

"Still
The Second
Best Thing
About Payday"

The NIH Record

New Study Finds Genetic Link to Homosexuality

By Linda Anderson

A new study has found a correlation between a specific region of the X chromosome and male homosexuality. The finding represents new evidence that sexual orientation may be influenced by heredity.

The study conducted by NIH scientists titled "A Linkage Between DNA Markers on the X Chromosome and Male Sexual Orientation" was reported in the July 16 issue of *Science*. The authors are Dr. Dean H. Hamer, Stella Hu, Dr. Victoria L. Magnuson, Dr. Nan Hu, and Dr. Angela M.L. Pattatucci.

By analyzing the inheritance of genetic markers in pairs of homosexual brothers, the scientists localized the region related to sexual orientation to a minute segment of the human genome. However, a specific gene has not yet been isolated.

Hamer, chief author of the study, said, "The region that we've discovered represents a significant variation in the human genetic repertoire. If the gene itself can be isolated, then it will be important to understand how it interacts with other genes, the brain, and the environment to influence a trait as complex and variable as human sexuality."

Hamer is with NCI and conducted the study

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Lessons on Writing About Health for Children Given

By Amy Iadarola

Helen's hair is always mussed, a big knot on the top of her head, and her dress is always buttoned wrong. But Helen's disheveled appearance doesn't concern her because she's so excited about life, so full of questions. "Why? Why? Why?" and "How?" she asks.

Many years ago, Helen was a student of Catherine O'Neill's. Then an elementary school teacher, O'Neill is now a freelance writer for the *Washington Post*. She conjures up Helen when she writes the "How and Why" column in the *Post's* Health section. The column, which was born in 1985 with the first issue of the section, is aimed at kids ages 6 to 12, kids like Helen.

O'Neill spoke at the recent NIH public affairs forum entitled "Why Do I Have a Bellybutton?: Writing About Health for Children."

Initially, O'Neill's mission in writing the column was "to answer curious kids' questions." Over the years, her mission has evolved. "I aim to help kids understand their bodies and their place in the world and to bolster their ability to control and guide their futures," she said. In her column, she has addressed issues ranging

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Staff IHS Hospitals

CC Nurses Respond to Four Corners Emergency

By Rich McManus

Five Clinical Center nurses recently volunteered to respond to a mysterious outbreak of acute respiratory distress syndrome in the Four Corners area of the southwestern United States. Though none encountered the infectious agent—now believed to be a hantavirus associated with rodent wastes—all returned enriched from their experience in a distinctly un-Clinical Center-like environment.

The nurses' quick response to emergency both gratified and amazed Kathryn McKeon, CC associate director for nursing. Alerted on Thursday, June 3 of the need for staffing help in the desert southwest, McKeon bade farewell to the volunteers—none of whom hesitated to answer the call—the following Monday morning.

By air, Shiprock, New Mexico, site of an Indian Health Service (IHS) hospital, lies some 1,900 miles from Bethesda. That's where nurses Trisha Miller and Kim Woodring spent 3 weeks in June at a small 50-bed hospital that Miller described as looking "like an elementary school." In terms of the creativity and compassion brought to the profession of nursing, however, Shiprock is much closer to the high-tech CC.

"They were great to work with, from the nurses and doctors to the pharmacy techs and others," said Miller, a 2 1/2-year veteran of the 10D intensive care unit. "I really respected them. They see so much, and so many different types of cases."

Like the black widow spider bite and the patient kicked in the chest by a bull seen by Woodring, a Silver Spring native who has spent 2 years on 12 West, an oncology/AIDS unit. Or the split heads and open wounds casually reported to CC nurse Florentino "Tino" Merced-Galindez, ordinarily an oncology nurse on 12 East but for 4 weeks a volunteer at the IHS hospital in Tuba City, Ariz.

Like Miller and Woodring, he left deeply impressed by how much the nurses do with so little in the way of such common items as computers, Betadine swabs, and disposable syringes.

"They do an outstanding job," he said. "Nursing is done differently in every city in the U.S., but what is common to all is that they do the best they can with what they have."

Echoed Miller, "I think they're the basis for TQM (total quality management, a quality initiative adopted in recent years throughout

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Nursing Research Becomes 17th Institute at NIH

What's in a name? If the staff of the new National Institute of Nursing Research were asked this question, the answer would surely be "a lot more than one would think." Formerly the National Center for Nursing Research, the newly created institute, its staff, friends, colleagues and the nursing community are looking forward to celebrating the new status.

"People ask me why institute status is so important," said Dr. Ada Sue Hinshaw, NINR

director. "I tell them that it is a matter of perception, which includes a sense of stability, stature and importance for nursing research within the health research community."

The change from center to institute began on the evening of June 10, when President Clinton signed the NIH Revitalization Act of 1993, thus creating the NINR, among other things. HHS Secretary Donna Shalala then signed the corresponding *Federal Register* notice on June

(See **NINR**, Page 2)



After a brief ceremony where Secretary Donna Shalala (l) signed the Federal Register notice establishing the NINR, she and NINR director Dr. Ada Sue Hinshaw show the new institute logo.

NINR (Continued from Page 1)

14, which formally added the 17th institute to NIH. In her press release announcing the NINR, Shalala said, "I am particularly pleased that nursing research has received this recognition. Nursing research makes a vital contribution to improving the nation's health. Strengthening that research role is certainly something I am proud to support."

The institute's purpose is to provide a strong scientific base for nursing practice, answering such questions as: How can nurses help mothers-to-be prevent low birth weight babies?



NATIONAL INSTITUTE OF NURSING RESEARCH

This is the new National Institute of Nursing Research logo. The NR stands for nursing research, and the flame symbolizes knowledge.

How can the extent of a child's pain be determined so that the right help can be given? What can nurses do to help women deal with the typical symptoms of menopause? How can older people live independent lives as long as possible?

In addition to ameliorating illness, nurse scientists study health promotion and disease prevention, including how to motivate people to adopt healthy lifestyles. Innovative ap-



Director Ada Sue Hinshaw and the NINR staff lift cups engraved with the new institute logo in a celebratory toast to NIH.

proaches are also developed and tested to improve the delivery of health care through high quality nursing services. Nursing research is strongly collaborative. Nurse scientists work closely with many health disciplines to find answers to health problems.

According to Hinshaw, "What has been especially gratifying is the support, encouragement and assistance of our NIH colleagues dating from the time we first arrived on campus in 1986. We look forward to continuing our good relationships and productive collaborations as we all work towards furthering research in the interest of good health." □

Blood Donors Needed

The NIH Blood Donor Center urgently needs blood types A positive, O positive and O negative. To avoid waiting, call for an appointment, 61048. Center hours are 7:30 a.m. to 3:30 p.m., Monday through Friday, except Tuesday when it closes at 12:30 p.m. □

Women Volunteers Needed

The NIDR is seeking female volunteers over age 30 for a study of normal salivary glands. Volunteers must be healthy and must not be taking any medication. The study involves a minimum of 4 weekdays with two Clinical Center overnight stays. Procedures include nuclear medicine tests, blood drawing, and urine collection. Volunteers will be paid. To learn more, contact Alice, 64371. □

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NIDDK and the American Celiac Society-Dietary Support Coalition cosponsored the first conference on celiac disease recently at Lister Hill Auditorium. The 3-day conference featured a food fair at the Bethesda Holiday Inn. Pictured here is Elle Sterk of Sterk's Bakery, who is showing a cookbook to Rhona Friedman (l) and Marie and Rodman Grismore.

Antidepressant Holds Promise for Treating Autism

Scientists have discovered that an antidepressant medication can help to reduce some of the abnormal behaviors associated with autism, a severe developmental disorder that affects 4 out of every 10,000 children. In the June 15 issue of the *Archives of General Psychiatry*, researchers at the National Institute of Mental Health reported that clomipramine can relieve many of the obsessive-compulsive symptoms of autistic disorder.

