

*"Still  
The Second  
Best Thing  
About Payday"*

# The NIH Record

## Revitalization Seen

### 'Town Meeting' Airs Intramural Program Concerns

By Rich McManus

NIH director Dr. Bernadine Healy held a 2-hour "town meeting" Sept. 20 in Masur Auditorium at which she fielded questions from intramural NIH and ADAMHA scientists and announced her intention to revitalize the "jewel in the crown of NIH" as part of her overall strategic plan for the NIH.

She also lent a ringing endorsement to the idea of a graduate university at NIH and envisioned a whole new "NIH North" campus as a possible answer to the problems of overcrowded labs, insufficient parking, and decrepit infrastructure.

Healy spent the first half-hour of the well-received program placing the intramural side of NIH, which accounts for about 10-15 percent of NIH's nearly \$9 billion budget, in social, political and economic context.

In brief, she said biomedical science in America is "an endangered enterprise" attracting fewer students and fewer dollars as its workforce ages and becomes less robust. Those youngsters who do elect careers in biomedical science tend to have so many debts that clinical medicine, not basic research, attracts them



NIH director Dr. Bernadine Healy fielded all questions at the 2-hour town meeting, held Sept. 20 in Masur Auditorium for all NIH and ADAMHA intramural scientists. Such meetings will probably be repeated in the future, she suggested.

most. Lastly, America's edge in technology is being ceded to foreign nations, and with it is going a decided economic advantage.

"NIH must become a national priority," she said, "and the intramural program must be the flagship of biomedical research in the

(See **TOWN MEETING**, Page 8)

## A Herculean Task

### Ruffin Charged With Closing U.S. Minority Health Gap

The phone never stops ringing and the computers never go dark in NIH's Office of Minority Programs, tucked into the end of the north wing on the second floor of Bldg. 1.

"We took our message to nearly a thousand people at three regional meetings this past summer," says Dr. John Ruffin, NIH associate director for minority programs, "and it seems like every one of them is calling or writing in to say, okay, we heard you, now let's get going."

Ruffin's message at each of the regional meetings was the same straightforward message he has been delivering for the past year here at NIH, on Capitol Hill, and to anyone in both the public and private sectors who will listen:

"We have two related problems concerning the health of minorities in our country: First, there is a huge and unacceptable gap between the generally good health status of the majority community and the much poorer health status among minorities. Second, minority men and women are still seriously under-represented in such key career categories as

(See **RUFFIN**, Page 6)

## Lessons Learned

### NIH Technology Transfer Office Picks Up Pace

By Carla Garnett

In 1987, a year after Congress passed the Federal Technology Transfer Act (FTTA), Dr. Bruce Weintraub, chief of NIDDK's Molecular, Cellular, and Nutritional Endocrinology Branch, and his colleague Dr. Fred Wondisford realized they had developed a product with potential widespread clinical and academic use.

A recombinant human thyroid-stimulating hormone, the Weintraub-Wondisford product would allow patients with thyroid cancer (of which there are about 12,000 new cases annually in the United States) to be diagnosed and treated with radioactive iodine—without being tired or listless, two normal side effects of the therapy. A new biotechnology company called Genzyme expressed interest in collaborating with the scientists.

According to the then-relatively new FTFA, government agencies could establish licensing agreements with pharmaceutical and biotechnology companies and receive royalties for inventions that would be shared with the inventors and their laboratories. Before FTFA, royalties from inventions went to the Treasury Department labeled as miscellaneous receipts

(See **TECH TRANSFER**, Page 12)

## Women's Health Research Comes of Age

About 120 scientists, clinicians, ethicists, lawyers and women's health advocates brainstormed to set a research agenda for women's health for the next decade at a workshop Sept. 4-6 in Hunt Valley, Md., north of Baltimore. "Our goal," said Dr. Ruth Kirschstein, in her opening remarks, "is to address the biomedical research needs of America's women."

Kirschstein, director of NIGMS, has served since September 1990 as acting NIH associate director for research on women's health. The Office of Research on Women's Health (ORWH), which she headed, organized the workshop called "Opportunities for Research on Women's Health." The office also held a 2-day public meeting in June to solicit input on the research agenda from organizations involved in women's health issues. More than 90 statements were submitted at this meeting.

Workshop participants expressed enthusiasm that NIH had held such a meeting within the first year after the creation of the ORWH. Rep. Pat Schroeder (D-Colo.) commented that she was gratified at the progress that already has been made. Many advocacy group representatives also praised NIH for its commitment to—and actions on behalf of—women's health research.

In the keynote address, Dr. Bernadine Healy, NIH director, acknowledged "an awakening in women's health." Referring to past criticisms of NIH for not including

women in some important clinical studies, she said, "We have owned up to these faults and made important corrections very quickly." She

(See **WOMEN'S HEALTH**, Page 4)

## Pinn To Direct ORWH

Dr. Vivian W. Pinn has been selected as the first director of NIH's Office of Research on Women's Health (ORWH).

She comes to NIH from Howard University College of Medicine where, since 1982, she has been professor and chairman of the depart-

(See **PINN**, Page 2)



Dr. Vivian Pinn will head the new Office of Research on Women's Health at NIH.

## PINN

(Continued from Page 1)

ment of pathology. She is the third woman and the first African American woman to chair an academic pathology department in the United States. She is also a recent past president of the National Medical Association.

Pinn is internationally recognized for her research in renal pathology. Her medical interests include increasing opportunities for minorities in medical education, and improving access of minorities and women to health services. Recently, she led a project to increase screening for breast cancer and cervical cancer among minority and disadvantaged women, and to increase provider sensitivity and education concerning such screenings.

The ORWH was established in September 1990 to strengthen and enhance NIH's efforts to improve the prevention, diagnosis, and treatment of illnesses in women, and to enhance research related to diseases and conditions that affect women. The office helps establish NIH goals and policies for women's health issues and assures that all appropriate clinical trials include the participation of women. Dr. Ruth L. Kirschstein, who is also the director of the National Institute of General Medical Sciences, had been the NIH acting associate director for research on women's health.

