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National Institutes of Health

"Still The Second Best Thing About Payday"

The NIH Record

As Fiscal Year Closes...

Uncertainty Surrounds Furlough Possibilities

By Carla Garnett

The federal government will close the books for fiscal year 1995 on Saturday, Sept. 30. That much is certain. Whether FY1996's books will open on Sunday, Oct. 1 is still up in the air, as of press time.

In the past several weeks, as the Oct. 1 deadline for the beginning of FY1996 neared, speculation and rumors about results of budget negotiations between the White House and Congress have dominated headlines, airwaves and more than a few conversations at the proverbial water cooler. As the issue unfolds over the next few days, employees can prepare using this reliable information from the NIH Office of Human Resource Management (OHRM), covering a wide range of possibilities with the worst-case scenario being a nonpaid government-wide shutdown.

A Bit of Background

All federal agencies depend on a set of annual appropriations bills, passed by Congress and signed by the president, in order to use funds for daily operations. Congress has not yet passed the 13 appropriations bills for FY1996. In addition, President Clinton has not agreed to sign several of the bills as they are currently written.

Because FY1995 ends—and with it, government operating funds—on Sept. 30, a federal furlough could occur as early as the first week of October.

What that would probably mean for employees is that most workers would report to their regular job sites. There, each would receive notification of a government-wide work stoppage. Then, all employees would be dismissed. Further instructions, as

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1995 Combined Federal Campaign Starts Oct. 11

"It's Up to You," is the theme of the 1995 NIH Combined Federal Campaign. The annual fundraising effort will kick off on Wednesday, Oct. 11 at 11:45 a.m. in front of Bldg. 1. On the agenda are food, music, a free raffle and fun—not to mention a great cause. The National Institute of Neurological Disorders and Stroke is the sponsor institute of this season's campaign.

This year, more than 2,500 voluntary agencies will participate in the CFC, which provides services to millions who need our help, here in this country and throughout the world. Area keyworkers will be distributing the CFC *Catalog of Caring*, which lists the many charities to which NIH'ers may designate their contribution.

Breaking with tradition from campaigns past, in which the CFC Walk/

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Brown Bag Lunches: Food for Thought

By Ruth Levy Guyer

"Your parents always told you not to brag, not to be boastful," said Dr. Hynda Kleinman, "but they lied! You have to promote yourself professionally."

Dr. Hynda Kleinman

Kleinman was talking to about 90 young scientists who were attending one of this summer's three lectures in the "Scientists' Network: A Brown Bag Lunch Series," sponsored by the Office of Research on Women's Health and coordinated by the Office of Science Education.

Similar advice was included in a handout circulated by Dr. Joan Schwartz: "You must forever be your own career development officer. Like it or not, you must learn to grab the reins and steer your professional future."

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Search for Understanding

Modern Research May Solve Puzzle of Autism

By Anne Blank

Temple Grandin, an assistant professor at Colorado State University with a Ph.D. in animal science, runs her own successful business designing livestock equipment. In addition to being an animal behavior specialist and engineer, she is a sought-after lecturer and consultant, as well as a published author. She is intelligent, funny, and engaging, and cares sincerely about the comfort and well-being of the animals for whom she designs buildings and holding pens. Grandin also has autism.

In another family are three brothers. They have extremely different ability levels, ranging from relatively average to well below. For example, the eldest brother, who is of normal intelligence, delivers newspapers. The second brother has the daily habit of reading the newspaper from front to back, a practice that, at first glance, may not appear too unusual. But while some people may like to read certain sections before others, for some reason this adolescent is compelled to read the entire newspaper, in order. The youngest brother then has his turn with the paper; instead of reading it, however, he shreds the whole thing. All three boys have autism.

Dr. Temple Grandin describes her experiences with autism at NIH meeting.

As these examples illustrate, people with autism show great variation in their behavior and abilities. Grandin is an example of a person who has triumphed over most of the deficits while developing to a remarkable degree the special strengths of autism, such as her ability to

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FURLOUGH
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available, would also be given at that time.

Avoiding a Shutdown

A work stoppage could be avoided, however, if Congress passes what is known as a continuing resolution, which would keep operations going until an appropriations bill is passed and signed. In years past when the government's time and money have run out, continuing resolutions have been passed to avoid a shutdown. Before this year, the most recent threat of federal furloughs occurred during September and October 1990. That year layoffs between 13 and 22 days were considered by HHS and NIH officials. In the end, the government shut down over a 3-day weekend in October and although the furlough caused some area monuments to close, NIH employees did not have to face the prospect of being sent home or losing pay.

This year, the president and some congressional leaders reportedly have agreed to work toward some kind of continuing resolution, however details of the agreement and whether such a measure would completely avert a work stoppage had not been hammered out by press time.

Marvene Horwitz, OHRM's assistant director for consulting services, cautioned that a continuing resolution is only a temporary measure to keep government funded for a few additional weeks.

"Another wrinkle is that the debt ceiling will be reached soon," she said. "If Congress does not pass legislation to raise that ceiling, we could again be without authority to spend monies, which would require a shutdown/furlough at that time. At this time, we have no idea how long any shutdown/furlough would last."

Pay and Leave

Depending on whether Congress passes legislation, Horwitz continued, employees may not be paid retroactively for furlough days. Also, unemployment compensation may or may not be available to employees, depending on individual state regulations.

"Each state has different requirements on unemployment benefits," said Horwitz. "Each ICD personnel office has that information and I would urge employees to contact their personnel office to determine what the requirements are for their states."

In addition, employees do not earn annual or sick leave while on furlough, because they are in nonpay status, she continued. If workers are on leave that was approved before the furlough, that leave is "canceled," i.e., leave cannot be taken on a nonwork, nonpay day.

Lastly, essential government employees—a category that includes some NIH'ers—will have to report for work even during a shutdown. Such staffers will be paid. Essential NIH employees have already been determined by individual institutes, centers and divisions, Horwitz added. "Generally, employees involved in patient care and the protection of life and property may be considered essential." ❑

Blue Cross/Shield Service Day

Blue Cross/Blue Shield of the National Capital Area will be on the NIH campus Tuesday, Oct. 3, to assist BC/BS enrollees who have claims or enrollment problems. A BC/BS representative will be available from 10 a.m. to 2 p.m. that day in Bldg. 31, Conf. Rm. 9, armed with a laptop computer to access directly the enrollee's records at company headquarters.

No appointment is necessary. Assistance will be provided on a first-come, first-served basis. It is anticipated that BC/BS will schedule more service days in the future. ❑

Weight Maintenance Study Recruits Women

The USUHS department of medical and clinical psychology needs healthy, nonsmoking, overweight women volunteers, ages 18-55, to participate in a weight maintenance program as part of a study examining factors affecting weight maintenance. The 3-month program meets weekly and costs $150. If interested, call Dr. Tracy Sbrocco, (301) 295-3672. ❑

CFC KICKOFF
(Continued from Page 1)

Run was prominent, this season NIH'ers can participate in a new form of exercise—the NIH Heart Walk. For kickoff day, the route will begin at Bldg. 1 and circle the campus. Sponsored by the Division of Safety, ORS, and the R&W, heart walks were created to encourage NIH'ers to stay fit by walking. Employees may choose from as many as six measured routes. Just look for red "HeartWalk" stickers marking each route in various NIH buildings or along the campus grounds.

For more information about the Heart Walk, contact your nearest R&W or Karen Helfert at the Division of Safety, 6-1987.

And don't forget the CFC free raffle! First prize is a Bahamas vacation for two, courtesy of the R&W. To enter the raffle, sign up at the nearest R&W, but you must be present at the drawing to win. Other raffle prizes include gift certificates and movie tickets.

NIH'ers pledging at least $26 will be eligible to win a TV and/or VCR donated by the NIH Federal Credit Union or two USAir airline tickets to anywhere in the continental United States.