In addition, the authors—Charles T. Gordon, Rosanne C. State, Jean E. Nelson, Susan D. Hamburger, and Judith L. Rapoport, all with the Child Psychiatry Branch at NIMH—discovered that clomipramine improved some of the core symptoms of autism. These include stereotyped motor behaviors such as jumping, twirling and hand flapping, as well as abnormal social interaction.

"We are far from finding a cure for this devastating disorder, but these results offer considerable hope for people with autism and their families," said NIMH director Dr. Frederick K. Goodwin. "At the conclusion of the study, in fact, nearly 80 percent of the parents of study participants elected for their children to remain on clomipramine treatment."

Autism is a significant public health problem with great cost to the individual, family and community. Only 5 to 10 percent of autistic children become independent as adults; 25 percent improve but still require supervision; and the remainder continue to be severely impaired and in need of high-level institutionalized care. The disorder often coexists with mental retardation.

Autism is distinguished by impaired social interaction, lack of development of language and communication skills, and the inability to engage in imaginative activity. Autistic children, for example, typically are unable to form relationships with other people; they may not speak at all or may use language inappropriately to the situation; and they often cannot play creatively with other children. Certain obsessive-compulsive behaviors—such as positioning objects in a particular way, or performing tasks a certain number of times—are a common symptom of autistic disorder.

According to Gordon, clomipramine is known to be effective for treating obsessive-compulsive disorder—a mental illness causing recurrent, distressing thoughts that lead people to perform senseless behaviors like repetitive handwashing, checking locks, and counting objects. The research team hypothesized that clomipramine could, therefore, help reduce the obsessive-compulsive behaviors in autism.

"What was unexpected—and exciting—was the patients' improvement in making eye contact and initiating social interaction," he said. "It was a very consistent effect—we observed improvement in all of the patients taking clomipramine. The difference was slight

in some patients, more marked in others—but it was noticeable."

In the study, 12 autistic children completed a 10-week double-blind crossover comparison of clomipramine and desipramine, and 12 different autistic children completed a similar comparison of clomipramine and placebo. While clomipramine was superior to desipramine in reducing both obsessive-compulsive and core autistic symptoms, the drugs were equally effective in reducing hyperactivity—another common feature of autistic disorder. Additionally, clomipramine helped to reduce self-injurious behaviors—biting, hitting and pinching themselves—in all of the four children in the study who exhibited such behaviors.

Of the 24 children studied, Gordon said, about one-sixth showed major improvement in social and behavioral functioning. About half

...These results offer considerable hope for people with autism and their families.

of the group demonstrated moderate improvement. About one-sixth showed small improvement, and the remaining one-sixth had none.

Until now, medication studies in autism have yielded relatively disappointing results. The most studied and consistently useful medication has been the neuroleptic drug haloperidol, but it has problematic side effects—most notably tardive dyskinesia, a disorder causing involuntary movements of the facial muscles, limbs and trunk.

"Clomipramine is the most effective medication, certainly, that we've seen in quite some time," said Rapoport. "And even long-term use poses no significant risk of side effects, which is not the case with neuroleptic medications."

According to Rapoport, the precise physical cause of autism remains unknown; however, it has been hypothesized that autism is caused by excessive levels of serotonin, a neurotransmitter, or by underdevelopment of parts of the brain.

Clomipramine belongs to the class of drugs known as serotonin reuptake inhibitors. While its exact neurochemical mechanism is unknown, the drug is presumed to influence obsessive and compulsive behaviors through its effects on serotonergic neuronal transmissions.

"This is the first double-blind, controlled trial of a serotonin reuptake inhibitor for autistic disorder," Rapoport said. "We believe that the results shown for clomipramine could be applicable for other drugs of this type."

In addition, she said, future studies comparing haloperidol and clomipramine treatments for autistic disorder could prove to be useful.—

Caree Vander Linden □

CHILDREN

(Continued from Page 1)

from AIDS, violence, and the death of a loved one, to bike safety, nutrition, and pet care. The column often includes tips for parents and teachers and an "interactive" component such as a quiz, crossword puzzle, or suggested activity, which O'Neill said provides her readers another way of learning. Many of the schools in the D.C. area use the "How and Why" column in their science and health curricula.

O'Neill said that the children fuel her writing. Ideas for her columns come from visiting classrooms, talking to teachers, and reading the mail she gets from her young readers. A typical letter might read: "Why do I have a bellybutton?" or "I have a bump on my arm. Is it cancer?"

In writing her column, she keeps in mind the issues that preoccupy primary- and middle-school-age children, including dealing with peer pressure, resolving conflict, cultivating self-esteem, separating from family, and developing relationships.

Health writing for children has changed over the past several decades. "What we as a society write about for kids says a lot about what we as a society want for our children," said O'Neill. She believes that, in the past, books about the human body aimed at kids did not give a deep understanding of how the body functions. Instead, the body was viewed as "a mystery that could only be accessible to adults." Our attitudes have changed profoundly. Today, children's books about the body are more candid about issues such as human sexuality. "There is an openness about AIDS and homosexuality that there never was before, much of this in response to the AIDS epidemic," she said. "There has also been more open discussion of racial issues, and violence has become a growing health concern."

O'Neill gave the audience some tips on writing for kids. You must vary the tone and content to keep young readers interested. Tone, in particular, is crucial, O'Neill said. Writers must be careful not to condescend. "Don't 'dumb it down,'" she warned. "Take kids seriously as people who are intelligent and curious." She cautions writers against using kid slang. "By the time it gets to you it's probably out of style." In general, she said, "Be clear, compassionate, and factual." And a final suggestion: "Kids like gross things, so I try to get a little bit of gross stuff in there every now and then."

"Writing for kids is one of the most important things a writer can do," she said. "It puts you in touch with your own inner child and with the future—and it's fun!"

In addition to freelancing for the *Post*, O'Neill is publications director for the National Association of Independent Schools in Boston. She has also been a reporter, editor, and teacher. Helen, by the way, is now a pediatrician. □

GENE LINK

(Continued from Page 1)

as part of the institute's effort to identify genetic factors involved in cancers that are frequently found in gay men infected with the AIDS virus.

Hamer and colleagues studied the family histories of 114 gay men and found that their brothers, maternal uncles, and maternal male cousins were more likely to be homosexual than would be expected among the general male population. In some families, gay relatives could be traced back for three generations. Because the homosexual uncles and male cousins of the gay subjects were raised in different households, the scientists hypothesized that a genetic factor was involved. Furthermore, the maternal link suggested that homosexuality might be associated with the X chromosome, which is the sex-linked chromosome that men inherit only from their mothers.

Explicit evidence for a genetic link was obtained by studying the X chromosome DNA of 40 pairs of gay brothers. The scientists used a technique called linkage mapping to search for patterns of similarity in the genetic information of related individuals. Thirty-three of the gay sibling pairs had coinherited genetic markers in the same chromosome region called Xq28, suggesting that 65 percent of the families studied were transmitting a gene for homosexual orientation.

"The statistical significance of the results was better than 99 percent, which means that the possibility of obtaining our findings by chance

is extremely unlikely," said Hamer. However, he noted that replication on an independent population of families will be necessary to confirm the results.

The scientists do not know why seven of the 40 pairs of gay brothers did not coinherit the Xq28 genetic marker. Hamer postulated that these gay men may have inherited other genes that are associated with homosexuality, or they might have been influenced by environmental factors or life experiences.

"Given the intricacies of human behavior, it is not surprising that a single genetic locus [region] fails to account for all of the variation seen in the study group," said Hamer. "What is remarkable is that we can account for at least some of the inherited variability with a fair degree of statistical confidence."

The scientists are also studying the families of lesbians. Preliminary results suggest that female sexual orientation is genetically influenced, but DNA markers have not been detected yet.