Pinn earned her M.D. degree in 1967 at the University of Virginia School of Medicine, where she was the only African American and the only woman in her class. She completed a residency in pathology at Massachusetts General Hospital. Her bachelor of arts degree is from Wellesley College, and she was the valedictorian of her graduating class at Dunbar High School in Lynchburg, Va. She has received many distinguished awards in her field, is an active member of several professional organizations, and has authored or coauthored numerous medical journal articles. □

## Join First NIH Cycling Classic

Join national cycling champion Bobby Phillips of Baltimore Oct. 6 at the first annual NIH Cycling Classic to benefit NIH patient charities. Classic events include free information and workshops on fitness and bike safety and maintenance; in addition, a United States Cycling Federation-certified cycling event through campus begins at 8 a.m., followed at 1:30 p.m. by special pee-wee races for cyclists ages 3 to 12 and at 1:45 p.m. by a USCF-sponsored race open to all. For registration information or to volunteer help, call R&W, 496-6061. □

## Miller Gives Malaria Lecture

Dr. Louis H. Miller, head of the malaria section of the Laboratory of Parasitic Diseases, NIAID, recently delivered the ICAAC Lecture at the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy, sponsored by the American Society for Microbiology, in Chicago.

The lecture, entitled "The Eyes of the Hippopotamus," addressed the use of the best and most sophisticated science today to develop new tools to combat malaria, a parasitic infection transmitted by mosquitoes that causes more than 1 million deaths each year worldwide. To be useful in the tropical setting where malaria is a major health concern and where resources are limited, these tools must be highly effective, safe, inexpensive, and easy to apply at the village level.

The title of Miller's talk refers to the immense hippopotamus as a symbol of the



Dr. Louis H. Miller

present medical situation in many tropical countries where malaria flourishes. There doctors merely see the eyes of the great hippopotamus—a mere fraction of the malaria problem—rising above water, while the bulk of the disease remains unseen in the villages. Since 1950, malaria has been partially controlled by chloroquine, a drug that was developed through basic research during the early part of the century and is an example of a tool that could be used at the village level. This drug, combined with chemicals and programs to reduce mosquito populations, made the ultimate control of malaria seem to be an almost achievable goal. Today, however, control of malaria is complicated by the emergence of chloroquine-resistant organisms, and deaths due to malaria are increasing.

Scientists are now concentrating on three areas of research—the mosquito vector, chemotherapy and vaccines—to find the innovative new tools that have the potential for dramatically reducing the impact of malaria. □

## Training Center Expands Computer Course Offerings

The NIH Training Center has responded to requests for hands-on training on several new software application programs for PCs and Macintosh computers. It will offer one-day Introduction to Windows 3.0 courses starting in November, followed by Windows application training for word processing, spreadsheet development, and desktop publishing early in 1992 or as soon as the products are launched. End users who are switching from other database programs to Paradox can anticipate Paradox course presentations early next year.

NIH Macintosh users can choose courses on many new topics, some starting as early as November. For example, MacWrite will be offered starting Nov. 25. In December, look for Advanced Macintosh Techniques, featuring System 7, and the upgraded packages Filemaker PRO and MacDraw PRO. February will feature the start of 4th Dimension, a powerful relational database. And More, an outlining program with slide presentation capabilities, will begin in March.

Call the NIH Training Center, 496-6211, for detailed information about these courses. If the personal computer training you need is not currently offered in the catalog or quarterly brochures, let the center know so that it can develop courses for you. □

# The NIH Record

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## NIAID's Diamond Advances Amebiasis Research

By James Hadley

In the depths of Bldg. 4, nestled in the basement off a densely cluttered hall, is a neat, actually immaculate, laboratory.

"This is the cleanest, most organized lab I've ever seen," says a photographer. "And I've been into most of the labs here at NIH."

A casually dressed, bespectacled research zoologist reaches for an old handbook by the famous American pathologist of yesteryear, Professor E.V. Cowdry. He quotes from *Microscopic Technique in Biology and Medicine*: "In streamlining the laboratory the first essential is orderliness and neatness. It is possible for some geniuses to do outstanding research amid confusion . . . but ordinary (people) cannot."

"No genius am I," he laughs heartily.

The narrow laboratory is actually the research home and office of Dr. Louis S. Diamond, chief of the parasite growth and differentiation section of the Laboratory of Parasitic Diseases, NIAID. He is known for his research on the protozoan parasite *Entamoeba histolytica*, the causative agent of amebiasis, which he has conducted for the past 31 years at NIH.

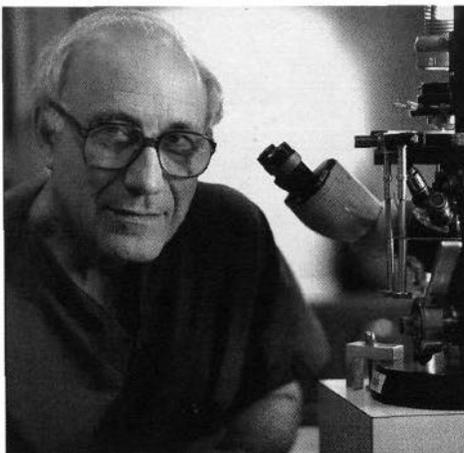
Amebiasis, often referred to as one of the forgotten diseases of mankind, affects approximately 500 million people worldwide. Of these, 40 million develop disabling diseases such as colitis and liver abscess, and between 40,000 and 80,000 die annually. The disease, which is transmitted principally by infected food handlers and by eating food or water contaminated with human waste, is most prevalent in the crowded urban areas of developing countries. However, amebiasis does occur occasionally in the United States.

The tiny amebic parasite lives primarily in the large intestine of humans where it can cause a severe dysentery. From the intestine it can spread to other organs of the body. The liver is a primary target, and to a lesser extent so are the lungs, brain and skin.

Diamond started his scientific career as a parasitologist with a special interest in protozoa. His 1958 doctoral dissertation at the University of Minnesota was devoted to the study of trypanosomes of frogs.

In 1959, he began his NIH career at NIAID. It was here in his laboratory in 1960 that Diamond and his colleagues made a discovery vital to productive research on any microorganism. *Entamoeba histolytica* was cultured for the first time under axenic conditions, that is in the absence of all other living cells.

Although a fundamental breakthrough, this discovery did not at once solve all the problems of growing the organism. The original medium described for axenic cultivation was laborious to produce, cumbersome to use, and



Dr. Louis S. Diamond

still did not provide the numbers of amebae necessary to conduct research.

Painstaking and meticulous work by Diamond and colleagues led in 1968 to a growth medium that overcame all the deficiencies of the first medium and provided luxurious numbers of amebae. "Diamond's medium" is now used worldwide as the most popular growth medium for *Entamoeba*. He has developed several other media for intestinal protozoa.

With this medium, axenic cultivation of *Entamoeba histolytica* had reached the practical stage and was ripe for exploitation. Axenized amebae were available for the preparation of highly sensitive and specific diagnostic antigens, for immunological investigations, biochemical and pathological studies and research at the molecular level. In fact, the first studies on the molecular biology of the ameba were conducted in Diamond's laboratory as early as 1971.

