferences or on submitting proposals, contact OSEP, 2-2469.

Institute Relay Race, May 18

Just a reminder to get ready for the NIH Health's Angels Running Club's 17th annual NIH Institute Relay on Wednesday, May 18. The relay will start at noon in front of Bldg. 1. All NIH employees and Public Health Service employees who work at the Parklawn Bldg. are invited to participate.

There is a \$5 entry fee for each team participating in the relay. Entry forms and instructions are available at the NIH R&W Activities Desk, located in Bldg. 31, Rm. B1W30, and at the Parklawn R&W, located in the Parklawn Bldg., Rm. 509.

Teams must return their completed entry forms to an R&W Activities Desk by close of business, May 13. Team packets will be made available for pickup on May 17.

To learn more about the relay or to volunteer your help at the event, call either Peter Pentchev, 6-3285, or Jerry Moore, 6-4606. □

NINDS' Ahern Retires After 41 Years of Service

By Shannon Garnett

After 41 years of government service, 39 with NIH, Rowena Ahern, information and exhibits assistant in the NINDS Office of Scientific and Health Reports (OSHR), has hung up her hat. She officially retired on Apr. 1. "More than half of my life has been spent here (at NIH), and I've really enjoyed it," she said.

Ahern began working for the government in the 1940's during World War II. She then took several years off to start her family. In 1953, she decided to restart her career, so she came to NIH. Her first position was in the Clinical Center, which was not completely built at the time and was just being staffed. "My job was, literally, to type the telephone book using a manual typewriter," she said.

In 1958, she joined OSHR, where she has held several different positions during her 36 years of service to the institute.

"Everybody's talking about reinventing government now; well Rowena is known for running her own corner of the bureaucracy with organization and precision. And with all of her good cheer, she really does turn red tape into red carpet. The institute will greatly miss her," said Dr. Patricia A. Grady, NINDS acting director.

Ahern had considered retiring earlier but a career shift changed her mind. "In the last 10 years I have participated in the exhibits program where I was able to attend professional meetings all over the United States, as well as Canada. That's why I stayed," she said. "I was going to retire after 30 years, but here I was doing what I liked and I liked the people, so why leave?"

Throughout her years at NIH, she has witnessed many changes on the campus such as the addition of more buildings and employees, as well as within NINDS, whose name has changed several times during Ahern's career—from NINDB to NINDS in 1968, to NINCDS in 1975, and finally back to NINDS in 1988. However, when asked what was the most significant thing she witnessed while at NIH, she said, "The gene therapy scientific breakthrough... It was the most exciting."

During her career, Ahern has received many accolades from NIH, PHS, and NINDS. Among her awards and honors there are two that she holds most dear: the Assistant Secretary for Health's Special Citation (1987) and the National PHS Volunteer Award (1990).

For more than 20 years, she has volunteered her service to the Recreation and Welfare Association (R&W), where besides serving on the board, she has participated in many of R&W's humanitarian efforts including Camp Fantastic and Children's Inn.

"I was always interested in volunteer work, especially volunteering with children," she said. "Ever since I was 16, I've been doing volunteer work with kids." In fact, each year she continues to participate in R&W's annual



Rowena Ahern (c) enjoys her retirement luncheon with Richard L. Sherbert, Jr., NINDS executive officer, and Dr. Patricia A. Grady, NINDS acting director.

Christmas party for children with cancer and their families, by making her famous lasagna.

"The Latin meaning of the word recreation is to re-create. Rowena has recreated a lot of us. She's someone who has brought a lot to our organization," said Randy Schools, R&W's general manager. "We're really going to miss her. She's been a proud part of the R&W."

Recently, friends, family, and past and present colleagues honored Ahern at a luncheon at the Navy Officers' Club. During the luncheon, she received a plaque commemorating 41 years of loyal service to the federal government, and a 9-inch color television for her kitchen, a gift from her friends and colleagues. In addition, Schools presented her with a "deluxe survival kit," which included a beach T-shirt, a water gun, and lifetime membership to the R&W. "We figure she's paid enough dues," said Schools.

Although Ahern has retired, she will still be back on NIH's campus from time to time. Her retirement plans include volunteering at the Fogarty Hospitality Center, helping out in R&W's main office, and traveling to Hawaii and Argentina.