Hamer emphasized that the study was not designed to test for sexual orientation. The findings do not permit determination of an individual's sexual orientation, he pointed out, because the complexities of sexuality cannot be fully explained by a gene or genes.

"As efforts to map the human genome progress, there will be increasing concern about how the information is used. Scientists, educators, policy makers and the public should work together to ensure that behavioral genetics research is used to benefit all members of society and not to discriminate," said Hamer. □

Yvonne Maddox Named Acting MARC Director at NIGMS

Dr. Yvonne Maddox recently was named acting director of the NIGMS Minority Access to Research Careers (MARC) Program. She has been the deputy director of the NIGMS Biophysics and Physiological Sciences Program Branch since 1991. She will continue to hold this position while serving as acting MARC program director.

Maddox came to NIGMS in 1985 as a health scientist administrator in the physiological sciences section of the Biophysics and Physiological Sciences Program Branch. This section includes a large portfolio of grants in the area of trauma and burn injury research.

Before joining NIGMS, she served as a research assistant professor in the department of physiology and biophysics at Georgetown University Medical Center. She also worked as an NIH postdoctoral fellow at Georgetown, studying the role of eicosanoids in pulmonary vascular reactivity. Maddox received her Ph.D. from Georgetown University, with her research focusing on the regulation of vascular tone by prostacyclin.

Maddox has received many awards, including the 1990 PHS Special Recognition Award and the 1990 NIH Director's Award. She is active in several NIH organizations, including the staff training in extramural programs committee, the nutrition coordinating committee, and



Dr. Yvonne Maddox

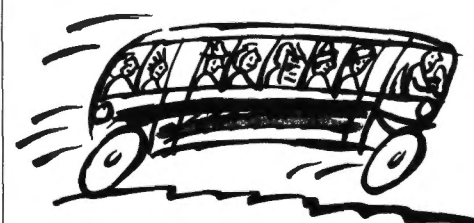
the digestive diseases interagency coordinating committee. She also serves as chair of the board of directors of the Center for Development and Population Activities, which provides access to quality health and family planning information and services, promotes increased productivity, and improves the quality of life for women and families in Third World countries.

Maddox replaces Elward Bynum, who retired after 39 years of federal service, 27 at NIGMS. □

New NIH TRANSHARE Program Doubles Monthly Subsidy to \$42

Changes are in the wind for the NIH TRANSHARE program. NIH now provides up to \$42 a month in subsidies to qualified participants. In addition to public transportation commuters, vanpool commuters are also eligible for this program. The changes don't stop there; the program is also available to off-campus personnel in leased facilities as well as stay-in-school employees.

The original requirements remain the same—participants must relinquish all NIH issued campus parking permits, and off-campus employees must provide parking



access card (FACSCARD) numbers and/or sticker numbers, which will be recoded in order to restrict parking access. Up to 24 temporary parking permits are available each year and can be obtained relatively easily. Campus personnel should simply stop by the Parking Office in Bldg. 31 for a temporary dashboard permit. Off-campus participants will be issued a 1-day parking validation sticker from their administrative office.

Funding for the new NIH TRANSHARE program is available for 2,000 eligible participants. If more than 2,000 eligible participants apply for the program, a waiting list will be developed. The success of the program, budget constraints, and the passing of pending authorizing legislation will determine whether the program will continue past December 1993.

For more information about TRANSHARE, call the Employee Transportation Services Office, 402-RIDE (7433) or stop by Bldg. 31, Rm. B3B08.

Ethics Training Opportunities

Many NIH employees still need to attend ethics training for 1993. Employees should check with their deputy ethics counselor or personnel office to see if they are among designated participants. To help meet this requirement, the NIH Training Center has scheduled general sessions on Aug. 5 (Lister Hill), Aug. 16 (Lipsett), Aug. 26 (Lipsett) and Sept. 27 (Lipsett). Training sessions last about 2 hours and are available both morning and afternoon. NCI employees may attend general sessions or sign up for either of two NCI sessions to be held at Masur Auditorium on Aug. 31. Contact the ICD deputy ethics counselor or personnel office for registration information. For more course information, call the Training Center, 66211. □

Computing Evaluation Project Seeks Participants

The DCRT Computer Center Branch reviews alternative methodologies to determine their effectiveness for high-performance computing. One such methodology, clustered computing, is currently being evaluated with several researchers. Initial results are positive, but a more extensive evaluation requires participation by more members of the NIH research community.

Clustered computing is an approach to providing high-performance computing for the scientific community by use of existing workstations. It takes advantage of the unused cycles available on today's high-performance personal workstations, thus providing cost-effective computing and resource allocation. Groups of networked Unix workstations, which may be located in different rooms or even different buildings, are electronically managed by a common set of software that distributes incoming numerically intensive computer jobs among those machines. Clusters may consist of dedicated computer servers, personal workstations, or combinations of both. Jobs may be classic batch or parallel in nature. The management software has the capability of defining various classes of work, indicating which workstations will accept some or all of those classes, and allowing the owner of a personal workstation to determine the criteria under which jobs may be forwarded to his or her machine.

The current CCB computer cluster consists of 6 IBM RS/6000 and 2 Sun Unix workstations. The cluster has Fortran and C compilers and the Engineering and Scientific Subroutine Library available. File access is by way of the Network File System to file systems on the user's own workstation. Plans for the cluster include updated versions of the management software, additional user groups, access to the Advanced Laboratory Workstation file system, and increased capacity in the form of more and higher powered workstations from several vendors. Longer term plans may include a DCRT-wide cluster, packaging of the appropriate software and distribution to end-users to replicate clusters in their own laboratory environment, and the possibility of a "cluster-in-a-box," a collection of workstations in one unit, as a central service.

DCRT is seeking a few additional NIH researchers to participate and make use of the existing cluster for their scientific computation requirements at no cost. Computationally intensive tasks such as gene linkage analysis and image processing are particularly well-suited for participation. For more information, contact Paula Moore, 21237.

In a related project, DCRT scientists in the Laboratory of Structural Biology are also evaluating and using a cluster of 10 HP 730- and HP 750-class Unix workstations on an FDDI network for computationally intensive methods. This collection of machines performs

at the level of a Cray Y/MP processor. Current applications include molecular dynamics (CHARMM) and quantum chemistry (GAUSSIAN, GAMESS). This system is being used as a platform for the development and evaluation of parallel computing methods as well as the primary source of computing cycles for the LSB.

This cluster will be upgraded to higher speed

Summer Students' Poster Day Set

The third annual NIH-wide Summer Research Program Poster Day 1993 will feature scientific presentations by students and teachers on Friday, Aug. 6. Posters will be displayed in the Visitor Information Center, Bldg. 10, from 9 to 11 a.m. and from noon to 2 p.m. During those times, members of the NIH scientific community will be able to discuss the projects informally with the presenters.

Poster Day was developed by the Office of Education in order to provide a forum for summer student and teacher researchers from all institutes, centers and divisions to share the results of their NIH experience with NIH scientists and their peers. This forum also allows them to gain experience in the presentation of scientific results. All participants will receive a certificate and a t-shirt in recognition of their achievement.

Last year's Poster Day featured 197 posters and 214 presenters. For more information, contact the Office of Education, 62427.



Karen J. Faunce has been appointed chief of the Administrative Management Branch and principal administrative officer of the Division of Intramural Research, NIAID. She is a graduate of the University of Maryland, and began her employment with HHS in 1975 with the FDA. During her tenure at NIH, which began in 1979, she has held administrative positions with DRS, NCI, NIDR and, most recently, NIDCD, where she served as principal administrative officer and chief of the Administrative Management Branch.

workstations (HP 735/HP 755), will include more machines, and will be connected with a high-speed switch (ATM). These enhancements will improve performance for macromolecular simulation by a factor of four. Both the network of HP workstations and the parallel software will likely be available for use through the CCB cluster project in the future. □

Orphan Products Board Lauds Richter

Mary Kaye Richter, a former member of the National Advisory Dental Research Council, is the winner of a Public Health Service Award for exceptional achievement in orphan products development. Richter is founder and executive



Mary Kaye Richter

director of the National Foundation for Ectodermal Dysplasias (NFED), an advocacy group for people with ED. The Orphan Products Board honored "her longstanding work and dedication to children with ectodermal dysplasias."