Another first for his laboratory was the discovery of viruses in protozoa. Working in collaboration with Dr. C.F.T. Mattern, formerly of the NIAID Laboratory of Viral Diseases, the lab identified three unique viruses identified in *Entamoeba histolytica*. None was found to be transmissible to humans. These viruses may have future research implications on the genetic level.

Because of his expertise, Diamond is sought after in developing countries where amebiasis is prevalent and a serious health problem, particularly in Mexico and India. In 1972 he spent a year serving as a consultant and conducting research at the General Hospital at the National Medical Center in Mexico City.

Since 1966, Diamond has been a frequent visitor to India serving as project officer for three Indo-U.S. projects on amebiasis at the Medical School in Hyderabad, the All-India

Institute of Medical Sciences in New Delhi, and the Kothari Centre for Gastroenterology in Calcutta.

Most recently, Diamond was honored by having a conference in India dedicated to him for his contributions to the study of *Entamoeba histolytica*, which have "been of far-reaching significance," and for his "profound impact on amebiasis research in India." The International Symposium on Amebiasis in New Delhi was sponsored by the All-India Institute of Medical Sciences and Jawaharal Nehru University.

His research has also garnered him awards. Diamond received the Superior Service Award for his study of amebiasis. And in 1976 he was awarded the Meritorious Service Medal by the U.S. Army, partly for his research contributions to the study of amebiasis—a disease long recognized to be of special importance to the military.

Somehow Diamond also found time to play an active role in professional societies. He served as president of the Society of Protozoologists in 1984, president of the Helminthological Society of Washington, D.C., in 1982, and vice president of the Society for Cryobiology from 1968 to 1970. He is a member of the American Society of Tropical Medicine and Hygiene, American Society of Parasitologists, and the American Microscopical Society.

Diamond's interest in *Entamoeba histolytica* can be overwhelming. He likes to tell the story about how he accompanied his wife to her doctor and discovered that the physician shared this common interest and they immediately began to compare notes. Minutes later he heard his wife in the background, saying, "What about me?"

Needless to say, Diamond will continue to search for clues and answers to the unanswered research questions about the protozoan and continue to contribute to the world's knowledge about amebiasis. □

### Ski Club Plans Trips

The NIH Ski Club will meet Thursday, Oct. 10 at 7 p.m. in Wilson Hall, Bldg. 1 to discuss a trip to ski the West on Mar. 8-16, 1992. The excursion includes 3 days of skiing at Big Sky, Mont., a day at Yellowstone National Park, and 3 days at Jackson Hole, Wyo.

Many options are available: snowmobiling or snowcoaching in Yellowstone, a visit to the Elk Refuge at Jackson Hole, crosscountry skiing in both Montana and Wyoming, and a visit to Grand Teton National Park.

Space is limited; make reservations by calling Bob Bingaman, 496-5151. Prices: \$889 per person for a double; \$779 per person for crosscountry skiers or nonskiers.

Come to the first meeting to obtain more information about this trip as well as day trips and a weekend trip. □

## WOMEN'S HEALTH

(Continued from Page 1)

urged everybody to put these lapses "into perspective and move forward."

Healy asked for a "unified" agenda for women's health research. "Setting the priorities will be the most difficult, as well as the most important, aspect," she said, "because it will help us allocate resources and guide and encourage researchers."

A 10-member task force on opportunities for research on women's health will submit its recommendations to NIH by mid-December 1991. It must evaluate and prioritize a 2-inch thick set of draft recommendations from ten panels of experts who met during the workshop.

Because women's health issues are complex and need to be addressed on many levels, the meeting took a two-part approach. On the first day, the panels explored women's health in terms of life span: from birth to adolescence, young adulthood, the perimenopausal years, and the mature years. On day two the perspective shifted to crosscutting science: reproductive biology, early developmental biology, aging processes, cardiovascular diseases, malignancy, and immune function and infectious diseases.

A special panel met to examine issues related to the inclusion of women in research, which range from legal and ethical considerations to recruitment into and retention in clinical studies.

Discussions throughout the 3 days focused on many gender differences and women's health needs:

- While females have an advantage of longevity over males, many women live those extra years in states ranging from poor health to frailty to severe disability.
- Gaps in knowledge exist about physiological differences between males and females. These differences affect overall disease and gender-specific diseases across all age groups.
- Little is known about the benefits and risks of estrogen replacement therapy, yet this information could be of vital importance to the health of women after menopause.
- Women bear a disproportionate burden of impact from sexually transmitted diseases and urinary tract infections. This is especially true of women between ages 15 and 40.
- At least 80 percent of sexually active women use or have used oral contraceptives. Yet the potentially great impact of their long-term use has never been carefully assessed.
- The rate of smoking in women soon will be higher than the rate in men. This threatens to raise lung cancer rates in women to epidemic proportions.
- Little is known about the impact of diseases on minority women. For example, Black women have higher rates of obesity than white



Dr. Bernadine Healy, NIH director, cited a "new awakening in women's health" in her remarks at the Workshop on Opportunities for Research on Women's Health, held Sept. 4-6.

women. Yet national surveys show Black women do not eat more fat, only more cholesterol, than white women.

● Addictions and depression take a tremendous toll on women from all segments of American society.

"As we move into the nineties women seem to be going both backward and forward in terms of health status," said Dr. Maureen Henderson, associate head of the Fred Hutchinson Cancer Research Center in Seattle. One reason, she suggested, is that women born in the 1940's, -50's, -60's and -70's have very different sociomedical backgrounds from one another and are unlikely to have the same future health profiles. "We need to understand cohort experiences," she concluded.

Henderson showed a slide of 18 growth factors and hormones that influence the growth and metabolism of breast cells. Yet, she said,

only two—estrogens and progestins—have been studied in research on breast cancer, heart disease, and osteoporosis. "We must encourage risky and innovative research on less easy-to-measure hormones and their influence on women's specific diseases and health in general," she urged.

Many discussions during the workshop focused on the need to look at a woman's overall physical and mental health throughout her lifespan. "NIH needs to stress behavioral aspects of health and disease to a greater extent," said Healy during her keynote address. "I predict that in 3 or 4 years, it will be commonplace at NIH for scientists and science administrators to think of behavioral research within the spectrum of biomedical research."

The workshop was chaired by Dr. Mary Lake Polan of Stanford University's department of obstetrics and gynecology and Dr. William Hazzard of Bowman Gray School of Medicine.