"I have found the NIH a very rewarding place to be," she said. "I feel that this is one agency that is really helping humanity on a daily basis." □

Female Volunteers Needed

The Biological Psychiatry Branch, NIMH, is currently seeking female volunteers ages 18-45 to participate in a 5-month study investigating 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 will 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 Dr. Peter Schmidt, 6-9675. □

The Record

April 26, 1994



TRAINING TIPS

The NIH Training Center, Division of Personnel Management, offers the following hands-on personal computing courses:

<i>Course Titles</i>	<i>Starting Dates</i>
Personal Computing Training 6-6211	
Welcome to Macintosh	5/26, 6/21
Advanced Macintosh Techniques	5/17
Intro to WordPerfect (Mac)	5/9
Advanced WordPerfect (Mac)	5/18
Intro to MS Word (Mac)	6/6
Advanced MS Word (Mac)	6/20
Excel - 4.0 Level 2	6/13
Intro to FilemakerPro	On request
Intermediate FilemakerPro	On request
Intro to Personal Computing for New Users	6/10
Intro to DOS 6.0	5/10, 6/16
Advanced Windows 3.1	5/27, 6/24
WordPerfect for Windows	6/7
Freelance Graphics for Windows	5/24, 6/21
Harvard Graphics for Windows	5/25
Pagemaker 4.0 for Windows	6/13
Intro to Word Perfect 6.0	5/16
WordPerfect 6.0 - Advanced Topics	5/24
Intro to Harvard Graphics, Rel. 3.0	5/3
Intermediate Harvard Graphics, Rel. 3.0	6/24
Advanced Paradox 3.5	5/23
Intro to dBASE IV	6/1
dBASE IV - Advanced Topics	5/2
Intro to Lotus 1-2-3, Rel. 2.4	5/9
Microsoft Mail (DOS)	5/4
Microsoft Mail (Windows)	6/15
Microsoft Mail (Macintosh)	On request
Basic Statistics Using SAS/STAT	5/11
IMPACT System for Admin Staff	6/2
IMPACT System for Professional Staff	6/2
IMPACT System: A-TRAIN (TMS)	5/5, 6/8
Intro to CRISP	5/27
Advanced CRISP	5/27

Additional courses are available by request. For more information, call the Training Center, 6-6211, or consult the NIH Training Center Catalog.

Personal Computer training is available through User Resources Center (URC) self study courses. There is no cost to NIH employees for these hands-on sessions.

The URC hours are:

Mon. - Thurs	8:30 a.m. - 7 p.m.
Friday	8:30 a.m. - 4:30 p.m.
Saturday	9 a.m. - 1 p.m.

DCBT Training Classes

Classes

	<i>Dates</i>
BASIC Biomedical Computation	4/29
ROC Methodology	4/29
Getting Started with Windows	5/1
OS/2 2.1 Overview	5/3
Computer Data and the Privacy Act	5/4
Unix Commands	5/5
Pedigree Drawing Programs for Mac and PC	5/5
RACF for IBM 370 Data Security	5/5
Topics in Analytical Cytology	5/9-10
Using Image 1.53 for Densitometric Analysis of 1-D Gels	5/10
Rheological Properties of Biological Media	5/10, 12
NTAS Administration at NIH	5/11
COBOL/370 Conversion	5/12
Computational Folding of Proteins	5/13
Windows NT Adv. Server Administration at NIH	5/16
Beyond Basic WYLBUR	5/16-20
Overview of ADB System	5/17
Planning and Installing a LAN	5/17
Managing Data Effectively	5/18
Client-Server Access to Centrally Managed Data	5/23
Intro to Macromolecular Simulation	4/28

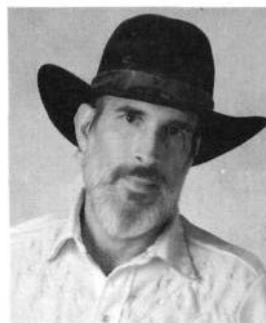
Rick Carow Mourned, 30-Year NIH Employee

Jon Fredric "Rick" Carow, employed at NIH for more than 30 years, died of cancer on Mar. 7 at his home in Mount Airy, Md. He was 50 years old.

Born in Washington, D.C., Carow attended Antioch University in Columbia, Md., where he received a B.A. in adolescent counseling in 1978 and (from the Baltimore campus) an

M.A. in developmental clinical psychology in 1980.

His career at NIH was in grants management. Starting out as a mail clerk in NHLBI's Grants Operations



Rick Carow

Branch, Carow rose to become the deputy chief of NIA's grants and contracts management office. His experiences over the years in NHLBI, NIDR, and NIA gave him a wealth of information about all aspects of grants management, a fact well-appreciated by coworkers who often relied on his "institutional memory" when seeking advice.

Carow steadily took on more responsibility through the years. At NHLBI, he rapidly advanced to chief of the council services and grants records section and, later, to grants management specialist in the Grants Operations Branch. In 1988, he joined NIDR as its only grants management specialist. Working alongside the grants management officer and support staff, Carow took the lead in restructuring NIDR's grants management section, which set up the foundation for today's larger operation.