Ectodermal dysplasias are rare, hereditary disorders that result in a variety of medical and dental conditions, including missing or misshapen teeth.

Richter founded NFED in 1981 when her son, Charles, was diagnosed with the disorder. Since that time, she has brought the concerns of ED patients to the attention of the public, Congress, and health care providers. Lately, she has been instrumental in recruiting youngsters with ED for a National Institute of Dental Research study of dental implants. In addition to her involvement with NFED and NIDR, Richter serves on the board of directors of the National Organization for Rare Disorders, as president of the National Alliance for Oral Health, and on the steering committee for Oral Health 2000. □

FOUR CORNERS

(Continued from Page 1)

the CC) right there. They work real well together without even knowing that they're doing it."

Miller learned from her head nurse, Sue Johnson, of the need for volunteers and answered without much deliberation.

"I probably wouldn't have gone if I had had more time to think about it," she laughs. "I thought it would be a good opportunity to try out, so what the heck? My family was worried about me, but they figured they might do it too if they were young again. I looked at (the danger of becoming ill) as the chances being higher of me getting killed on the Beltway driving to work than getting the virus. The hype was much more powerful here than it was there."

Interestingly, Merced-Galindez said the local media in the Four Corners were more adept at presenting information than many of the major U.S. newspapers. "The local papers ran short, unhysterical pieces that were very factual. They worked closely with the Centers for Disease Control."

Added Woodring, "The town paper also ran safety precautions, hints on cleaning up rodent droppings and other safety tips. They were very good."

All of the CC'ers noticed a distinct rush on local clinics whenever a headline reported a new death. "If the media died down, we'd be really slow," said Woodring. "If someone else died it would pick up again."

Miller and Woodring roomed together at a Best Western motel in Farmington, N.M., some 30 miles from Shiprock, and used a government car to commute to work. Their



Bidding farewell to the nurses who volunteered to respond to the health emergency in the Four Corners area is Kathryn McKeon (r), associate director for nursing at the Clinical Center. The volunteers are (from l) Trisha Miller, Florentino Merced-Galindez, Jenny Lemert, Kim Woodring and Allyson Browne.

workplace was a combination emergency room, treatment room and screening room, and they saw whomever walked in the door.

"The hospital was overwhelmed with people who thought they had the mystery illness," said Miller. Signs and symptoms of the sickness included fever, muscle aches, and trouble breathing. Anyone with symptoms of more than 3 days' duration was ruled out as having the illness since it struck its victims so quickly and severely.

"We ordered blood tests on those suspected of having the virus, but no one even had a

(positive result) while we were there," said Miller. "Ten or 20 patients were screened as 'possibles,' but no one had the disease," which was dubbed UARDS, or unexplained acute respiratory distress syndrome.

Woodring was struck most by cultural differences in the southwest. "It is a society run by the elderly," she observed. "They are to be treated with great respect in Navajo culture. We were told to address them as grandma and grandpop, not by their names. And it was considered rude to look them in the eye."

"Most of the elderly didn't speak English,"

Answering the Call: A CC Nursing Tradition

When the phone rang in Kathryn McKeon's office on the afternoon of Thursday, June 3 and an official of the Indian Health Service asked whether Clinical Center nurses could respond to a mysterious illness in the desert southwest, it was not the first time CC nurses were tapped as emergency volunteers.

McKeon, associate director for nursing at the CC since 1989 and a nursing department veteran since 1979, knew exactly how to handle the call. She followed a protocol that had been established during past emergencies to which CC nurses have responded—Hurricane Andrew in 1992, Desert Shield/Desert Storm/Kuwait City in 1991, Hurricane Hugo in 1989, and a variety of other less dramatic instances.

"I remember back in January 1982, when the Air Florida jet crashed into the 14th Street Bridge," she recalls, sitting in the office from which she oversees the professional practice of all nurses in the Clinical Center, whether they belong to her department, the ICDs or to other hospital departments—among them

transfusion medicine, critical care medicine and hospital epidemiology—that employ their own nursing staffs. "We had five or six nurses who were helicoptered to the shore of the Potomac River for the rescue effort that day."

To McKeon, responding to calls for outside help is simply one more facet of that sense of membership to the larger world that she tries to encourage in all her employees.

"I always tell my nurses that they have a role in the world that is larger than the Clinical Center, even though this role is a challenging one, and that there are bigger causes out there," she said. "I find that the staff has a strong commitment to making a difference at lots of levels."

Requests for what are known as "external emergencies" can come to the nursing department from a variety of sources, including the surgeon general, the Federal Emergency Management Administration (FEMA), the chief nurse of PHS, or any executive-branch agency. Regardless of where they originate, however, the NIH director must approve all TDYs or

temporary duties, and only CC nursing department employees are eligible to volunteer.

"Some situations are PHS-associated," said McKeon. "For example, after Desert Storm, we were asked to help staff a civilian hospital in Kuwait City. Two groups from NIH went, led by John Tuskan. That was done in cooperation with the American Red Cross, and involved considerable danger, including undetonated munitions, land mines, some sniper fire and a horrible sanitation risk."

After Hurricane Andrew struck south Florida, a team of about five CC nurses helped staff field hospitals. A similar number volunteered following Hurricane Hugo's punch at Charleston, S.C. Less attention-getting instances also abound: At an Immigration and Naturalization Service detention camp at Brownsville, Tex., a CC nurse spent half a year caring for immigrants. At a Coast Guard clinic in Barrow, Alaska, a nurse from the CC was needed. When the National Oceanic and Atmospheric Administration sent a boatful of scientists to study an illness among dolphin and porpoise herds, a CC nurse was aboard for 6 months.

she continued. "We used whatever translating help we could get. Sometimes the hospital housekeepers would translate for us."

The symbol "E-" on a patient's chart meant he or she spoke no English. Those who couldn't write their names on consent forms used their thumbprints in place of signatures; the CC nurses carried inkpads for these instances.

The native people were also very stoic, noted Woodring. "I had a patient who had been hit by a truck come in 2 days after the accident. That patient, in Bethesda, would require narcotics. Down there, they wouldn't take anything."

Patients commonly hitchhike to the hospital, she continued. "It's very ordinary to see a Ford pickup rumbling along the road with five or six kids sitting in the back. If they hit a bump, a kid falls out. Trauma like that is quite common."

Animal bites and labor-related trauma such as chopped-off fingers are also typical, noted Merced-Galindez, who discovered that a friend of his was also working at the 100-bed hospital in Arizona.

The only CC'er posted to Arizona, Merced-Galindez, a native of Puerto Rico and NIH nurse since 1988, said an IHS-sponsored 1-800 hotline and a special newsletter circulated to businesses on the Navajo reservation helped quell many fears. His 12-hour shifts were characterized by basic screening and assessment of patients who flocked to the emergency room at the first sign of a sniffle.

"The mountains of northern Arizona is a very dry region and there are lots of respiratory problems," he observed. "None of the cases I saw turned out to be the pulmonary edema

characteristic of the disease."

He saw his chief role as "to calm people. A lot of teaching went on as well, mostly with the kids. We'd tell them to avoid chasing rats."

Once the agent causing the illness was identified as a hantavirus, "things settled down some," he said. Though he never felt scared of the virus, which is still being characterized, he was nonetheless mystified by its workings.

"It seemed to strike people in the age range 13 to 35, which is odd since most infections strike those with compromised immunity, such as the very young or very old. That's a riddle to me."