R&W will be selling commemorative T-shirts for the event. When you purchase a T-shirt, you can fill out a certificate that also qualifies you for the raffle.

Lunches can be purchased from caterer George Starke's Head Hog BBQ; prices will range from $3.75 for a barbecue sandwich to $5.50, which buys a barbecue sandwich with beans and coleslaw. Turkey chili will also be available for $2.75 a bowl. Music will be provided by Questet. So come and join the fun! And remember—"It's Up to You." ❑

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19th Annual MFP Lecture Series Begins Oct. 10

Lectures on AIDS, melanoma, sickle cell anemia, infertility, drug-resistant bacteria, and depression are on tap for the 19th annual Medicine for the Public lecture series sponsored by the Clinical Center.

The lectures, which are free and open to the public, are held at 7 p.m. on Tuesdays in Masur Auditorium, Bldg. 10, beginning in October. The schedule is as follows:

"AIDS: Can We Boost the Immune System?," Oct. 10, Dr. Joseph Kovacs, CC critical care medicine department. Kovacs is conducting, with NIAID colleagues innovative clinical studies that focus on strengthening the body's immune system as a method of treating people infected with HIV. After a brief overview of current approaches to therapy, he will describe studies using interleukin-2, a protein that regulates immune system responses. Preliminary studies show that IL-2 significantly increases levels of white blood cells normally destroyed by the AIDS virus.

"Melanoma and the Suntan Generation," Oct. 17, Dr. Stephen Katz, NIAMS director and chief of the NCI Dermatology Branch. Katz will explain what exposure to the sun—the leading cause of melanoma diagnosis in the United States—does to the skin, including how melanoma is diagnosed, the importance of early detection, and research currently under way.

"Sickle Cell Anemia: New Treatments and the Search for a Cure," Oct. 24, Dr. Griffin Rodgers, chief of the molecular hematology section, NIDDK. Sickle cell anemia is a painful, inherited blood disorder that strikes one in every 400 African Americans born today. New technologies such as gene therapy hold promise as an eventual cure, but in the meantime, innovative drug therapies are proving effective in alleviating the disease's symptoms.

"Understanding Infertility and the Ovary," Oct. 31, Dr. Lawrence Nelson, section on gynecological research, NICHD. One couple in 10 experiences infertility, a condition that can not only shatter dreams, but also result in tremendous medical costs if couples turn to unproved or ineffective diagnoses and treatments. Nelson will discuss the ovary's role in infertility, what can be done to correct dysfunction, and current research efforts to better understand and treat infertility.

"Drug-Resistant Bacteria: Old Foes with New Faces," Nov. 14, Dr. David Henderson, CC deputy director for clinical care. Hailed as a miracle drug after its introduction in the 1940's, penicillin changed the way medicine treated bacterial infections. Over the decades, however, bacteria have become resistant to the arsenal of antibiotics, paving the way for outbreaks of diseases once thought to be under control such as tuberculosis. Henderson will discuss how bacteria become drug-resistant and what we can do to control this growing public health problem.

"Depression," Nov. 21, Dr. Philip Gold, Neuroendocrinology Branch chief, NIMH. A combination of new medications and therapy often can eliminate symptoms in many who suffer from this emotionally paralyzing condition. Gold will review the latest research.

For more information on the lecture series, call 6-2563. ❑

Note New Day Care Number

Those wishing to reach the Division of Space and Facility Management's newly opened Child Care Center at 6006 Executive Blvd. in Rockville should dial 6-9411. ❑

First Fellows Symposium Set

The NIH fellows committee invites employees to attend the first NIH Postdoctoral and Clinical Fellows Symposium, scheduled for 8 a.m. to 5 p.m. on Thursday, Oct. 12 at Natcher Auditorium.

Seven nationally recognized scientists, from a range of biological disciplines, will focus on the latest developments in molecular biology, especially those that contribute to an understanding of the etiology of major diseases. Speakers include Ari Helenius, Yale University; Kevin Campbell, University of Iowa; Tom Maniatis, Harvard University; John O'Shea, NIAMS; Melanie Spriggs, Immunex Corp.; Joseph Nevins and Paul Modrich, Duke University.

For more information, call the Office of Education, 6-3887. ❑

Beginners' Judo Starting

The NIH Judo Club will start its next beginners' class on Tuesday, Oct. 10 at the Malone Judo Center in Bldg. 31C. It will run every Tuesday and Thursday evening from 6:15 to 7:30 for 6 weeks. The cost is $35. Students will be encouraged to continue as regular members of the club when the class is completed. For more information, call Doug Dolan, (301) 652-4328 or Stephanie Turner, 6-9490. ❑

At a ceremony in the Lawton Chiles International House observing an expanded U.S.-Korean collaboration in biomedical science, NHLBI director Dr. Claude Lenfant and Dr. Yung Chil Hah, director of the Research Center for Molecular Microbiology at Seoul National University, signed a joint statement outlining increased cooperation between scientists from both countries. Hah presented NHLBI with a plaque from the Korean Science and Engineering Foundation (KOSEF) in recognition of the U.S.-Korea Collaborative Research Program. Over the next 5 years, research scientists and postdoctoral students from Korea, with support from KOSEF, will conduct research at NHLBI's Laboratory of Biochemistry. Dr. Earl R. Stadtman, chief of the enzyme section in the laboratory, fostered the relationship with Korean scientists that promoted this collaboration. The president of KOSEF and several KOSEF leaders participated in the ceremony. Pictured above are (from l) Dr. Moon Bin Yim, research chemist, NHLBI Laboratory of Biochemistry; Stadtman; Dr. P. Boon Chock, chief, NHLBI Laboratory of Biochemistry; Jin-Ho Park, KOSEF president; Lenfant; Hah; Dr. Edward Korn, director of intramural research at NHLBI; Jong Chul Kyung, director general, division of international cooperation bureau, Korean Ministry of Science and Technology; Dr. Byung Ock Chung, KOSEF director of international cooperation; and Dr. Sa-Ouk Kang, professor of biophysics, Seoul National University.

BROWN BAG LUNCH SESSION OFFERS FOOD FOR THOUGHT
(Continued from Page 1)

The speakers at the first two lunches were concerned with "the culture of science." Being good at science is an obvious factor in the equation for scientific success, but it is not the only one. Being visible and "networking" are also essential.

Kleinman described how visibility, like kudzu, grows and grows. She warned young scientists they must be willing to devote time to the labor-intensive activities that build careers: being on the editorial boards of journals, giving talks at meetings, presenting posters, inviting speakers to their labs (and getting invited back to speak at the guest's lab), joining societies, and being active on committees. Visibility, added Dr. Edith Miles, can also be enhanced by participating in scientific collaborations, offering technical expertise to "someone else's scientific problem," and even going high-tech with a personal homepage on the World Wide Web.

Being part of the grapevine, learning

Dr. Vivian Pinn

what's happening, occurs when one "networks." One of the young scientists in the audience asked how one becomes part of a network. Just by being in the room that day, noted Dr. Marion Zatz, the questioner already was part of a network. Zatz said networks can consist of professional colleagues and mentors, friends, and even neighbors. Networks, she said, are just a means of exchanging information, which is the coin of the realm in science. She urged the audience to nurture their networks—keep communication going and growing with the people they know.

Schwartz's handout contained information on some more formal networks available to young scientists such as AWIS (American Women in Science, which has national and local chapters), WICB (Women in Cell Biology) and WIN (Women in Neurosciences), which are subgroups of larger professional societies, such online networks as the Young Scientists' Network and WISENET (Women in Science and Engineering), and others. She also distributed lists of the members of WSAC (women scientists advisory committee) at NIH and of the coordinators of the interinstitute interest groups that meet regularly.