In 1990, he moved to NIA, and as supervisory grants management specialist, again set to work upgrading grants office functions. On retiring in 1993, Carow had successfully reorganized the way NIA processes new applications, prepares background materials for its national advisory council, and maintains grant files.

Away from NIH, Carow was an accomplished composer and musician—adept at playing the piano, guitar, clarinet, saxophone, and percussion. He performed with local bands and orchestras such as The Continentals of Washington, the Naval Choral Singers and Combo, and the 125-piece Foundry Symphony Orchestra, directed by his father Glenn Carow. He also wrote and produced music for "The Mind is a Funny Thing," an audio cassette version of the children's book; he sang for National Singing Telegrams Ltd.; and he volunteered his time to organizations providing psychological and musical therapy services.

Another of Carow's contributions—inspired by the loss of his identical twin at age 8—was to help found the International Twins Foundation, a nonprofit organization that offers social support to twins experiencing a similar loss. In recent years he was a contributing columnist to the foundation's newsletter *Twinless Twins*.

Carow is survived by his wife Roberta L. Carow; daughters Brittney Lee Carow of Mount Airy and Lisa Marie Carow of Denver; mother, Ruth F. Carow of Bethesda (a former NIH employee); father, Glenn Carow of Front Royal, Va.; sister, Bonnie LaPlante of Winchester, Va.; and brother, Jeffrey Carow of Damascus, who is also employed at NIH.

Contributions in Carow's name may be made to the Hospice of Frederick, c/o Jane Davis, NHLBI, Westwood Bldg., Rm. 4A15.

NIA, Office of Minority Health Establish New Centers

An NIH-wide initiative to improve the health of older minorities took a significant step forward recently with the announcement of six new Exploratory Centers for Research on Health Promotion in Older Minority Populations. The \$2.8 million centers, a collaboration between NIA and the NIH Office of Research on Minority Health, will study health status, health behavior and practices, and interventions for improving the health of older Black, Hispanic, and Asian Americans.

In addition to the center awards, NIA also made available a new U.S. Bureau of the Census report, "Racial and Ethnic Diversity of America's Elderly Population." The publication, third in an NIA-supported series of demographic profiles prepared by the Census, predicts "marked increases in the racial and ethnic diversity within the elderly population." Today, some 87 percent of America's 31 million older people are white, 8 percent Black, 4 percent Hispanic, and 1 percent Asian. Over the next 20 years, the proportion of the older population that is white will drop to 78 percent, while the percentage of minorities—especially Hispanics and Asians—will rise dramatically. And life expectancy is increasing in all groups.

"The growing diversity of our aging population makes it even more important for us to examine racial and cultural differences that might affect health status and use of health services," says Shirley P. Bagley, NIA assistant director for special programs. In addition, notes Dr. John Ruffin, NIH associate director for research on minority health, "establishing these centers will allow greater coordination and collaboration of research activities and give added dimension to NIH efforts to improve the health of minorities." □

The Record

April 26, 1994

May Is National High Blood Pressure Month; Free Screening Offered

May is National High Blood Pressure month and time for the NIH Blood Pressure Screening Program, sponsored annually by the Occupational Medical Service (OMS), Division of Safety.

High blood pressure is a silent menace. A person's blood pressure can increase dangerously without causing any signs or symptoms. You may not feel any different, but if your blood pressure is high, you could develop a stroke, kidney damage or heart disease. That's the bad news. The good news is that if high blood pressure is found, it can be controlled. There is only one way to know what your blood pressure is—have it measured.

Measurement Is Simple

Blood pressure measurement is simple, quick and painless. It is very important to have your blood pressure checked if you have what are considered "high risk" factors or behaviors. Each of these factors can increase your risk for developing high blood pressure or heart disease. How many of the high risk factors listed below are true about you: Are African-American; have family members with high blood pressure; are overweight; have a high intake of alcohol; are physically inactive; have a high intake of salt/sodium; are a smoker; have elevated cholesterol?

During National High Blood Pressure Month, OMS increases its efforts in high blood pressure education and detection. In addition to its regular blood pressure screening and monitoring schedule, many additional sites and times are planned. The schedule shown includes the days, times and locations for both the May high blood pressure screening and the regular OMS blood pressure screening and monitoring. No appointment is necessary—just stop by.

NIH employees are urged to take advantage of this opportunity. Last year during the screening program, 11 people were found to have dangerously high blood pressure that required immediate referral to their doctor. Many others were found who were unaware that they had high blood pressure. OMS will also provide educational material and a chance to ask questions about high blood pressure. If you have questions, contact OMS, 6-4411.