Working in Korea when the AIDS epidemic broke out, Merced-Galindez was used to the panic that accompanies news of emergent

Communication about the disease improved as time went on. It's much calmer now. But at the start, people were running wild.

viruses. "They ended up canceling some (public) events," he noted. After the hantavirus was discovered, however, masks and gowns were discarded and isolation was no longer required for those patients deemed "possibles."

"Communication about the disease improved as time went on," he said. "It's much calmer now. But at the start, people were running wild."

Concluded Merced-Galindez, "It gave me a different perspective on nursing practice. It was a 'real world' situation, and the level of care was very high despite the lack of computers and extensive documentation. You had to learn to be creative with the equipment at hand, and

"As a matter of fact, we're in a holding pattern right now as to whether our nurses will be called to the Midwest flooding situation," McKeon confided.

"We really are very flexible," she said. "These assignments have required a great deal of reassignment and reshuffling of staff."

McKeon said that Desert Shield/Desert Storm posed the greatest challenge to her resources. "We were prepared to admit 10 to 15 patients from the Naval Hospital," she said. "In addition, it cost us a great deal of staff who went on reserve duty at a variety of local military hospitals and aboard the hospital ship Comfort. If three nurses from one unit went on a mission, I had to reshuffle the entire staff. You have to sort of reorder everything."

"The call can come at any different hour," she continued. "I just happened to pick up the phone in the office at 7:30 one evening and got a call asking for critical care nurses in south Florida by the next morning."

The nurses who went to Kuwait City needed a variety of vaccinations, in addition to supplies of masks, gloves and gowns. "We called it their

CARE package," laughed McKeon. That team ended up doing far more than patient care, including work as sanitation and building engineers, she explained.

"We make a lot of assumptions at the CC that don't necessarily apply out in the field," she observed. "We warned the team going to Navajo country of the likelihood of culture shock, and to some degree, organizational shock."

The payoff for NIH, in addition to organizational pride, is that when these volunteers return, not only do they tend to appreciate what they have here more, but also their minds have been broadened.

"They bring so many treasures back with them," said McKeon. "They get a rich perspective that we like to capture and move along with. They learn new skills. They have a can-do attitude. Many take substantial personal risks, as in Kuwait City and Navajo country."

Next time you see bags stacked in the lobby of Bldg. 10, you may be watching the next chapter unfold in a proud story of national service.

improvise."

One of the CC volunteers turned out to be an old hand at medicine southwestern style: Allyson Browne of 8 West, an endocrinology unit, had spent 2 years at an IHS hospital in Santa Fe and so "knew a little about the population." Posted to a 50-bed IHS hospital in Crownpoint, N.M., she discovered on arrival "an overworked staff of nurses and doctors and patients coming in with a real concern over symptoms."

Working in the outpatient department and ER, Browne encountered no cases of the disease, only flu symptoms. The Takoma Park, Md., native shared trailer space and work with fellow CC'er Jenny Lemert, a nurse on 2J, for 4 weeks.

"It was a good opportunity and a good experience to work with native Americans," she said. "Really, we were just kind of helping out."

All of the nurses expressed a willingness to go if needed to the site of the next national emergency. Warned McKeon, "We may be asked to provide nurses in the aftermath of the Midwest flooding." □

Misconduct Hotline Created

To address the increase in the number of allegations related to work place misconduct, including all forms of discrimination, a toll-free telephone hotline has been established for employees to report their concerns. The hotline is operational Monday through Friday, 8:30 a.m. to 5 p.m. The number is 1-800-572-3305 (voice and TTY). Bilingual (English and Spanish) operators are available to take calls.

Information collected is voluntary, and may be reported anonymously. This information will be used to identify and resolve patterns and practices of inappropriate work place behavior. Employees are advised that contacting the hotline does not constitute the filing of an equal employment opportunity complaint. Any employee who desires to file an EEO complaint must contact the Complaints Management and Adjudication Branch, Office of Equal Opportunity, 61551.

For more information, call Gwendolyn Brooks, 66301. □

Training Center Holds Open House

Hands-on computer demonstrations and presentations on new training programs will be the highlights of an open house at the NIH Training Center on Aug. 9, in the EPS Bldg. The open house will run from 2 to 4 p.m. with a ribbon-cutting ceremony and contest drawing for free training courses at 3:30 p.m.

Employees are invited to try out the latest computer software, hardware and services at the new User Resource Center and tour the Training Center's state-of-the-art computer and traditional classrooms.

Open house visitors can use the EPS/N shuttle, which provides regular service from Bldgs. 31A, 10, 82, Solar and 6100. □

OC's Bob Schreiber Retires, Followed Laboratory Animal Issue for NIH

Bob Schreiber, a longtime NIH public information officer, retired recently after more than 30 years, the last decade of which was spent chiefly following the broadening impact of the laboratory animal issue on NIH intramural and extramural research.

He joined the National Institute of Neurological Diseases and Blindness in September 1962 as an information specialist, focusing chiefly on that institute's extramural program then headed by current NINDS director Dr. Murray Goldstein.

Two and a half years later, Schreiber rose to assistant information officer at NINDB. It was from that post that then-NIAID director Dr. Dorland Davis hired Schreiber to be information officer in February 1967.

For the next 16 years, Schreiber was NIAID's information officer, during which time the institute handled such well-known initiatives as tissue typing studies that led to the possibility of organ transplantation between unrelated donors, the controversy over the swine flu vaccine, and the emerging AIDS epidemic.

Schreiber helped organize some of the first science writers' seminars at NIH on such topics as allergy and immunology. "There was not much written on those subjects in the newspapers back then," he recalls.

His office also handled a new technical innovation at the time—teleconferencing. When the annual American Academy of Allergy meeting was held in Puerto Rico one year, a telephone linkup to NIH allowed local reporters to question authorities at the conference overseas. Schreiber received the DHEW Superior Service Award in 1973.

Born in Cleveland, Schreiber and his family moved to Oklahoma when he was 9. "We went to Oklahoma in the 1930's, when the Okies were moving on to California," he remembers. He received his bachelor's degree in journalism in 1950 at the University of Oklahoma. After a short stint as a reporter at the *Enid* (Okla.)



Bob Schreiber

News and Eagle newspapers, he joined the University of Oklahoma Medical Center as its first public relations director.

While on staff, he obtained his master's degree in journalism (1961) with concentrations in public relations and public health from OU, thereby launching a career in medical communications.

In 1958, "when the Eisenhower administration let foreign oil into the country for \$2 a barrel," the resulting economic pinch in Oklahoma ended his job at the medical center and Schreiber moved on to a similar post at the University of Pittsburgh Health Science Center.

"It was a much bigger operation than Oklahoma," he remembers. "The dean of the public health school was a former U.S. surgeon general, Dr. Thomas Parran."

For 4 years, Schreiber handled medical public relations at Pitt, working with such notable scientists as Dr. Jonas Salk.

In 1962, Schreiber had to choose between a higher paying public relations post at a midwestern medical center or a position at NIH. The opportunity to work for a national

organization in a major city tipped the balance in NIH's favor.

Following his years in NIH information offices, Schreiber was offered an assignment in 1983 to work with surgeon general Dr. C. Everett Koop, setting up a conference on developing strategies to increase the supply of solid organs for transplantation. After 5 months in that post, Storm Whaley, former NIH associate director for communications, brought Schreiber back to NIH as his special assistant.

"The Silver Spring monkey controversy had erupted in 1981 and there was quite a bit of fallout from that. I followed that issue as well as the evolving animal rights issue." During this period in the Office of Communications, OD, Schreiber also handled a variety of information assignments that drew on his wide knowledge of the institutes.

At a retirement party in his honor in Wilson Hall, a succession of past and present NIH authorities rose to pay him tribute, including Whaley, who credited Schreiber with a low-key but insistent approach to issues important to NIH: "It wasn't Bob's style to raise his voice in a meeting and pound the table, but I learned over the years that I had better pay attention to what he had to say."