Dr. Joan Schwartz

"Knowledge," said Schwartz, "is power, and knowledge and information at NIH are passed down, but women don't get the knowledge and information when they aren't in the hierarchy." That was one reason why, in 1992, WSAC was set up. WSAC members advise the scientific directors of their institutes, centers, and divisions of issues of importance to women, and they inform women in their ICDs about activities and events that may affect them.

Before WSAC was formed, a task force on the status of intramural women had begun to identify problems faced by women scientists at NIH. Through the efforts of the task force and WSAC, for example, discrepancies between women and men with respect to both salaries and status were identified; now almost 50 women and minority scientists at NIH are getting back pay and promotions due them over the years. Commented Kleinman: scientists "don't necessarily get what they deserve. They get what they negotiate for."

Kleinman talked about another issue that has affected women's visibility at NIH. Before 1990, few of the endowed lectureships on campus featured women speakers. Thanks to the efforts of the task force and WSAC, this situation has been corrected, and, in addition, a new annual lectureship—the Margaret Pittman Lectureship—was established last year honoring the first woman laboratory chief at NIH.

The third lunch in the series focused on another issue of concern to many young scientists: how to juggle work and family. One of the "scientific couples" at NIH, Catherine Ribaudo and Dr. Randall Ribaudo, discussed their plan to combine work and family now that they have a new baby. They talked about how they anticipate handling "curve balls" they have been forewarned will come their way, an inevitability when a baby enters the world.

The Ribaudos' comments sparked many comments from the audience—including those who were in the middle of difficult juggling acts, those who felt they had succeeded in combining careers and childrearing, and those who felt they had failed. Several people talked about the importance of "educating the work environment" to the needs of parents. One woman (who had not yet married or had children) said she was eager to help her colleagues when family difficulties arose, and she hoped her colleagues would make their needs known. She hoped that somewhere down the road the same overtures would come her way, labelling this type of network a "sisterhood."

Dr. Vivian Pinn, director of the Office

> ***"Your parents always told you not to brag, not to be boastful, but they lied! You have to promote yourself professionally."***

of Research on Women's Health, said that because of the interest in discussions of this type her office will look into continuing the series.

For more information about these lunches, contact Gloria Seelman in the Office of Science Education, 6-0608. ❑

Immunology Retreat Planned

The first annual Immunology Retreat, under the auspices of the Immunology Interest Group, will be held Oct. 28-30 at Airlie House in Warrenton, Va. All members of the NIH immunology community are invited. The sessions will be: Signalling and Immune Function; Death and Development; Antigen Recognition; Infectious Diseases. To attend, send e-mail to Lenardo@nih.gov with your name, affiliation, telephone number, and e-mail address. There is a limit of 200 participants. To work on the committee for this event call Mike Lenardo, 6-6754, or Pierre Henkart, 6-1554. ❑

NEI's Charles Egwuagu Honored by PHS

Dr. Charles E. Egwuagu, commander in the Public Health Service and senior research scientist in NEI's Laboratory of Immunology, recently received the PHS Commendation Medal and certificate of the Commissioned Corps. The citation read, "...for pioneering research in the molecular biological aspects of autoimmune disease."

Egwuagu has served as an immunologist in NEI's Laboratory of Immunology since 1987. He conducts studies aimed at characterizing autoreactive T cells that mediate noninfectious, inflammatory eye diseases. These diseases, collectively known as uveitis, are responsible for about 10 percent of severe vision loss in the United States. The molecular basis of uveitis is largely unknown, but investigators at NEI and elsewhere have been working to find both the causes and effective treatments for these debilitating diseases.

Dr. Charles E. Egwuagu (c), senior research scientist in NEI's Laboratory of Immunology, is awarded the PHS Commendation Medal and certificate of the Commission Corps. Shown with him are Dr. Carl Kupfer (l), NEI director, and Dr. Robert Nussenblatt, director of NEI's Division of Intramural Research.

Egwuagu is one of the first scientists in vision research to apply new molecular biological techniques to the *in situ* analysis of T cells that infiltrate the retina in an animal model, and has shown that particular T cell subsets selectively accumulate in the retina of rats with uveitis. In addition, Egwuagu and his group have recently generated the first transgenic rat model at NIH.

"Dr. Egwuagu's research has significantly advanced our understanding of the disease process in autoimmune uveitis," said Dr. Robert Nussenblatt, director of NEI's Division of Intramural Research and chief of the Laboratory of Immunology, who nominated Egwuagu for the PHS medal. "This work provides hope to those whose sight is threatened by uveitis."

A native of Nigeria, West Africa, Egwuagu received his Ph.D. in microbiology and molecular epidemiology from Yale University in 1987 and earned a master's in public health from Yale Medical School the same year.

In addition to his research achievements, he is most proud of his work with minority high school students for the past four summers. In his lab, student interns participate in research projects. "The program is geared towards placing minority students in laboratories to encourage them to pursue a career in science," said Egwuagu. "It is an extremely rewarding experience working with these talented young people, especially when they call to tell you that they have been accepted to a college of their choice."

In recognition of this aspect of his work, Egwuagu has twice been honored by awards from the NIH Office of Equal Employment Opportunity and was the 1993 keynote speaker at a ceremony honoring students participating in the NIH Biomedical Science Career Orientation for Minority Students. ❑

Genome Lecture Series Begins, Oct. 17

The National Center for Human Genome Research's 1995-96 Human Genome Lecture Series will begin Oct. 17. The series will feature nine distinguished speakers from the fields of molecular biology, technology development and genome research and covers topics that span the breadth of the goals of the Human Genome Project. All talks are held in Lipsett Amphitheater, Bldg. 10. The schedule follows:

Oct. 17, noon - 1:30 p.m., Dr. Barbara Trask, research professor, department of molecular biotechnology, University of Washington, "Probing Nuclei and Chromosomes by Fluorescence in Situ Hybridization: Implications for Mapping."

Nov. 16, 11:30 a.m. - 1 p.m., Dr. Philip Hieter, professor, department of molecular biology and genetics, Johns Hopkins University School of Medicine, "Cross-Referencing Yeast Genetics and Mammalian Genomes."

Dec. 19, noon - 1:30 p.m., Dr. Wylie Burke, associate professor, department of medicine, University of Washington Medical School, "Preventive Care for Individuals with an Inherited Predisposition to Cancer."

Jan. 18, 1996, 11:30 a.m. - 1 p.m., Dr. Michael Boehnke, professor, department of biostatistics, University of Michigan, "Mapping Genes for Complex Human Diseases."

Feb. 29, 11:30 a.m. - 1 p.m., Dr. Philip Green, associate professor, department of molecular biotechnology, University of Washington, "Genome Map and Sequence Assembly."

Mar. 21, 11:30 a.m. - 1 p.m., Dr. Patrick Brown, associate professor, department of biochemistry, Stanford University and assistant investigator, Howard Hughes Medical Institute, "Scanning a Genome."

Apr. 18, 11:30 a.m. - 1 p.m., Dr. Richard A. Mathies, professor, department of chemistry, University of California, Berkeley, "Developing New Tools for the Genetic Revolution."

May 16, 11:30 a.m. - 1 p.m., Dr. David Burke, assistant professor, department of human genetics, University of Michigan, "Microfabricated Structures for Integrated DNA Analysis."

June 20, 11:30 a.m. - 1 p.m., Dr. Richard Myers, associate professor of genetics, Stanford University, "Mapping and Sequencing at the Stanford Human Genome Center."

For more information, call 2-0911. To schedule an appointment with the speaker, call Dr. Elise Feingold, 6-7531. NIH designates this continuing medical education activity for a maximum of 13.5 credit hours in category 1 of the Physician's Recognition Award of the American Medical Association.