"The women of America deserve this research agenda," Kirschstein told workshop attendees. The agenda will be carried out under the direction of Dr. Vivian W. Pinn, whom Healy has named as her choice for permanent head of ORWH. □

### Is Outside Income Okay?

The deputy director of the Office of Government Ethics, Donald E. Campbell, will speak about limitations on outside employment and prohibitions on honoraria on Wednesday, Oct. 2, from 11 a.m. to 1 p.m. in Conf. Rm. 9, Bldg. 31C. The talk is sponsored by the NIH Science Writers Guild. □



Dr. Ruth Kirschstein (second from r) meets with key staff of the Office of Research on Women's Health. They are (from l) Dr. Judith LaRosa, Wendy Wertheimer, and Alberta Sandel.

## NIH Observes Women's Equality Day

In observance of the annual celebration of Women's Equality Day, NIH's Division of Equal Opportunity, the NIH advisory committee for women (ACFW), and the Bethesda chapter of Federally Employed Women, Inc. (FEW) recently cosponsored a panel discussion entitled "Shattering the Glass Ceiling." The program provided a forum for NIH employees to hear and discuss the views of women who have moved into leadership positions at NIH.

In her welcoming remarks, Lucretia Coffey, NIH Federal Women's Program manager, stated that celebration of Women's Equality Day commemorates the ratification of the 19th Amendment to the U.S. Constitution on Aug. 26, 1920. This amendment guaranteed



*Lucretia Coffey, NIH Federal Women's Program manager, welcomed participants to NIH's recent observance of Women's Equality Day, a program jointly sponsored by NIH's Division of Equal Opportunity, the NIH advisory committee for women, and the Bethesda chapter of Federally Employed Women, Inc.*

women the right to vote. Since then, women's rights have been included in all major legislation relating to civil rights issues. However, she noted, 70 years later, women are still striving to achieve true equality in both the public and private sector workforce.

Dr. Bernadine Healy, NIH director, gave opening remarks at the program, reflecting that since her appointment as director, she has had to "dodge a few bullets and comb a few shards of glass from my hair." She recalled a recent article in the *New York Times*, which described a new breed of executive women. These women managers were depicted as individuals who are as insensitive as their male predecessors were to issues concerning women and family. Healy declared, "If we want real change, we must do better than this." She stated that in addition to the challenges inherent in leadership positions, women have an extra challenge to be vigilant for themselves and for others; women must value and be sensitive to the needs of other women to help all of them reach their goals and shatter the so-called glass ceiling.



*Elva Ruiz, director of NCI's Hispanic Cancer Control Program and panelist during NIH's Women's Equality Day celebration, emphasized the importance of seizing opportunity.*

Following the opening remarks, Mary Ganges, president of FEW's Bethesda chapter, gave an overview of the purpose and organization of FEW and a brief history of the establishment of the local chapter. She noted that membership is open to men and women and the chapter now has 35 members. Ganges then presented Healy with a complimentary chapter membership in recognition and appreciation of Healy's support of FEW's goals and objectives.

Diane E. Armstrong, DEO director, served as moderator for the panel discussion. She noted that at NIH women represent 81 percent of employees in GS 7-9 positions, 73 percent of GS 10-12 positions, 38 percent of GS/GM 13-15 positions, and 14.5 percent of positions at the Senior Executive Service level. These statistics are reflective of the federal workforce, she said, and show that much needs to be done to reach equality in the upper levels of management throughout the federal government.

Panelists included Dr. Yvonne Maddox, deputy director, Biophysics and Physiological



*Mary Ganges (l), president of the Bethesda chapter of Federally Employed Women (FEW), Inc., presented NIH director Dr. Bernadine Healy with a complimentary FEW membership in recognition of Healy's support of the organization's goals and objectives.*

Sciences Program, NIGMS; Sue Ohata, special assistant to NIH's associate director for extramural affairs, OD; Elva Ruiz, director, Hispanic Cancer Control Program, NCI; and Diane Wax, chief, Policy Analysis and Legislation Branch, NIAID.

These women related factors that influenced them to seek leadership positions and offered recommendations on how others can move up the career ladder.

Maddox said she relied on her own ambition and self-confidence as well as help from others to reach her position. Ohata spoke of her mother's influence in persuading her to seek a leadership role and pointed out that good communication skills are essential for women moving up the career ladder. Ruiz said it is important to recognize opportunities and what is in demand, to become an expert in areas in demand, and to get training and visibility through programs such as the Women's Management Training Initiative and the Grants Associates Program. Wax explained the



*Sue Ohata, special assistant to NIH's associate director for extramural affairs, served as a panelist for NIH's program observing Women's Equality Day.*

need to understand the system and make things happen. She reiterated the usefulness of training programs such as the Management Intern Program, "career opportunities training agreement" positions and the development of communication skills through groups such as Toastmasters.

Carol Romano, ACFW vice chairperson, gave closing remarks for the celebration and announced upcoming ACFW events, including a Career Day on Nov. 7 in Lipsett Amphitheater and the Visitor Information Center, both in Bldg. 10.

Members of the FEW Bethesda chapter received many inquiries from employees and are looking forward to seeing new and potential members at their next monthly meeting, which will be held on Oct. 15, noon to 1 p.m., in Bldg. 10, Rm. 2C116 (Medical Board Rm.). Anyone interested in additional information on the FEW chapter should contact Ganges, 496-5841. □

## RUFFIN

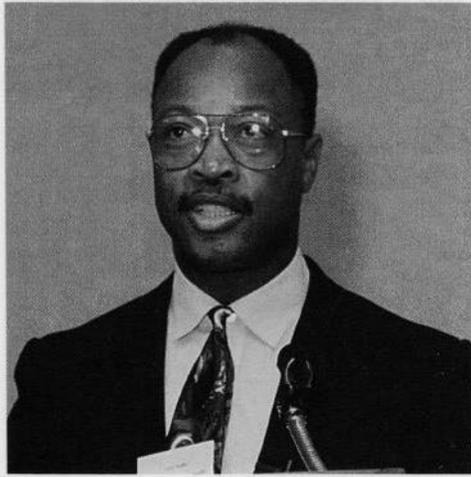
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biomedical research and health care delivery.

"We can't solve one problem without making progress in the other. That's what my office is doing—moving forward on both fronts—heightening people's awareness of the health disparities and finding ways to recruit and retain more minorities for careers in the life sciences."

During his first year at NIH (he arrived on Aug. 24, 1990), Ruffin has brought together the basis of an impressive constituency both inside and outside NIH and HHS.

"If our country is going to make progress in hypertension, alcoholism, kidney disease, diabetes, infant mortality, and all the other areas where there are glaring gaps between Amer-



*Ruffin addresses the audience at the first regional meeting held in Arlington.*

ica's majority and minority communities, then we have to start right here at NIH," he says. "We are this country's greatest asset for progress across the board in medicine and health."