Jim Sweat, director of the Division of Security Operations, praised Schreiber as a devoted and loyal civil servant, and gave him an honorary NIH Police badge. Other speakers included coworkers R. Anne Thomas, acting NIH associate director for communications, and Dr. Louis Sibal, director of the Office of Laboratory Animal Research; both credited Schreiber with offering invaluable advice and assistance.

In retirement, Schreiber and his wife plan to remain in the Washington area but travel more frequently—the first destination was a tour of western national parks. "I also hope to get a computer and get involved with that," he said.

—Rich McManus □



Frances Humphrey Howard, special assistant to the associate director of the National Library of Medicine's Extramural Programs, has been awarded two honorary degrees of doctor of humane letters. The first was presented by Seton Hill College in Greensburg, Pa. The second was awarded by the University of Maryland at Baltimore. In awarding the degrees, both institutions recognized Howard's extraordinary career of five decades of public service.

Japanese Blood Donors Needed

The hematology service in the Clinical Center's clinical pathology department is urgently seeking Japanese blood donors to study Nak⁺ individuals. A small blood sample (10 ml) will be collected. Compensation will be made at the time of donation. For more information call 66891. □

DCRT Computer Training Classes

Classes	Dates
The Dark Side of the Simple t-test	8/5
Mainframe Services at NIH	8/6
C Language Fundamentals	8/9-13
SQL: The Language for Relational Databases	8/9-11
BITNET	8/12
Beyond Basic WYLBUR	8/16-20
High Performance Computing with Math Advantage	8/20
Intermediate PC-DOS	8/23, 8/25
Molecular Graphics: Creating Pictures and Videos	8/23
ENTER MAIL	8/27
Designing Tables and Managing a DB2 Database	8/30-9/1

Classes are offered by the DCRT Training Program without charge. Call 62339 for more information. □

NIAAA Hosts Conference on Genetics of Alcoholism

Stone House was the site for the recent "International Workshop on the Genetics of Alcoholism," a joint venture of the National Institute on Alcohol Abuse and Alcoholism and the NIAAA-funded Collaborative Studies on the Genetics of Alcoholism (COGA). Scientists from genetics and other areas of alcohol research represented ten different countries at the conference.

NIAAA convened the researchers to establish a foundation for international collaboration on the genetics of alcoholism.

The workshop gave scientists a twofold opportunity: first, to hear from COGA investigators about the status of U.S. genetics research and, second, to present to key NIAAA staff and COGA representatives information concerning genetics research in their respective countries.

Meeting chair and COGA director Dr. Henri Begleiter, State University of New York, was optimistic about the workshop results. "Participants responded enthusiastically, and our first meeting represented an auspicious beginning," he said.

Dr. Francis Collins, director of the National Center for Human Genome Research, provided meeting participants with an overview of genetics research at NIH. He also expressed interest in the ongoing work of NIAAA and COGA and encouraged alcohol investigators to pursue genetics research.

Dr. Enoch Gordis, NIAAA director, underscored the importance of genetics research to NIAAA and the entire alcohol field: "Success in uncovering the genes involved in vulnerability to alcoholism will help us to recognize the potential for alcoholism in high-risk individuals, to intervene at an early stage, and to develop new treatments for alcohol-related problems."

NIAAA has supported research on the genetics of alcoholism for about two decades, beginning with the twin and family studies that first revealed evidence for inherited susceptibility to alcoholism. NIAAA's current genetics research portfolio includes genetic linkage and gene mapping studies, as well as animal and human studies of genetic susceptibility to



Attendees at the recent NIAAA conference included (from l) Dr. Theodore Reich, Jewish Hospital of St. Louis; Dr. Henri Begleiter, State University of New York Health Sciences Center and director, COGA project; Dr. Allison Goate, Washington University, St. Louis; Dr. Yu-Cun Shen, director for research and training, WHO Mental Health Center, Beijing; and Dr. Claiton H.D. Bau, Hospital de Clinicas de Porto Alegre, Brazil.

alcoholism and alcohol-related health effects.

In 1989, the institute initiated COGA, a multidisciplinary study involving seven U.S. research institutions that are collaborating to determine how vulnerability to alcoholism is transmitted through families. COGA scientists are studying large families of alcoholics, methodically collecting biological material and conducting neuropsychological and personality assessments.

Now in its fourth year, the project is expected to yield fundamental knowledge about possible biological markers, and genetic, psychological, and environmental factors associated with alcoholism susceptibility. Preliminary results are expected to be published at the end of the fifth year.

Countries represented at the workshop included Brazil, Canada, France, French Polynesia (Tahiti), Germany (with representatives from both Munich and Berlin), Japan, People's Republic of China, Spain, and Chinese Taipei (Taiwan).—Peggy Murray □

Visit Vermont Resort This Fall

How would you like to experience fall in New England? R&W has scheduled a 3-night/4-day trip to the Mountain Top Inn and Resort in Chittenden, Vt., for Oct. 21-24. This family-run inn specializes in delicious food, glorious scenery and New England hospitality. Package includes transportation, accommodations, all meals, horseback riding, fishing, golf, trap shooting, wagon rides, and canoeing and will feature a pontoon boat ride to a special breakfast on the lake and a shopping/sightseeing trip to the town of Woodstock. All this and more for \$380 per person (based on double occupancy). For information call Jodi, 66061. □

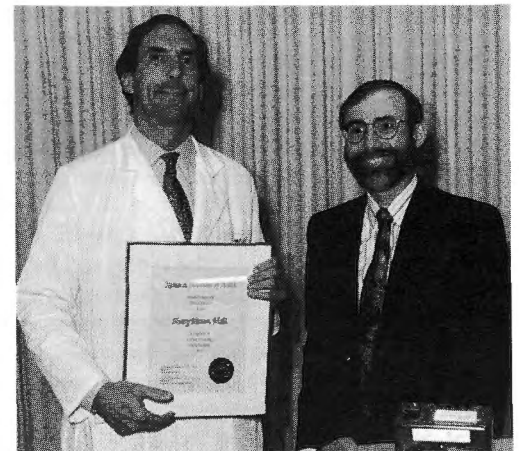
EP Credit Union Branch Construction Proceeding

Construction for the NIH Federal Credit Union's (NIHFCU) new Executive Plaza branch, which began a few months ago, is progressing as planned. While the credit union has experienced some temporary delays due to logistical constraints, cooperation with the NIH Division of Space and Facilities Management is permitting the project to proceed to completion.

The new branch will be a full-service operation, offering members a wide range of financial services including direct deposit/free checking, Price/Pace Club membership, CDs/IRAs, notary service, travelers checks, ATM card service and other amenities.

"The credit union is a safe, sound and secure financial institution backed by the National Credit Union Share Insurance fund, the strongest insurance fund in existence," said Sandeep Singh of NIHFCU.

For information on opening an account, call (301) 718-0208. □



Dr. Henry Masur (l), chief of the Clinical Center's critical care medicine department, receives the Clinical Teacher of the Year Award from Dr. Michael Fordis, director of the NIH Office of Education. Masur was chosen as the 1993 award recipient by the clinical associates.

Sailing Classes Offered

Join the fun with the NIH Sailing Association. Basic training classes start Wednesday evening, Aug. 25. Cost is \$95 plus \$35 club membership dues. Course includes six evening classroom sessions, a Saturday morning orientation at the marina and three or four weekday afternoons on South River near Annapolis, with two students and one instructor in the club's Flying Scots (19-foot sloop-rigged centerboard daysailers).