Spectroscopy Course Offered

The Center for Fluorescence Spectroscopy at the University of Maryland School of Medicine is offering a short course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy," in Baltimore, Jan. 8-12, 1996. The course will cover basic and advanced topics in fluorometry, including time- and frequency-domain measurements, Forster energy transfer, chemical sensing, imaging, fiber optics, infrared fluorometry, two-photon excitation, instrumentation, and fluorescence microscopy. Deadline for enrollment is Dec. 8, with later enrollment if space permits. For more information, call (410) 706-8409 or fax (410) 706-8408. ❑

AUTISM
(Continued from Page 1)

visualize engineering problems in three dimensions. The public may recognize a relatively high-functioning person with autism in the character played by Dustin Hoffman in the movie *Rain Man*. At the other extreme are people with autism and profound mental retardation; these individuals may be unable to speak or live on their own. In between these extremes are people with varying degrees of autism and intelligence.

To assess the state of the science in autism and to make research recommendations, NIH recently held a congressionally mandated conference. New findings of the mechanisms underlying other developmental disorders led to an intensive lobby by parents of children with autism for similar advances in the study of autism and, ultimately, to the NIH conference.

"This conference brought together experts in autism and experts from other areas to explore whether the methodologies and knowledge that are solving the riddles of other developmental disorders have potential to make significant breakthroughs in autism," said Dr. Marie Bristol of NICHD, chair of the conference committee. NICHD cosponsored the conference with NIDCD, NIMH, and NINDS.

Autism is believed to be a complex neurodevelopmental disorder that occurs early in brain development and involves a dysfunction in processing sensory stimuli. Neuroanatomic studies of the brains of individuals with autism have found differences between the brains of children and adults, and suggest differences between the brains of high-functioning people with autism and those who are lower functioning. These studies indicate that autism selectively affects specific areas of the brain that play a role in regulating language and movement, as well as certain features of emotion and behavior. Abnormalities are found in the limbic system, including structures such as the hippocampus and the amygdala that are related to memory, learning, and emotion, explained Dr. Margaret Bauman, a child neurologist at Massachusetts General Hospital in Boston. Other structures of the brain associated with coordination are also abnormal.

Through studies of this kind, as well as structural and functional brain imaging studies using MRI and other technologies, researchers are trying to identify the developmental stage at which different abnormalities may occur. Certain changes in cerebellar cells already have been pinpointed as occurring prior to 30 weeks' gestation, Bauman explained.

The most recent American and international diagnostic systems include the following criteria for autism: 1) impaired social interaction; 2) qualitative impairment in verbal and nonverbal communication; 3) restricted, repetitive, and stereotyped patterns of behaviors, interests, and activities; and 4) onset before 36 months of age. "For the first time ever, largely through NIH funding, there is a worldwide definition for the diagnosis of autism," said Dr. Fred Volkmar of the Yale Child Study Center.

Sir Michael Rutter (l) of the University of London meets with NIDCD director Dr. James Snow (c) and NICHD director Dr. Duane Alexander at autism conference.

Autism affects between 1 per 1,000 people, to 2 per 1,000 if the entire range of pervasive developmental disorders is considered, according to studies presented by Dr. Susan Bryson of York University, Ontario. Males are affected more often than females, by a ratio of approximately 3:1 to 4:1. About half of people with autism require out-of-home placement by late adolescence or early adulthood; thus, this chronically handicapping disorder has major implications for health and social services, said University of London psychiatrist Sir Michael Rutter, who gave the keynote address.

While the precise causes remain unclear, etiological theories abound. These include prenatal risk factors such as viral pathogens (e.g., rubella and cytomegalovirus), abnormal immune responses, neurophysiological deficits, other unidentified environmental influences, and the factor that many experts find most compelling: genetic determinants. Estimates place the number of genes involved at approximately 3 to 6.

In the wake of the discovery of the genetic loci for other complex traits, researchers are optimistic about one day finding the genetic basis for autism. Information from the fine-resolution map being developed by the National Center for Human Genome Research is precisely what is needed to plan and carry out a successful genome search for loci contributing to autism and other related developmental disorders, known as the autism-spectrum disorders, according to Dr. Anne Spence of the University of California, Irvine, Medical Center, and Dr. Francis Collins, director of NCHGR.

For years before autism was recognized as a neurodevelopmental disorder, it was seen as devastating and incurable. Today, however, it is viewed as a condition that can be improved, although not cured, and many therapies are being used with varying degrees of success. These treatments range from drug, vitamin and music therapies to behavioral intervention, which seems to hold the most promise at this time.

Dr. Sally Rogers of the University of Colorado Health Sciences Center, Denver, reported on findings indicating that: 1) children with autism benefit most from early intervention, beginning before age 3; 2) structured treatment (20-40 hours per week) is necessary for two or more years, with a low child/adult ratio; and 3) a significant minority of children (35-45 percent) may be capable of achieving age-level functioning with early intervention. While intervention is most effective when started at a young age, people of all ages and ability levels profit from treatment, Bristol noted.

Although certain predictors of successful outcome have been identified, including language ability and IQ, the next generation of autism research must identify what treatments are effective for which children, according to Dr. William McIlvane, director of the Eunice Kennedy Shriver Center for Mental Retardation in Waltham, Mass. There is currently no biological marker for autism and no specific pharmacological treatment for it, although, in some cases, medication may help control some of the symptoms that interfere with learning

and social interaction.

Crucial areas for future inquiry include: family and molecular genetic studies; longitudinal investigations to identify early characteristics of autism-spectrum disorders and to describe and compare their developmental courses; animal and human studies that address specific hypotheses regarding pathophysiology and/or treatment; the design of psychopharmacologic agents that treat the core symptoms of autism; and large-scale, multi-site comparisons of treatment interventions.

Recently, the four NIH institutes presented a report on the autism conference to 1,600 parents and professionals who have or work with children with autism. The report will be published in the *Journal of Autism and Developmental Disorders*. Call 6-5133 for a copy.

When Touch Hurts: Reports of Life with Autism

As a child, Temple Grandin would compulsively spin—sometimes a coin, sometimes her own body. She would chew puzzle pieces and spit out the cardboard, smear feces around a room, and spend hours letting sand trickle through her fingers, she recounts in her autobiography *Emergence Labeled Autistic* and other writings. She also would echo words that were said to her, and scream incessantly.

Donna Williams, another high-functioning person with autism, writes in her autobiography, *Nobody Nowhere*, that she, too, would spin compulsively as a child and echo whatever was said to her, as well as speak in different pitches and imitate accents. She would walk on tiptoe, constantly switch lights on and off, and ring the doorbell over and over again. She also was self-abusive, slapping herself on the face, yanking out her hair, biting her own flesh, and banging her head against the wall.

One of the many frustrations for those who teach or live with autistic children is the lack of understanding of the odd, obsessive behaviors exhibited by these children. Why do autistic children do the seemingly inexplicable things that they do? While no one would argue that all autistic children act the same way for the same reasons, we may be able to learn something about autistic behavior, and thus appropriate intervention, from the accounts of people like Grandin and Williams—people who have "emerged" from autism.

According to both women, a driving force behind their stereotypical behaviors as children was the compelling need to block out the painful stimuli of the outside world. These "stereotypies," as they are called, also served to keep their own emotions from overwhelming them, thus maintaining the sanctuary of their own safe, albeit isolated, worlds.

In her autobiography, Williams explains how her mysterious conduct as a child helped her make sense out of a terrifyingly incoherent world. She writes that headbanging was "to fight tension and to provide a thudding rhythm in my head when my mind was screaming too loud for me to be able to hum or to repeat a hypnotic tune in order to calm down." She blinked her eyes quickly and compulsively to "slow things down and make them seem like a more detached, and therefore less frightening, frame-by-frame film." Quickly switching lights on and off had a similar effect.