OMS nurse Betty Moyer measures the blood pressure of Hank Cox of the NIH Motor Pool.

Blood Pressure Screening Schedule

BLDG./ROOM	DATE	TIME(S)
Bldg. 1 Conf. Rm. 6	May 16	8:30-11:30 a.m.
Bldg. 10		
OMS Clinic, Rm. 6C306	May 2, 9 May 5, 12 May 16 May 19 May 9 May 10	7:30-11:30 a.m., 1-7 p.m. 7:30-11:30 a.m., 1-7 p.m. 1-4 p.m. 8-11 a.m. 2-4 p.m. 1-4 p.m.
Housekeeping Rm. B1D25		
Bldg. 12A, Rm. 3026		
Bldg. 13		
OMS Clinic, Rm. G904	May 3 May 6, 13 May 11 May 16 May 6 May 10 May 13 May 4 May 20 May 5, 12, 19 May 4 May 20	8:15-11:15 a.m., 1-2 p.m. 8:15-11:15 a.m. 8:15 a.m.-noon, 1-3:30 p.m. 1-3:30 p.m. 1-3:30 p.m. 8:30-11:30 a.m. 1-3:30 p.m. 8:30-11:30 a.m. 8:30-11:30 a.m. 1-3 p.m. 1-3:30 p.m. 1-3:30 p.m.
Bldg. 31, Rm. B2B57	May 11 May 16	8:15 a.m.-noon, 1-3:30 p.m. 1-3:30 p.m.
Bldg. 36, Rm. 1B13	May 6	1-3:30 p.m.
Bldg. 38, Rm. B1E08	May 10	8:30-11:30 a.m.
Bldg. 49, Conf. Rm. A	May 13	1-3:30 p.m.
EPN, Rm. 103	May 4 May 20	8:30-11:30 a.m. 8:30-11:30 a.m.
Federal Bldg./10B08	May 5, 12, 19	1-3 p.m.
Solar Bldg./1A01	May 4 May 20	1-3:30 p.m. 1-3:30 p.m.
Westwood Bldg./11	May 2, 9 May 4, 11	8-11 a.m., 1-3:30 p.m. 8-11 a.m., 1-3:30 p.m.

Blood Pressure Screening & Monitoring

Blood pressure screening and monitoring is available regularly without an appointment.

BLDG./RM.	DAY	TIME
Bldg. 10 OMS Clinic 6C306	Monday - Friday Monday Thursday	5-9:30 p.m. 1:15-4:15 p.m. 8-11 a.m.
Bldg. 13 OMS Clinic G904	Tuesday Friday Thursday	8:15-11:15 a.m. 1:15-3:15 p.m. 1-3 p.m.
Federal/10B103		

Self-Service Blood Pressure Readings

Vita-Stat machines are available at the following locations:

Bldg 31—by cafeteria; Bldg. 38A—lobby; Westwood—by Rm. 11; EPN—Rm. 103

NIH'ers Urged To Beware of Insurance Scam

Several NIH employees have recently been the victims of an insurance scam. A representative of Globe Life Insurance Co. has telephoned or met with NIH employees at work and talked them into considering signing up for a savings plan through payroll deductions. The representative was able to get an employee's date of birth, Social Security number, and address, and then had the employee sign a blank form to authorize the company to send him or her literature about the savings plan. The blank form was actually a payroll allotment form, which the company then filled out and submitted to NIH to have an allotment started for a life insurance policy.

In addition, employees have been called, purportedly by their personnel offices, and asked for their Social Security numbers to update records. It turns out these calls were not made by personnel office staff. It is possible that the insurance representatives used this information and forged employee signatures on payroll allotments. Employees should not give out personal information over the phone to someone who has called them for this information. If you should notice a savings allotment deduction on your pay slip that you did not authorize, notify Grace Taylor, payroll operations section, 6-5072.

You should also be aware that solicitation at work by telephone, by mail, or in person is strictly prohibited. If you should receive such a telephone call, you should tell the caller that solicitation is prohibited. If he or she persists, attempt to get the caller's name and address and the company's name, then forward this information to the Recruitment and Employee Benefits Branch, Bldg. 31C, Rm. B3C15. That office will notify the company of their representative's prohibited conduct. If the person contacts you in person at work, you should remind him or her of the prohibition. If the person persists, you should call the NIH Police, who will take appropriate action to remove the agent. If you receive solicitation by mail at work, you should forward the correspondence to the Recruitment and Employee Benefits Branch. That office will take appropriate action. □