Students must be NIH employees, patients, or contractors, as well as R&W members. Application forms (class and membership) and further information on the Sailing Club are available at the R&W activities desk in Bldg. 31. □

BIG YARD Holds Forum, Aug. 5

The NIH chapter of Blacks in Government's young adult resources and development committee (BIG-YARD) will present a youth forum titled, "For Your Information: A New Generation," on Thursday, Aug. 5, from 11:30 a.m. to 1:30 p.m. in Wilson Hall, Bldg. 1. Bernie McCain of WOL Radio will deliver the keynote address. Workshops on KSA preparation, mentoring and financial planning will be offered. A fashion show on professional attire and attitude is also featured. For more information, call Felicia Shingler, 47255. □

The NIH Life Sciences Education Connection

The Office of Science Education Policy has moved to the fourth floor, Suite 450, in the Executive Plaza South Bldg. on Executive Blvd. in Rockville. The office's phone number, 22469, will remain the same as will the fax number, 23034. If you're in the area, stop by and visit the new location.

On July 30, the Office of Education held a hands-on demonstration of the electronic bulletin board EdNet. For information about upcoming sessions or to make arrangements for EdNet training, contact the OE, 62427.

An ongoing hands-on science education program for children ages 8-15 in its 20th year in Montgomery County is in need of teacher volunteers to create a similar



program on the NIH campus. The "Adventure in Science" program hopes to make NIH its fourth site in the county and needs your help. For more information about participating in this program, contact Dr. Ed Max, 20484.

The Science Alliance program also needs volunteers for its activities, which match scientists with elementary school teachers. The Science Alliance program will host a workshop for scientists on Aug. 13. The workshop will include training on working with teachers and elementary students as well as planning time for the 1993-1994 school year. If you are interested in being a Science Alliance scientist, call Dr. Irene Eckstrand, 47762, or Dr. Jim Anderson, 47754.

McKay Heads NINDS Laboratory of Molecular Biology

Dr. Ronald McKay recently joined NINDS as acting chief of its Laboratory of Molecular Biology.

Prior to his move to NIH, McKay was an associate professor of human biology and experimental medicine at Massachusetts Institute of Technology.

He received his bachelor's degree in zoology (1971) and Ph.D. (1974) from the University of Edinburgh in Scotland.

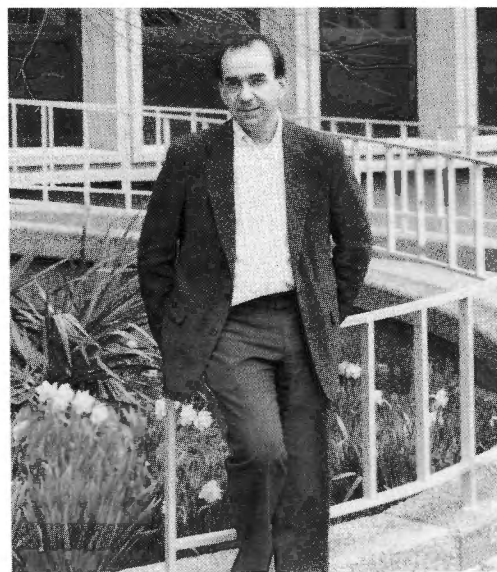
McKay's research has already had a significant impact on the field of molecular biology. His early training led him to describe the first restriction fragment length polymorphism in man and subsequently to develop one of the three quantitative assays used to measure the interaction of proteins with specific DNA sequences. This widely used technique is often called "the McKay assay."

He also pioneered the use of monoclonal antibodies to demonstrate the complexity of the nervous system. The focus of his laboratory research has been to establish mammalian experimental systems to define the molecular mechanisms that turn a multipotential stem cell into a functioning adult neuron.

In 1988, McKay and his colleagues discovered nestin, a gene that identifies neuronal precursor cells. Neuronal precursor cells determine the number and types of cells in the mammalian brain. Nestin is specifically expressed in neuronal stem cells and not in the differentiated cells of the mammalian central nervous system.

In addition, McKay has defined growth factors that promote the proliferation and survival of neuroepithelial stem cells, and has established cell lines that express neuronal precursor cell features and are capable of differentiation into neurons and glial cells.

McKay and his colleagues at the NINDS laboratory, a group of international researchers, have begun launching their novel approach to studying the molecular biology of the mamma-



Dr. Ronald McKay

lian brain and nervous system. The primary focus of their research is the transplantation of neuronal stem cells.

"We will develop new genetic tools based on our successful transplantation of neuronal stem cells. The fact that fully integrated neurons can be derived from transplanted stem cells opens the way to many exciting research and clinical goals," said McKay. "In a time of financial restriction, I'm excited about the research opportunities at the NIH."—Shannon Garnett □

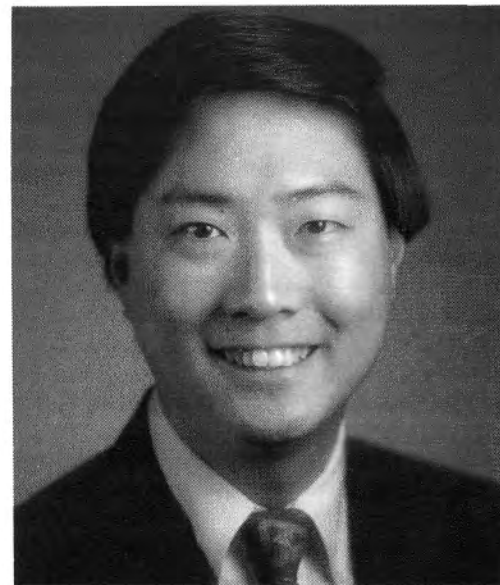
Postmenopausal Women Needed

The Cardiology Branch, NHLBI, needs normal healthy postmenopausal women who are not on hormone replacement therapy for an outpatient study assessing the effects of hormone replacement on the cardiovascular system. Participants will be paid. For more information, page Diane Badar 104-3741-7 (digital beeper). □

Chow Named FIC Assistant Director

Dr. Jack C. Chow has been appointed to the dual position of assistant director for international relations and chief of the International Coordination and Liaison Branch of the Fogarty International Center.

Dr. Philip E. Schambra, FIC director, said



Dr. Jack C. Chow

that Chow "will serve as my principal advisor on all matters concerned with NIH's international relations. He also will be responsible for the coordination of all bilateral and multilateral programs, strengthening NIH's external representation and ensuring cohesiveness of NIH international activities."

Most recently, Chow served as deputy assistant secretary for public health policy in the Office of the Assistant Secretary of Health, PHS, where he was principal advisor to the assistant secretary in determining national health policy development planning and strategy. He also served as deputy assistant secretary for health legislation in the Office of the Secretary, HHS.

Prior to that, Chow served as senior policy analyst with the White House Office of Science and Technology Policy and as a staff member of the committee on appropriations, U.S. House of Representatives.

While at OSTP, Chow was involved in the development of policy on international health issues such as AIDS vaccine trials, tuberculosis, and the World Summit for Children. As staff member to an appropriations committee, he oversaw and advised on the funding of all HHS international programs and activities, including those of FIC.

Chow received his M.D. from the University of California, San Francisco, his M.S. from the University of California, Berkeley, and his B.A. in political science from the University of Pennsylvania, where his concentration in international relations included U.S. foreign policy, Soviet foreign policy, the politics of East Asia, and international economics. □



TRAINING TIPS

The NIH Training Center of the Division of Personnel Management offers the following:

<i>Courses and Programs</i>	<i>Starting Dates</i>
<i>Management and Supervisory</i>	66371
Effective Listening and Memory Development	8/11
Using Animals in Intramural Research: Guidelines for Investigators	8/12
Using Animals in Intramural Research: Guidelines for Animal Users	8/12
Projecting an Effective Executive Image	8/16
Report Writing	8/16
Intro to Scientific and Medical Editing	8/16
Scientific and Medical Editing	8/18
Time and Attendance for Leave	
Approving Officials	8/18
Performance Appraisal Workshop	8/19
How to Write and Publish Scientific Papers	8/24
Influence and Negotiation	8/13

Office Operations and Administrative

<i>Systems Training</i>	66211
Writing Fundamentals II	9/8
Editing: An Introduction	9/8

Personnel Management

KSA Methodology Overview	8/30
Thrift Savings Plan for Personnelists	8/23
Management Control Training	9/9, 13

Special Courses

Mid-Career Financial Planning	8/26
American Sign Language-Level I	9/14
American Sign Language-Level II	9/14
Ethics Training	8/5, 17, 26
Ethics Training 93/NCI	8/31



Researchers in NIDDK's renal cell biology section, Metabolic Diseases Branch, received recognition recently from the Juvenile Diabetes Foundation International, the American Diabetes Association, the National Kidney Foundation, and the International Society of Nephrology. Pictured are (from l) Drs. Emmanuel Peten, section chief Liliane Striker, and Catherine Linder. Not shown is Dr. Zhi-Heng Liu. The section conducts research on glomerulosclerosis, the leading cause of kidney failure in the U.S.