In many of her childhood pictures, young Donna appears to be looking right through or past the person behind the camera. This behavior, too, served a distinct purpose. It was "an attempt to take in what was happening around me while escaping my fear by experiencing a visual image indirectly," she writes; had she looked at things directly, they would have lost all impact and meaning. In one of her more poignant and revealing recollections, Williams tells why she would deliberately hurt herself: this was a way of "testing as to whether one is actually real."

Like Donna Williams, Grandin also found noise to be excruciatingly painful. To block out sounds, she recalls, she would make similar stereotypical movements such as rocking; when sound became simply too much to bear, she would cry and throw herself on the floor. "I can remember getting too much noise, and I would rock and shut the world out," she says.

Both women say they experienced deep frustration at not being able to communicate. Grandin, who remembers feeling this frustration from the age of 3, now says that she could understand what adults were saying to her, but simply could not get the words out herself. Later, after acquiring language, she would echo words that were said to her. A possible explanation for the echolalia exhibited by many autistic children is that they cannot process, and thus understand, what they hear unless they repeat it, she notes.

In contrast, Williams writes that her echolalia was essentially a mirroring response, which she made because she sensed that adults expected it of her. She was simply repeating the sounds that she heard; sounds that, to her ears, meant nothing whatsoever. In her autobiography, she recalls often hearing sentences in unintelligible bits, much like the sound of a TV set when someone quickly and repeatedly turns the volume up and down. As she grew older, however, she, too, would repeat words in her mind in an effort to understand them.

Both Grandin and Williams were exquisitely sensitive to touch of almost any kind. As a child, scratchy petticoats felt like a power sander to the young Temple Grandin. Similarly, hugs were frightening because they unleashed an onslaught of stimulation. "I didn't like being hugged because it caused a tidal wave of stimuli that overwhelmed me," she says. "It felt good, but it was too much." Many years later, she would develop a wooden "squeeze machine" to give her the comforting pressure she sought without the sensory overload associated with human hugs. Likewise, Williams found human touch painful; it "burns," she would tell people.

As gripping as these accounts are, one always runs the risk of making a false interpretation when trying to explain another person's behavior, whether that person has autism or not. To take the example of rocking, one school of thought maintains that it is a self-stimulating behavior; another states that it and other repetitive behaviors are associated with biochemical aberrations (i.e., alterations in dopamine systems), and yet another asserts that rocking is an effort to regulate one's emotions.

Just as nonautistic people may have vastly different reasons for performing the same action, so do people with autism. In fact, according to NICHD psychologist Michael Lamb, almost any social behavior has multiple possible determinants.

At this point, however, given our overall lack of knowledge about autism, these fascinating accounts by high-functioning, verbal individuals with autism may serve as our only window into a hidden world we are only beginning to understand.

DCRT Plans Full Syllabus of Fall Computer Classes

After the lazy days of summer, the cooler days of September remind us that it's time to learn new skills, extend old ones, and catch up with the latest developments in computing as they affect our work.

Seminars for scientists are a highlight of the fall offerings. Seminars have been scheduled in "Prospects for in vivo Optical Tomography," "Macromolecular Simulation," "Metacomputing on the Internet: Accessing Remote Computing Resources for Science," "FASTLINK for Genetic Linkage Analysis," "Introduction to Wavelets," and "Introductory Topics in the Structural Biology of Proteins." Mathematical modeling will be presented in two classes, one a two-session presentation on the MATLAB software, and the other a four-session course on the concepts of mathematical modeling. The popular seminar, "Image Processing on the Macintosh," will return for the fall term, and arrangements have also been made for vendor presentations at a Macintosh scientific show at DCRT in November.

The fall training lineup this year is particularly strong in the newly energized area of mainframe computing. One promising development (for all of us who have important files but are too busy to back them up) will be presented in a new seminar, "Backing Up Personal Computer Data." This seminar will focus on the DCRT centrally managed enterprise data service, which can make the reliability of mainframe data storage available to PC users. As PC systems have come to hold data vital to our organizations, this facility has been much needed.

Summer 1995 saw the greatest number of database classes ever offered, and student attendance in this area reached an all time high. This fall they're back with a lineup that includes: "Relational Database Overview," "Relational Database Design," "Client/Server Database Connectivity," "SQL: The Language for Relational Databases," "Advanced SQL: Structured Query Language Unleashed!," "Creating and Loading DB2 Tables," "Managing and Optimizing DB2 Tables," "DB2's QMF for Application Developers," and, on the third Friday morning of every month, the "Database Technology Series" that keeps the community informed on the latest developments.

For those starting to use the MVS mainframe for the first time, a number of traditional favorites will be back for the fall, including "Central Computing Services at NIH," "ENTER MAIL," and "Introduction to WYLBUR."

The need for statistical analysis has made SAS the most used mainframe software at NIH for many years, and DCRT has distributed hundreds of copies of SAS software for Windows. In addition to the standard offerings, including "Overview of the SAS System for Windows," "SAS Fundamentals I and II" in separate sections for programmers and nonprogrammers, DCRT has arranged for a 3-day course, "Using SAS/STAT Procedures to Perform Categorical Response Data Analysis."

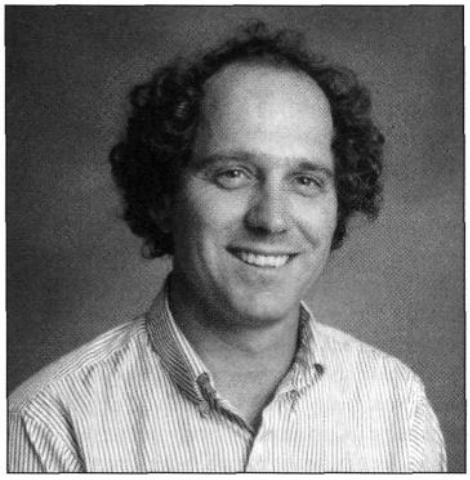
S-PLUS, a language created specifically for data exploration and analysis, will be presented in three classes: "Jumpstart in S-PLUS" will provide students with a basic understanding of the software so they can try it out before the longer courses, "Introduction to S-PLUS" and "Advanced S-PLUS," which will be given later in the term. S-PLUS is available on the Helix and ALW Unix platforms and comes in a Windows version as well. The Macintosh is also popular for statistical processing, and courses in JMP and Data Desk will give students a chance for hands-on experience with these easy-to-use statistical packages.

Users of Unix systems will find an array of favorites returning this fall, including "DCRT Support for Unix Workstations at NIH," "AFS (Andrew File System)," "Introduction to the Helix Systems," "Unix Fundamentals," and "Unix Commands." C Language, the language that grew up with Unix and is used to write code that can easily be ported to multiple platforms, will be taught in two courses, "Getting Started with C" and "C Language Fundamentals."

As we all use our computers more and more, the issues raised in a new seminar, "Comfortable Computing: Workstation Ergonomics," become more critical. This presentation, sponsored by DCRT and the NIH Division of Safety, will include a brief video showing simple, practical steps you can take to protect yourself from both eyestrain and physical discomfort. Presenters from DCRT and the Division of Safety will answer questions and discuss NIH's special resources for coping with any problems that may arise.

The term will offer two new seminars on HTML, the hypertext markup language used to create documents and home pages for the World Wide Web. Also offered are seminars on "Remedy," the popular client-server help desk tool, and on groupware featuring Lotus Notes.