"The directors of the NIH centers and institutes agree," he says. "All the ICDs have signed on to provide people and ideas and facilities—and money. They want to make a difference, too."

"This is not John Ruffin's crusade," says an impassioned John Ruffin. "This is a profound challenge to everyone everywhere in American medicine. NIH is doing its part. All of us are getting our resources together to help America meet that challenge head-on."

Motivated by NIH director Dr. Bernadine Healy, each of the ICDs has pledged new and redirected resources for minority health activities not only for the current 1992 fiscal year but also much larger sums for the 1993, 1994, and future fiscal years. To make the best use of these resources as well as ensure that attention is given to priority issues in health and personnel training, an NIH-wide policy council chaired by Ruffin will review

the specific grant and contract proposals for those earmarked dollars. He will then send his funding recommendations on to Healy for final approval and public award.

Speaking in July to the nearly 300 participants at Ruffin's Atlanta regional meeting, Healy noted the "truly appalling statistics" that reveal the disparities in such areas as life expectancy, infant mortality, and interpersonal violence.

"NIH cannot do everything" to close those gaps, the director said, "but NIH must be a player and we are committed to being a player."

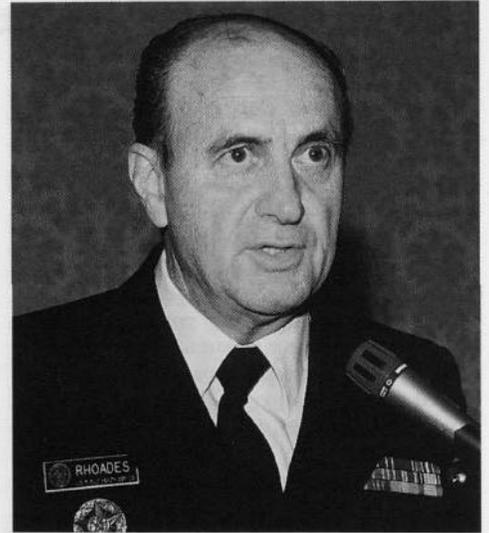
"The minority initiative is an integral part of our entire NIH strategic plan," Healy said, identifying it as "one of the 10 or so key elements" of that plan.

In his keynote address to the first regional meeting in June in Arlington, Va., HHS secretary Dr. Louis Sullivan also pointed to the "disparate health status that exists in our nation's Black, Hispanic, Native American, and other minority communities."

The secretary told the audience of 250, "We must act now and we must act decisively to address avoidable life-shortening disease and disability and violence in our communities."

Sullivan also said the NIH initiative in minority health should be seen as part of the broader eight-point minority health initiative being carried out throughout HHS. Other elements of the department-wide initiative include an additional emphasis on child immunization, expansions of Medicaid and Head Start, and increased support for the nation's historically Black colleges and universities.

After the third regional meeting ended in San Diego (coincidentally on his first anniver-



*Dr. Everett Rhoades, director of the Indian Health Service, was one of the speakers at the regional conference held in San Diego.*

sary date of Aug. 24), Ruffin returned to his office with renewed energy and commitment. "People want things to happen. They want to see progress. Yes, the regional meetings were very important for bringing people and organizations together. But 24 hours after the meetings ended, people began to ask, 'Okay, what have you done for us lately?' I see my job as delivering a substantive answer to that question." Ruffin points to the piles of reports, memoranda, and correspondence that have sprung up in every corner of his office. "And we're making a real start."

His office was quite different in August 1990. It was neat as a pin—and empty. "I



*Gloria Anderson (l), president of Bennett College in Greensboro, N.C., seeks out Ruffin and Healy for more information on the new initiatives of the Office of Minority Programs during the Arlington conference.*

walked in and saw just two things lying on my desk in this big room. Just two things. But they were enough," he laughs.

One was the complete eight-volume report of the secretary's task force on Black and minority health, issued in January 1985 by then-HHS Secretary Margaret Heckler. That report described in exhausting detail the disparities between the health status of minorities and that of the majority white community in the United States. The mind-numbing charts and tables made absolutely clear how wide and deep the gaps were and how profound the challenge was.

"That report came out in 1985," says Ruffin. "I arrived 5 years later, and nothing had changed. In fact, in some areas, the disparities had gotten worse."

The other paper on his desk was a request to NIH from the House committee on appropriations for a plan showing how NIH might apply more money to minority health concerns



Rep. Louis Stokes (l) of Ohio greets Dr. Bernadine Healy while Dr. John Ruffin (c), NIH associate director for minority programs, looks on.

over a 4-year period.

"Congress saw it as a single problem: that is, how to improve the health status of America's minorities. But I see it as a twin problem: how to improve health status and how to recruit and keep more minorities in biomedical careers.

"We all agree that the basic challenges in minority health do not require solutions generated only by persons of color. These are challenges that any good scientist can meet. And fortunately, there are excellent people—Black, white, Asian, Hispanic—hard at work on infant mortality and substance abuse and diabetes and so on. Scientific truth is color-blind. We know that.

"On the other hand, we also know that a young Black researcher, for example, knows first-hand, from his or her own health status or the status of a parent or a sibling, how important it is to solve the problem of hypertension. Such a young person is more likely—



Attending the conference in Arlington, the first of three to be held by the Office of Minority Programs, were (from l) Dr. William F. Raub, NIH deputy director; Dr. David Satcher, president, Meharry Medical College School of Medicine and chairman of OMP's fact-finding team; Dr. John Ruffin, NIH associate director for minority programs; Dr. Bernadine Healy, NIH director; and Dr. Louis Sullivan, DHHS secretary.

not guaranteed, but more likely—to stay in that research area to do his or her best work.

"Therefore, I believe we need a much larger pool of minorities dedicated to doing quality research on questions they know are life-and-death questions for their friends, their families—and themselves."

Ruffin feels that his view of the "twin problems" was generally accepted by the diverse participants at this summer's regional meetings.

"We had all the major public and private universities and medical centers represented and research centers of excellence and virtually

every one of the historically Black colleges and universities was also represented. We had people from the public schools who talked about the health status of minority children, but they also talked about pointing those same children along a lifetime biomedical career path.

"This is a challenge whose time has come. Everybody knows it. And I believe everybody wants to play a role in meeting that challenge.

"My job," says an optimistic Ruffin, "is to make sure everybody who wants to play gets the chance to do just that." □

## Healy Disburses First Shannon Awards

NIH director Dr. Bernadine Healy has announced the names of the first recipients of NIH's "James A. Shannon Director's Awards," which will provide nearly \$30 million in new biomedical research support.