Richtmyer, Noted Carbohydrate Chemist, Dies

Dr. Nelson K. Richtmyer, a chemist with NIH for 37 years until his retirement in 1971, died of cancer on June 6 at his home in Bethesda.

He was a distinguished researcher in the field of carbohydrate chemistry with the National Institute of Arthritis and Metabolic Diseases' Laboratory of Chemistry, now part of NIDDK. He made significant contributions toward clarifying the role of sugars in nature.

Richtmyer and Dr. Claude S. Hudson, one of the pioneers of carbohydrate chemistry and a former chief of the laboratory, helped define the chemistry of sedoheptulose, a 7-carbon sugar derived from sedum, a common garden plant. This research became more significant when another NIAMD scientist, Dr. Bernard L. Horecker, discovered that the sugar played a key role in metabolism in animals.

Dr. Melvin Calvin of the University of California concurrently discovered that sedoheptulose is an intermediate chemical in photosynthesis, a process that plays a key role in the maintenance of all life on earth. Such a discovery was made possible by the work of Richtmyer and his associates.

In 1959, Richtmyer collaborated with Alexander J. Charlson of NIAMD in isolating from the avocado and sedum plants the first 8-carbon sugar ever found in nature. Prior to the discovery of octulose, as the sugar was called, the largest carbon sugars in nature were thought to be heptuloses, or 7-carbon sugars.

Richtmyer and Dr. Hugo H. Sephton of NIAMD subsequently isolated a 9-carbon sugar, or nonulose, from the avocado.

In 1963, Richtmyer was presented with the Claude S. Hudson Award for his outstanding contributions to the field of carbohydrate chemistry and for editing *The Collected Papers of C.S. Hudson*. The award, named in honor of

the former chief of the Laboratory of Chemistry from 1929 to 1951, is now given annually by the American Chemical Society (ACS), whose purpose is to promote research and disseminate knowledge on all aspects of chemistry.

Richtmyer was born in 1901 in Coxsackie, N.Y. He received his B.A., M.A., and Ph.D. degrees from Harvard University during the 1920's.

Prior to coming to NIH, he held research positions at Harvard and the University of Heidelberg, Germany, and taught at Bryn Mawr College.

A member of the ACS since 1922, Richtmyer held a number of offices with the professional organization, including the chairmanship of its division of carbohydrate chemistry in 1954.—

Mark T. Sampson □



Lt. Col. Eugene Hayunga (l), U.S. Army Reserve, who in civilian life is a scientific administrator at DRG, recently received the Army Commendation Medal in a ceremony at Ft. Detrick. He was honored for his contributions to the first Tri-Service Nursing Research Program, which made \$1 million available for Department of Defense nursing research grants. Presenting the award is Maj. Gen. Richard Travis, commander of the U.S. Army Medical Research and Development Command.



The Division of Research grants recently honored its employees for outstanding contributions to NIH, PHS, the biomedical research community, and the general public. More than 120 employees were recognized for their achievements and commitment to excellence at the 7th annual DRG awards ceremony, held at Westland Middle School recently. Dr. Lynwood Jones (l) was among those recognized and is shown being congratulated for his 40 years of service to the federal government by Dr. Jerome Green, DRG director.

ORMH Director Ruffin Honored by Hispanic Organization

Dr. John Ruffin, NIH associate director for minority programs and head of the Office of Research on Minority Health (ORMH), recently received one of the National Coalition of Hispanic Health and Human Services Organizations' (COSSMHO) 1993 National Hispanic Health Leadership Awards. He was honored "for his effort to secure permanent federal support for

bolsters my confidence and reinforces my commitment. While the work ahead of us is great," he said, "this award tells me we are on the right track."

Other recipients of the award included Sen. Bill Bradley (D-N.J.) and Rep. Connie Morella (R-Md.).

COSSMHO is a nonprofit organization representing the needs and concerns of more than 1,000 health and human services providers serving Hispanic communities. It is the only national organization with a primary mission to improve the health and well-being of Hispanic communities throughout the United States, including Puerto Rico.

Reflecting upon the COSSMHO honor, Ruffin said one of the reasons ORMH received the award was because it asked the community early on to help NIH shape the strategy of this office. "We are the catalysts, ORMH is the facilitator and the community is the motor behind what occurs," he observed.

Ruffin recently received a PHS Special Recognition group award for the White House Initiative on Historically Black Colleges and Universities.

He also served as a member of the OASH PHS task force on minority health data. The group was cited "for exceptional contribution to the improvement of minority health statistics in the PHS."

In addition, he served on the PHS Meharry Project task force and received a PHS Special Recognition Award "for insightful and creative group management of PHS-wide resources that served to preserve and enhance the ability of Meharry Medical College to continue its mission." □



Dr. John Ruffin

health programs to meet the needs of Hispanic, Black and Native American communities."

In accepting the award, Ruffin noted that ORMH has only been in existence for 3 years and that support from private organizations such as COSSMHO is essential to its success.

"To receive this award so early in my tenure



Elizabeth Thomson, formerly the coordinator of statewide genetic counseling services at the University of Iowa, has joined the Ethical, Legal, and Social Implications Branch, NCHGR. She will serve as coordinator of the branch's research portfolio on issues related to genetic testing, education and counseling. Thomson received her bachelor of science degree in nursing from Coe College and a master of science degree in preventive medicine and environmental health from the University of Iowa. A genetics counselor and nurse, she was certified by the American Board of Medical Genetics in 1982 and has long been involved in clinical genetics issues.

Tissue Repair Workshop Planned

Recent discoveries regarding the role growth factors play in tissue repair offer the potential for exciting new methods of wound treatment. In order to encourage future collaborative research efforts in this field, NIGMS is sponsoring a workshop titled "Molecular and Structural Biology of Tissue Repair." It will be held Nov. 1-2 at Lister Hill Auditorium, Bldg. 38A.

The workshop is designed to bring together structural biologists (including crystallographers and NMR spectroscopists), protein chemists, cell biologists, biomedical engineers, and surgeons. The program will cover the biology of growth factors, the identification and cloning of relevant receptors, structural and biochemical studies on receptor/ligand interactions, and molecular studies of the transcription factors involved in growth factor/cytokine regulation.

Speakers include Drs. Helen Berman, Michael Caldwell, I. Kelman Cohen, Jeffrey Davidson, David Davies, Abraham DeVos, Robert Diegelmann, Charles Dinarello, Angela Gronenborn, Gary Grotendorst, Thomas Hunt, P. Andrew Karplus, Gaetano Montelione, Thomas Mustoe, Anita Roberts, Sharon Wahl and Peter Young. Registration is required due to space limitations. For more information call Linda Shein, 47800.



Students participating in NIGMS' Minority Access to Research Careers (MARC) Program recently gathered in Bldg. 1. The students, who are doing summer research at NIH, were able to meet each other as well as NIGMS and NIH staff involved in biomedical research and training programs. Pictured with the students are acting NIH director Dr. Ruth L. Kirschstein (second row near center), NIH associate director for research on minority health Dr. John Ruffin (third row, far r), acting MARC program director Dr. Yvonne Maddox (third row, far l), and Minority Biomedical Research Support program administrator Dr. Lorrita Watson (third row, second from r).