The printed catalogs will be sent to subscribers before the term begins at the end of September. Information is already available on the World Wide Web at http://www.nih.gov/dcrt and in ENTER TRAINING under WYLBUR. To be put on the subscription list for the catalog, call DCRT at 4DCRT (4-3278) or send a request via e-mail to 4DCRT@nih.gov. Classes are open to all NIH staff and to others who are registered users of DCRT systems. Any special requirements are listed under "Who Should Attend" in the description for each course. As always, there is no charge for attending DCRT courses. ❑



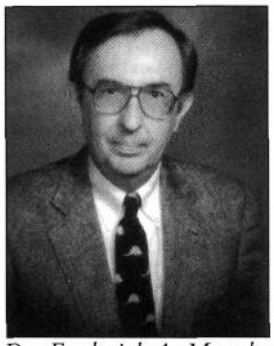
Dr. Christopher J. Portier, acting chief of the Laboratory of Quantitative and Computational Biology, NIEHS, has been named the 1995 recipient of the Mortimer Spiegelman Award by the American Public Health Association (APHA). The award is made to a statistician under age 40 for outstanding contributions to the field of health statistics, and will be presented at a ceremony Oct. 31 at the APHA annual meeting in San Diego. Portier is a native of Houma, La., and graduated with a bachelor of science in mathematics summa cum laude *from Nicholls State University. He earned his master's and Ph.D. in biostatistics at the University of North Carolina, Chapel Hill. He joined NIEHS as a mathematical statistician in 1978.*

Normal Volunteers Sought

NIMH seeks individuals in very good health, past and present, ages 18-65, to participate in upcoming winter studies. Participants will receive payment. Call 6-0500 for more information. ❑

UC's Murphy To Speak on Emerging Infectious Diseases

Dr. Frederick A. Murphy, dean and professor of virology at the School of Veterinary Medicine, University of California, Davis, is one of the world's leading photographers of viruses. He will inaugurate the 1995-1996 NIH Executive Speakers Seminar Series when he speaks about "The Threat of Emerging Infectious Diseases," Friday, Oct. 6 at 10 a.m. in Natcher Auditorium. This series focuses on contemporary trends in human resources management and the professional and managerial development of senior scientific, executive, and midlevel managers.



Dr. Frederick A. Murphy

Because of the book *The Hot Zone* and the film *Outbreak*, previously unknown infectious diseases have captured the public's attention. This popular summer entertainment brought to the forefront important issues regarding the threats posed by emerging infectious diseases attacking the human race. Many factors contribute to the emergence of an infectious disease. These include mutations, evolutionary progression, ecological conditions, and societal factors. Therefore, one cannot foretell when or where the next pathogen will emerge. It may be in distant Africa or close by.

Murphy is a virologist whose research has made him familiar with these new diseases. In 1976, he helped discover the Ebola virus. In 1989, while director of the National Center for Infectious Diseases at the Centers for Disease Control, he was called back into the fray to help in the outbreak of this disease in the infamous Reston monkey case. Recently, he has been working to mobilize national concern about these new diseases and what harm they could do to us all. He has been tracking new diseases not only in humans but also, as a veterinarian, in animals.

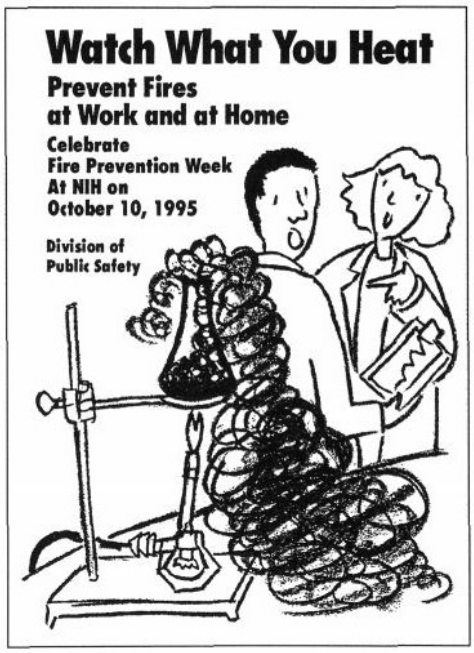
Murphy received a B.S. and D.V.M. from Cornell University and a Ph.D. in comparative pathology from the University of California, Davis. His honors are as diverse as his education. In the United States, they include the Presidential Rank Award and the KF Meyer Gold Headed Cane from the American Veterinary Epidemiology Society. International recognition of his contributions includes membership in the German Academy of Natural Sciences and the USSR Academy of Medical Sciences, as well as his being awarded a doctor of medicine and surgery *honoris causa*, by the University of Turku, Finland. His professional interests include the natural history, pathology and pathogenesis of viral diseases, especially rabies, hemorrhagic fevers, and viral encephalitides.

No registration is required for this seminar. However, attendance is limited to 500. For more information, call Joyce Laplante, Division of Workforce Development, 2-3380. ❑

NIH Observes Fire Prevention Week, Oct. 9-13

Did you know that the NIH Fire Department utilizes infrared spectrophotometry to monitor chemical spill decontamination, or that it has a fully equipped hazardous materials response vehicle for responding to chemical, biological, radioactive materials or mixed-hazard releases?

Did you know that the NIH ambulance carries an automatic electronic defibrillator for use in resuscitating cardiac arrest victims? Are you familiar with various home fire-safety devices such as residential automatic sprinkler systems, smoke detection devices, and other fire extinguishing equipment, which provide the highest levels of protection for you and your family?



The Emergency Management Branch, Division of Public Safety, invites you to see all of this and more—and obtain valuable information from the experts—at the NIH Fire Prevention Week open house on the Bldg. 31 patio on Tuesday, Oct. 10 from 10 a.m. to 2 p.m. Displays of fire detection and suppression devices; demonstrations of fire, rescue and hazardous materials response vehicles and equipment and protective clothing used at NIH; plus a variety of fire-safety brochures and other handout material will be featured. Food will also be available in the patio area. Hot dogs, potato chips and soft drinks will be sold from 11 a.m. to 1 p.m., with all proceeds donated to the Children's Inn at NIH.

National Fire Prevention Week was first proclaimed by President Harding in 1922. The annual commemoration is always the week of Oct. 9—the anniversary of the "Great Chicago Fire." The theme of this year's event is "Watch What You Heat—Prevent Fires." All employees should carefully consider the potential for fires at the workplace and at home. Fire hazards should be identified and corrected and all fire-safety issues should be taken seriously. In the United States, more than 6,000 people die and approximately 100,000 individuals are injured in fires annually. Property loss in this country is estimated at more than $10 billion each year. The good news is that most fires can be prevented.

So come eat, drink and be merry and learn about the latest in fire-safety technology and emergency response procedures. Support the men and women who protect the NIH community from fires and other emergency situations—and at the same time help the children and families who stay at the Children's Inn—by participating in the NIH Fire Prevention Week activities on Oct. 10. In case of inclement weather, the rain date will be Thursday, Oct. 12. Call 6-1985 for more information. ❑

The NIH Life Sciences Education Connection

✎ If you've ever wanted to help local elementary teachers share with children the excitement and rewards of science, but were unsure how to get involved, the NIH Office of Science Education will be presenting a science education workshop for scientists this October.

On Oct. 5, the Office of Science Education and the American Physical Society (APS) will hold a 1-day workshop in the Cloisters on the NIH campus for biomedical and behavioral scientists who would like to learn more about participating in elementary school teacher development. A second workshop will be held Oct. 7 at the American Center for Physics in College Park, Md. At the workshops NIH, APS, and Montgomery County Public School (MCPS) staff will discuss what is happening nationally in science education, how this relates to MCPS, and how scientists can serve as expert content consultants for teachers as they learn how to use new hands-on science curriculums. At the end of the session, scientists will have an opportunity to sign up to participate in a number of upcoming teacher training sessions scheduled throughout the school year.

If you would like to participate in the Oct. 5 or Oct. 7 workshop, contact the Office of Science Education, 2-2469.

✎ About 500 middle school students converged on the Clinical Center Sept. 15 to learn how patient care and research are combined at NIH. In an open house associated with the NIH Research Festival, students from 20 local schools who accepted NIH's invitation went in shifts to various stops to learn what is unique about the agency.