"This program is very important to me because it will help maintain research momentum and raise investigator morale," she said. "These awards were made for applications that fell within the required 'margin of excellence' but just missed funding. The proposals deemed especially innovative and creative were given preference. The Shannon awards will assure that hundreds of excellent scientists will receive NIH support who otherwise would not."

The Shannon Awards were named to honor the physician who directed NIH during the period 1955-1968, when NIH emerged as a world leader in biomedical research.

When Healy became NIH director in April 1991, her first major new funding initiative was the Shannon awards.

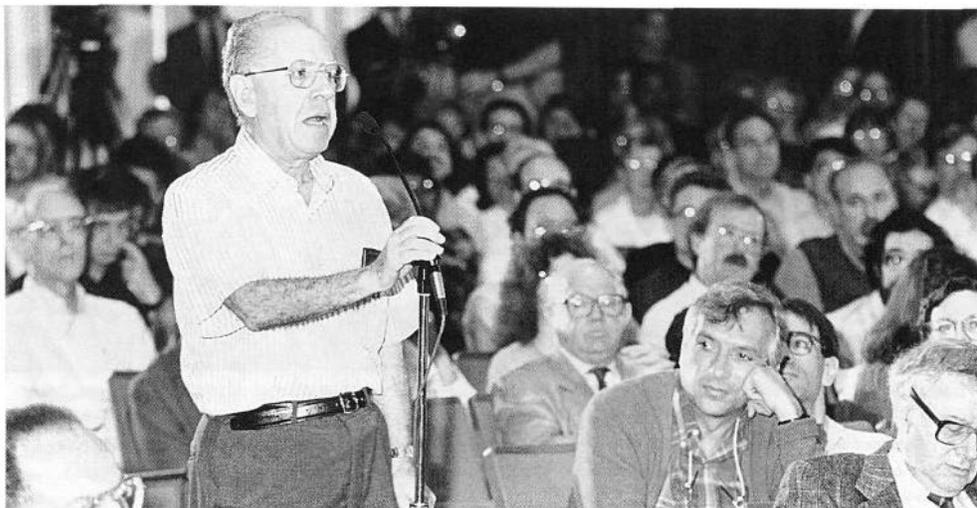
The first recipients are 310 scientists at 146 research institutions throughout the United States. The recipients did not specifically apply for these awards, but were nominated by

NIH program staff people, with the concurrence of the institute directors, from among applicants whose priority scores for new and competing NIH grants were just above the cutoff figures.

Many of the recipients are young scientists for whom this is their first NIH research support. It is expected that these promising biomedical investigators will use these funds to narrow their research focus into areas suitable for exploration in future NIH grant applications.

For other recipients, the Shannon awards will provide "bridge" support to sustain a proven productive laboratory that is maintaining its expertise between NIH grants. Still other scientists—most of whom have already worked under NIH research grants—will be using their Shannon awards to branch into exciting new biomedical areas where they can probe promising hypotheses.

Most of the awards (289 out of 310) are for \$100,000 to cover research and indirect costs over a 2-year period. Nineteen awards are for \$50,000 for research and indirect costs for 12 months, while two smaller awards will provide partial support for about 2 years.



NIDDK's Dr. Enrico Cabib opened the questioning portion of the town meeting with observations that were endorsed heartily by his intramural colleagues. A 24-year NIH veteran, he is chief of the developmental biology section in the Laboratory of Biochemistry and Metabolism.

## TOWN MEETING

(Continued from Page 1)

United States. It can and must be better. It can and must be happier."

Facing a panel that included Healy and most of her top staff, Dr. Enrico Cabib of NIDDK opened the questioning with a lament that was repeated by others: Why are there so many administrative hurdles placed in front of intramural scientists these days? And further, why is the nature of those obstacles so belittling to scientists?

"We are treated like naughty children who are suspected of telling lies," he complained. "I have been here for 24 years and everything still looks nice on the surface, the roses still bloom. But NIH is showing signs of rot at the core. My question is, What are you planning to do?"

The packed hall erupted in loud and sustained applause.

"We share your frustration," said Healy, who explained that rules are part of the price we pay for working in the federal government. "Procurement regulations are imposed on us externally," she said. "You can't shoot the messenger—these people (administrators) have to obey the law. I'd have to be blind, deaf and dumb not to know that procurement is a big problem on this campus. And I know that your frustration titer is high."

Healy said that big agencies with big budgets draw big attention from Congress. "Once you break the billion-dollar barrier, there is extraordinary scrutiny of every penny you spend," she said. DELPRO needs to be more efficient, Healy acknowledged, adding that she will relentlessly "see what we can do to come up with solutions. Some problems can be changed only by changes in the law. I don't want to see 2,000 scientists being led away from here in handcuffs."

Before entertaining the second question, Healy quipped, "Let's get the complaints on the table, although don't applaud every one."

She warned against NIH'ers projecting themselves as privileged people caught up in personal hassles and red tape. "The public is not impressed by relieving federal employees of their personal difficulties. The real stakes are the health of all Americans."

Healy asked Jack Mahoney, NIH associate director for administration, to follow up her answer to Cabib. "There is no challenge to the integrity of our scientists intended in these regulations," he assured, adding that NIH's Division of Procurement—the locus of many procurement hardships—is currently undergoing review and improvement.

Dr. Joost Oppenheim of NCI, who spent 20 years on campus before taking a job at the Frederick Cancer Research and Development Center, brought up two issues: crowded condi-

tions in laboratories force scientists "to sacrifice comfort for the opportunity to work here," and satellite outposts (he labeled Frederick, Md., "Siberia") of NIH preclude the close interaction of potential colleagues to a point that is "really very damaging."

"That brings up a strategic question," answered Healy. "Should the intramural program grow or stay the same? In my view, a no-growth scenario is a declining-quality scenario. It would result in doing yesterday's, instead of today's, science."

"It would be tragic if we closed down the intramural program," she said, "because it is the jewel in the crown of NIH."

She picked three areas where intramural NIH is poised to take off: structural biology, the human genome project, and gene therapy.

How to accommodate a booming intramural program? "The site plan of the campus is being revisited," she reported. "We haven't done that in about 20 years. Norm Mansfield (NIH associate director for research services) is looking into the plan, and is overseeing renovation of the Clinical Center and construction of the COB (Consolidated Office Bldg., planned for some 3,000 workers currently in rental space, to be built at the south end of campus near NLM by the late 1990's). We really don't have any room left on the campus to grow. So we are moving toward the point of considering—just considering mind you, not planning—a substantial campus to be known as 'NIH North' and this (the Bethesda campus) would be 'NIH South.' The north campus would not necessarily be a clone of NIH, but would be a supercritical mass of facilities. If we plan it well, everyone will want to be there."