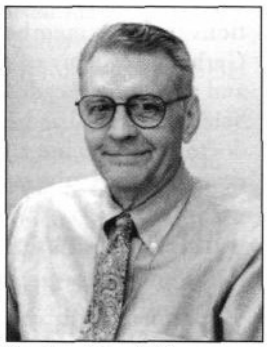
Following a brief, guided tour of campus by bus, students visited an operating room, a pathology lab, a hospital ward, and the Visitor Information Center, where several hands-on demonstrations were led by NIH staff. ❑

Paid Volunteers Needed

Females, ages 18-45, are needed to take an FDA-approved antihistamine (Seldane) for 1 week to study drug metabolism. Volunteers will be paid $30 for this study and may be eligible to participate in other studies that pay up to $600. Call the research nurse, (301) 295-3071, between 7 a.m. and 5 p.m. weekdays for more information. ❑

DRG Bids Farewell to Stiles, After 25 Years at NIH

Dr. H. Mac Stiles, scientific review administrator of the epidemiology and disease control 2 study section, Referral and Review Branch, DRG, recently retired after 25 years of service within the NIH community.



Dr. H. Mac Stiles

Stiles earned his D.D.S. degree from Baylor University in 1960, and then continued his studies, earning his Ph.D. degree in microbiology, in 1969, from the University of Maryland. To complement and expand his knowledge, he went on to Johns Hopkins University and earned his M.P.H.

In 1970, Stiles began his NIH career in what later became the National Caries Program, NIDR, where he was involved in the prevention and epidemiology of dental caries and the investigation of transmission of oral bacteria between mother and child.

He joined DRG in 1987 as scientific review administrator of the epidemiology and disease control 2 study section, where he has been responsible for the initial scientific merit review of research grant applications.

Prior to coming to NIH, he worked in private practice for 6 years. However, he always wanted to be in research and was motivated by his desire to help prevent disease.

He is a member of the Society of Epidemiologic Research, and has authored numerous articles and publications.

For Stiles, working at NIH has been very rewarding. He remarked, "I have received wonderful support from my colleagues throughout the years, and I have enjoyed the relationships made with the study section members." He has conducted workshops on how to navigate the NIH grant process for graduate students and has advised them on how to demystify the peer review process.

In retirement, Stiles will continue to live in the Bethesda area, but plans to spend time with his 101-year-old mother, who lives in Texas. He plans to pursue an in-depth genealogy that includes publishing information on family lines. Also, he is an orchid grower and will continue his hobby of horticulture. ❑

NIA's Ory Receives Purdue University Alumni Award

Purdue University's School of Consumer and Family Sciences recently honored Dr. Marcia Ory, the National Institute on Aging's chief of social research on aging, with a distinguished alumni award. The honor recognizes her contributions and commitment to the understanding of family issues, including the social and behavioral factors that affect the health and functioning of people in middle and later life.

Dr. Marcia Ory

Her student days at Purdue gave her an invaluable life-course perspective, and a positive view of aging. "I learned to appreciate the interconnectedness of human relationships within an intergenerational framework," says Ory.

The benefits of research stimulated by Ory's work today affect all age and family groupings. For example, she helped develop and implement cooperative research studies on behavioral therapies for incontinence in older people, reduction of frailty and prevention of falls across the life course, self-care behaviors in middle and later life, special care units for people with dementia, and menopause and health in aging women.

Ory received a doctorate from Purdue in family studies and sociology in 1976, and a master of public health degree from Johns Hopkins University in 1981. She joined NIA in 1981 as program director in the biosocial aging and health section, Behavioral and Social Research Program. She has served in her current position for the past 8 years.

According to Ory, her education helped prepare her to deal with the challenges of her demanding work. "It is often not the subject matter learned that is important in education, but the strategies for solving problems that are the most valuable in both family and work life," she says. ❑

NHLBI's Kathryn Ballard Mourned

Dr. Kathryn W. Ballard, 65, a scientific review officer for NHLBI's research training review committee in the Division of Extramural Affairs (DEA), died of cancer on Aug. 15 at Deaton Hospital in Baltimore.

Ballard was a person of energy and enthusiasm, whose varied interests were united by a commitment to helping others, particularly students.

"On her job, Dr. Ballard provided exceptional leadership," said Dr. James Scheirer, DEA deputy director. "She was creative, effective, and highly respected.

"She ran the NHLBI training committee but was active in the institute's overall training efforts, including training grants and student training awards," he continued. "And her interest in student training extended into the local community."

"She knew how to get students' attention when it came to science," said Dr. Joyce Hunter, leader of the vascular research training and development group in NHLBI's Division of Heart and Vascular Diseases. "She was a role model for them because she was a Black scientist and had had an illustrious career before coming to the NIH.

"She talked to students about her training and research experiences," Hunter said. "She'd often begin with what had stimulated her interest in science. She made science exciting for them."

Every year, Ballard participated as a judge or moderator at local science fairs, held at inner-city Washington-area schools. She also helped with an NHLBI partnership program to enhance computer and science literacy in underserved D.C. schools.

"Whenever there was a workshop with local teachers," Hunter added, "she was there, helping out—whether the teachers came here to the NIH or she went to the schools."

She also found time to serve as a docent at the Smithsonian Institution's Museum of Natural History.

Her commitment to community service began long before she came to the Washington area in 1987. While in California, she supervised summer research fellows, participated in various faculty-student committees, and taught at paramedical seminars given to high school students.

Ballard was born in 1930 in Waverly Hills, Ky. In 1951, she graduated with a bachelor's degree in zoology from Howard University and then earned two master's degrees, one in zoology in 1953 from the University of Michigan and another in 1959 in physiology from Western Reserve University. She received a doctorate in physiology from the University of Southern California, where she also did postdoctoral work. From 1968-70, she was a visiting fellow in pharmacology at the Karolinska Institute in Stockholm, Sweden.

From 1971-79, she was an assistant professor in the department of physiology at USC's School of Medicine. In 1979, she became an associate research physiologist at the University of California-Los Angeles School of Medicine and, at the same time, was a staff research assistant with the American Heart Association-Greater Los Angeles Affiliate-USC Cardiovascular Research Laboratory.

Her research interests included lipid metabolism and microvascular hemodynamics, especially related to aging.

In 1987, she joined NHLBI and her efforts there brought her numerous honors, including an Equal Employment Opportunity Special Achievement Award, an NIH Merit Award, and an NIH Director's Award. She also was a member of the Black employees advisory committee to the NIH director and author of more than 20 professional articles.

"She was one of the really nice people in the world," said Scheirer, her supervisor at DEA. "She had lots of friends and will be sorely missed."

Ballard is survived by a sister, Pamela Ballard of Los Angeles, and two brothers, Orville L. Ballard of Los Angeles and Bruce Ballard of Scarsdale, N.Y.

A memorial will be held for Ballard on Oct. 6 at 3 p.m. in the chapel on the 14th floor of the Clinical Center. For information, contact Rose Blondell, 5-0266.

A memorial fund also is being established in Ballard's honor as a tribute to her commitment to helping students. Contributions should be sent to the Budget Officer, NHLBI, Bldg. 31, Rm. 5A48.—**Louise Williams**

A Clarification

The Aug. 15 issue of the *NIH Record* unintentionally indicated that Diane Frasier has been appointed as chief of grants management, in addition to her responsibilities for contracts. It is well known that Geoffrey Grant, acting director, Office of Policy for Extramural Research Administration, OER, is the NIH grants policy officer and chief of grants management. Frasier's title is director, Office of Contracts and Grants Management, a title that is likely to be changed to reflect more accurately the organization's responsibilities for contracts. ❑

Female Volunteers Needed

The Biological Psychiatry Branch, NIMH, is seeking female volunteers ages 18-45 to participate in a 5-month study of the effects of reproductive hormones on brain and behavior. Volunteers must have regular menstrual cycles with no changes in mood in relationship to menses, be free of medical illnesses and not taking any hormones or medication on a regular basis. Volunteers will be paid. For more information, call Dr. Peter Schmidt, 6-9675. ❑

DCRT Training Classes

Windows for Workgroups Overview	10/2
RACF for MVS Mainframe Data Security	10/5
Introduction to HTML	10/6
Netscape for the Macintosh	10/10
CURE-Local Area Network Group	10/10
Disaster Recovery	10/10
Relational Database Overview	10/10
Introduction to the Helix Systems	10/11
Network Services	10/11
Overview of the SAS System for Windows	10/11
Unix Commands	10/12
PC Topics Session	10/12
Learn Power of PUBnet Using the Macintosh	10/12

Credit Union Hosts Run/Walk

The NIH Federal Credit Union is sponsoring the 4th annual Great Pumpkin Chase 5K Run/Walk to benefit the Friends of the Clinical Center. The event will be held Saturday, Oct. 28 on campus. Start time is 9 a.m. for the run and 9:30 for the walk.