NCI scientist James Mulshine posed the next question: "Is PHS too large to deal with the specific (hiring) needs of NIH?" New recruits face a hostile hiring system, he said, one that restricts their opportunities to earn bonus money.



Masur Auditorium was crowded with intramural scientists who paid close attention to the issues and answers brought up during the town meeting. Several of them publicly urged that more such meetings be held.



*Healy makes a point at the session, during which she endorsed a graduate university at NIH and a possible new NIH campus in exurban Maryland.*

Healy answered, "I've read briefing books on NIH from here to the front door and I confess I flunk when it comes to understanding the complicated personnel system at NIH. You've got Civil Service, Commissioned Corps, SES, and now SBRS. It's a mind-bender." She referred the question to NIH personnel chief Stephen Benowitz, but offered, "An ideal NIH bill would simplify personnel regulations here."

Dr. Stephen Epstein of NHLBI said that, in his 30 years at NIH, there has been an "overwhelming" increase in administrative burdens. Furthermore, many administrators lack the gumption to push the bounds of their authority when it comes to meeting scientists' needs, he said. "We need an aggressive interpretation of the rules—one such as a good lawyer would give you—that would result in helping scientists, not in making administrators' lives easier."

Healy again offered sympathy, explaining that NIH has but one lawyer to deal with such questions. Using a medical analogy, she said that NIH's attorney "has to be the cardiologist, neurosurgeon, and diagnostic radiologist, all rolled into one. A top priority is expanding our legal expertise," she said. "NIH is now in the big-time, and we need a more solid corporate/legal base. We have to provide better legal information to our family members."

NIMH's Dr. Jacqueline Crawley decried both the careworn and unappealing surroundings facing potential recruits in many laboratories and the lag time in hiring foreign postdoctoral scientists at NIH.

Healy agreed, "The infrastructure here seems to be at the bottom of the food chain. We need to work hard to improve it." She also mentioned the possibility of a loan-forgiveness program such as the one in place for AIDS researchers at NIAID as an incentive for postdocs to come to NIH.

Crawley's observations drew two more comments: Dr. Philip S. Chen, Jr., NIH associate director for intramural affairs, said there are ways to speed the paperwork associated with hiring foreign postdocs, of whom there are many more than U.S. postdocs at NIH, and Dr. Charles McCarthy, director of NIH's Office for Protection from Research Risks, acknowledged both that surroundings are, in many cases, poor, and that regulations governing research are "unnecessarily complex and need simplification."

Discussion moderator Dr. Carl Kupfer, who in addition to heading NEI is also acting NIH deputy director for intramural research, read a handwritten query: "Why does NIH permit the need for AAALAC (American Association for the Accreditation of Laboratory Animal Care) accreditation to result in delays of up to 1-2 years in other renovation projects?"

"You can't underestimate the need for AAALAC accreditation," said Healy. "It was a shock to me when I first came here to learn that NIH's intramural program is not AAALAC-accredited. That's like not having adequate fire protection."

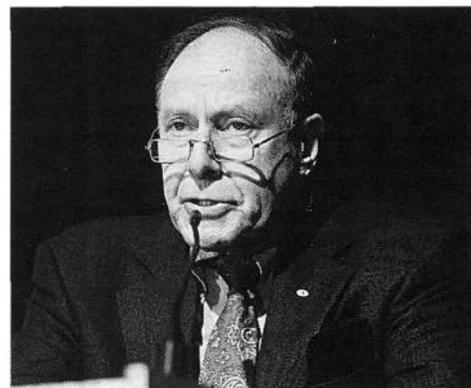
Norm Mansfield said that, by the end of October, NIH will be ready for AAALAC's inspection, but that not all work orders were halted by that job's precedence. "We have handled 100,000 trouble and preventive maintenance calls, 6,000 work orders have been processed and completed, and 450-500 big contracts have been let for major renovation to buildings.

"In the last year, NIH has gotten more money for facilities than ever in its history," he reported. "The problem is, things have been let go for 20 years—jobs that should

have been done.

"It is not widely recognized that the utility systems to labs are past their prime. We face the potential of catastrophic failure in some of these systems. NIH needs a couple of billion dollars to fix up this campus. Satellite facilities are needed because we're running out of room. There's not much space left for new construction."

Margaret Jensvold of NIMH accused NIH



*NEI director Dr. Carl Kupfer, who is also acting NIH deputy director for intramural research, moderated the discussion and posed questions submitted to him from the audience.*

of "destroying lives and careers" by fighting sexual discrimination and harassment lawsuits brought against it "to the hilt" in the courts while simultaneously appearing to endorse publicly advances in women's health and research. "NIH's behavior in court makes those sweet words hypocritical and divisive," she said.

**(Continued on Page 10)**



*Joining Healy on the panel were (from l) Dr. Charles McCarthy, director of the Office for Protection from Research Risks; HHS lawyer Gloria Frank; CC director Dr. Saul Rosen; Dr. Philip S. Chen, Jr., NIH associate director for intramural affairs; Dr. Jay Moskowitz, NIH associate director for science policy and legislation; and Jack Maboney, NIH associate director for administration. Not visible are Norman Mansfield, NIH associate director for research services, Dr. John W. Diggs, NIH deputy director for extramural research, and NIH's attorney Robert Lanman.*

**(Continued from Page 9)**

Healy emphasized, "All of us on this panel find such harassment and discrimination repugnant." The director knew of five such cases in recent history—three were settled, she said, and the other two are being adjudicated. Confirming those figures was Diane Armstrong, director of NIH's Division of Equal Opportunity. "Dr. Healy published policy guidelines on sexual harassment and sex discrimination shortly after her arrival at NIH," Armstrong said. "There is no place for discrimination at NIH."

NIMH's Jack Simpson, who identified himself as one of the few people to come from private industry into government, asked the panel why NIH training funds could not be used by an employee specifically for obtaining an advanced degree in a work-related field; Benowitz replied that it is up to an ICD's discretion to pay for such work—there is no legal bar on obtaining a government-funded degree.

One question that everyone knew would arise was finally popped by NIDDK's Dr. Simeon Taylor, who posed it in perhaps its least challenging form: "The parking problem bothers all of us at NIH. It's not a minor problem, though it does sound trivial. I'm almost embarrassed to bring it up, but it could have a major impact on the quality of life here. A solution would be of major symbolic value, and could encourage us a lot."