The Friends of the Clinical Center is a private, nonprofit, charitable organization that provides emergency financial aid to NIH patients and their families.

The 5K Run/Walk is open to adults and kids of all ages. All runners/walkers receive a free race day t-shirt, prizes will be awarded in several categories and refreshments will be served. The registration fee is $14 per person before race day. Pumpkin Chase registration forms are available in all NIH credit union branches. For more information, call the NIH R&W, 6-6061. ❑

Foil The Flu!

Free Flu Vaccinations Available for NIH Employees

The annual battle against the flu requires the efforts of many people, but the most important person is you!

Many view the flu merely as a week of being miserable with fever, headache, cough, stuffy nose, muscle aches, and fatigue. However, the flu can be a dangerous, deadly disease. In an average year, between 25 million and 50 million Americans develop the flu; of those, between 250,000 and 500,000 require hospitalization, and approximately 20,000 die from influenza and its complications.

Influenza immunization is the best way to prevent influenza-related sickness and death. By getting immunized, you can help yourself escape the bug and avoid giving it to others. Immunization can help anyone avoid the flu, but is especially important for persons considered at high risk for developing influenza complications and those who may transmit the flu to high risk people, such as home and health care workers in settings with high risk populations (such as the Clinical Center).

Contrary to a common misconception, flu vaccine cannot cause the flu. Research has improved influenza vaccines and eliminated problems with earlier versions. The most frequent immunization side effect, reported by fewer than one-third of those vaccinated, was soreness around the injection site for a day or two. Infrequently, other symptoms have been a fever, fatigue, or muscle ache—usually in people (primarily children) who have not been previously exposed to the influenza vaccine strains. Rare allergic reactions have been reported in persons hypersensitive to vaccine components—principally egg protein. Those allergic to eggs should consult their physician before getting vaccinated.

Influenza is caused by three types of influenza viruses (A, B, and C). A and B types are of major concern because they have different strains, or subtypes, which constantly change or mutate. Each year different strains prevail. This requires developing a new vaccine combination to provide protection against the current year's strains of flu. Immunization is required each year because of changes in the viruses and because protection lasts only about 3-6 months after immunization.

In the United States, flu season peaks between late December and early March. Because it takes about 2 weeks for protection to develop, the Centers for Disease Control and Prevention recommends that influenza vaccination programs begin in October. This year, between Oct. 11 and Nov. 17, the NIH Occupational Medical Service will offer NIH employees free flu immunizations. With immunization clinics in a variety of NIH buildings, the convenient schedule also includes:

* Morning, afternoon and evening immunization clinics;
* A staggered schedule based on the first letter of the last name;
* Walk-in clinics on Mondays and Wednesday evenings;
* Two "makeup" days in November;
* Flu immunization by appointment after Nov. 17; and
* Special immunizations in designated units in the Clinical Center.

Don't risk the flu—for yourself, your family, coworkers or NIH patients.

Wednesday Afternoon Series

A special double-header version of the Wednesday Afternoon Lectures will be presented starting at 2:30 p.m. on Oct. 11, in Masur Auditorium, Bldg. 10.

The first speaker is Dr. James E. Darnell, Jr., Vincent Astor professor and head, laboratory of molecular cell biology at Rockefeller University. He will speak on "Signaling Genes from the Cell Surface," hosted by the Cell Biology Interest Group.

At 3:30 there will be a reception for both Darnell, and the 4 p.m. speaker, Dr. Roger M. Perlmutter, chairman, department of immunology and professor, departments of immunology, biochemistry and medicine, University of Washington, and Howard Hughes Medical Institute investigator. Perlmutter's talk is on "Control of Lymphocyte Development by Protein Phosphorylation," hosted by the Immunology Interest Group.

For more information, contact Hilda Madine, 4-5595.

Flu Immunization Schedule for NIH Employees

Oct. 11 - Nov. 17

On Campus

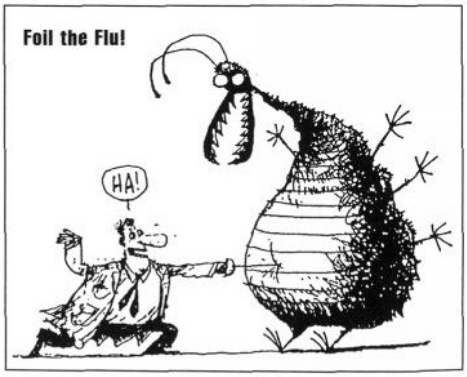
Bldg. 10, Rm. 6C306

1st letter of last name	Day/Date	Time a.m.	Time p.m.
AB	Wed, 10/25	7:30 - 11	1 - 3
CD	Tues, 10/24	7:30 - 11	1 - 2
EF	Wed, 10/18	7:30 - 11	1 - 3
GH	Wed, 11/8	7:30 - 11	1 - 3
IJK	Tues, 11/7	7:30 - 11	1 - 2
LM	Wed, 11/1	7:30 - 11	1 - 3
NOPQ	Tues, 10/31	7:30 - 11	1 - 2
RS	Tues, 10/17	7:30 - 11	1 - 2
TUV	Thur, 10/12	7:30 - 11	1 - 3
WXYZ	Wed, 10/11	7:30 - 11	1 - 3

Walk-in, any last name: Tues, 11/14, 7:30 - 11a.m., 1 - 2 p.m.; Wed, 11/15 7:30 - 11a.m. 1 - 3 p.m.
Evening Walk-in Clinics: Mon & Wed 10/11 - 11/15, Bldg. 10, Rm. 6C06, 4:30 to 8 p.m.
After 11/17, OMS offers flu immunizations by appointment; call OMS to schedule.

Bldg. 13, Rm. G904

	Day/Date	Times	
ABCD	Fri, 10/27	8 - 11 a.m.	1 - 3 p.m.
EFGH	Fri, 10/20	8 - 11 a.m.	1 - 3 p.m.
IJKLM	Fri, 10/13	8 - 11 a.m.	1 - 3 p.m.
NOPQRS	Fri, 11/17	8 - 11 a.m.	1 - 3 p.m.
TUVWXYZ	Fri, 11/3	8 - 11 a.m.	1 - 3 p.m.



Off Campus

EPN, Rm. 103

A - L	Fri, 10/19	8:30 - 11:30 a.m.	1 - 3 p.m.
M - Z	Fri, 11/2	8:30 - 11:30 a.m.	1 - 3 p.m.

Federal Bldg., Rm. 1C05: Thur., 11/ 9, 16 — 1 - 3 p.m.

Poolesville, Conf. Rm.
Bldg. 102 Tues, 11/7 8 - 11 a.m.
Bldg. 110 Tues, 11/7 12 - 2 p.m.

Solar Bldg., Rm. 1A05 Thur, 10/26 — 8:30 - 11:30 a.m. — 1 - 3 p.m.

Rockledge I, Rm. 5054 Mon, 10/16, 23, 30 — 8:30 - 11:30 a.m. — 1 - 3 p.m.