Said Healy, "My good friend Carl Kupfer warned me that if I wanted to come out of this meeting alive, I'd better do something about parking." Within the coming months, 650 more spaces will be added to campus parking, she said. Parking is the Montgomery County executive's biggest NIH-related priority, she added; the county's "good neighbor" rule specifies one space for every two employees here as a way of minimizing local auto traffic.

"Only about 5 percent of NIH'ers use Metro," she said, urging that those for whom it is convenient use public transportation. Healy also said it is now legal for NIH to subsidize in some way the admittedly high cost of Metro fares.

Dr. David Fitzgerald of NCI prefaced his question with an endorsement of town meetings: "They should be held every year during the week before Research Festival." He then asked why travel arrangements by federal scientists, particularly to foreign countries, take so much time and effort.

"Foreign travel is never going to be made easy," forecasted Healy. "There is extraordinary scrutiny—it's one of those lightning rods. Look what happened in Florence (Italy, site of last summer's international AIDS conference)—it became a major congressional explosion."

Healy said travel rules within NIH could be streamlined and suggested that scientists try to get the sponsoring institution to pay for



*Audience members were invited to address Healy and her OD staff from microphones located in the aisles.*

travel and lodging. Lastly she advised Fitzgerald, "You're not alone (in being scrutinized). Look what happened to poor Mr. Sununu."

A question arose about making tenure-track positions in the intramural program more open and competitive. Answered Kupfer, "We could do a much better job of stressing the advantages of the intramural program (to attract top candidates). The Office of Education is putting a prospectus in order to attract the very best people. We have a good case to make."

Dr. Barry Richmond of NIMH recounted "the agony of dealing with procurement people. If you want to make a big purchase, you almost have to don battle garb. There must be a way to make complex procurements smoother."

Having dealt with a version of this question earlier, Healy said she perceives a "cultural phenomenon at NIH—the administrators are seen as adversaries of the scientists. I can tell you that is not the mindset of Bldg. 1. Give (the administrators) a grain of sympathy. You say we're not service-oriented. I say it is a high priority for us and is becoming a higher priority. Jack Mahoney is making it an emphasis."

At this point, Healy reassured the scientists that top OD staff have spent much of the past month working on Office of Government Ethics regulations affecting, among other things, NIH'ers' ability to earn outside income. HHS ethics lawyer Gloria Frank stated, "There will be changes from the current policy. Right now is a time of intense scrutiny."

Dr. Robert Adelstein of NHLBI closed the session with a call for future town meetings, then inquired about the desirability of establishing formal postgraduate education at NIH "as a way of attracting investigators and increasing our own scientific knowledge."

"That is a readily accomplishable vision for

NIH," answered Healy. "We could have a magnificent graduate university. It would enliven the intellectual atmosphere and make a marvelous contribution to this country. I feel it's almost an abrogation of our social responsibility not to have it. The time is right to think about it and do it."

"This is a very lofty note on which to close this first of what I hope will be very many town meetings," she said.

Preparations had been made for off-campus NIH'ers in Frederick, Baltimore, Montana and North Carolina to hear the talk and be able to ask questions, but technical difficulties prevented their participation. The meeting was, however, videotaped. Masur Auditorium was at capacity, as was overflow space in Lipsett Amphitheater, where the audience topped 200 people, many of whom stood in the rear or sat on the steps. Only about 10 people gathered in extra overflow space in the 14th floor auditorium. □



*Dr. Alfred Del Vecchio has been awarded a 3-year American Cancer Society postdoctoral fellowship to continue work at NCI's Laboratory of Tumor Virus Biology. He will be working under the direction of Dr. Peter M. Howley, chief of the laboratory, in research on human papillomaviruses (HPV). Infection with specific HPVs can lead to cervical cancer. Del Vecchio will be studying genetic differences in the viruses that may cause infected cells to become cancerous.*



## TRAINING TIPS

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

Courses and Programs	Starting Dates
<i>Personal Computing Training 496-6211</i>	
Welcome to Macintosh	10/22, 11/7
Mac Write (New)	11/25
Transition to WordPerfect 2.0 (Mac)	Request
3Com PC Network-Level 1	10/21, 11/19
3Com PC Network-Level 2	11/22
Introduction to Personal Computing for New Users	10/30
Disaster Recovery and Data Security for the PC (New)	11/18
Introduction to DOS	10/21, 11/1
Introduction to WordPerfect 5.1	10/28
WordPerfect 5.1 — Advanced Topics	11/5
Printing with WP 5.1 and Laser Printers	11/22
Intro to Harvard Graphics, Rel. 2.3	11/7
Introduction to dBASE III+	10/29
Intermediate dBASE III+	11/19
Intro to Lotus 1-2-3, Release 2.2	11/4
Lotus 1-2-3, Rel. 2.2 — Adv. Tops.	11/18
Introduction to CRISP	11/15
Level 3 IMPACT System (New)	11/13, 11/19

Personal Computer training is available through User Resources Center (URC) self study courses. There is no cost to NIH employees for these hands-on sessions. Training Center, DCRT, and other training information is available on WYLBUR. Logon to WYLBUR and type ENTER TRAINING

## DCRT Computer Training Classes

Classes	Dates
DB2 Application Programming	10/7-10/11
Introduction to WYLBUR	10/7-10/18
Downloading Sequences from GenBank on the Convex	10/8
DCRT Support for UNIX Workstations	10/8
Batch Files with PC-DOS	10/15
ENTER BBS	10/15
Editing With Emacs	10/16
Macintosh Networking with System 7	10/16
MATLAB	10/17
RMAG DOS Utilities	10/17-10/18
Introduction to ISPF/PDF	10/18
Introduction to CASE	10/21
Introduction to Programming and Program Logic	10/21-10/31
Technology for Connecting Networks at NIH-NUnet	10/22
Convex Questions and Answers	10/23
Directions in Computing	10/25
Intermediate PC-DOS	10/28, 10/30
Programming in Perl	10/28-10/30

Classes are offered by DCRT's Computer Center Training Unit, without charge. Call 496-2339 for more information.

## Can't Help But Overeat?

Overweight women who feel that they compulsively overeat are needed for an NIMH study. Must be at least 50 pounds overweight, 18-49 years of age, and in good health. No weight loss treatment is offered, but you will be compensated for your participation. Call 496-4319 and leave message. □

## AZT Found Helpful In HIV-Infected Hemophiliacs

A recently published study shows that early treatment with zidovudine (AZT) delays the onset of AIDS in hemophiliacs older than 30 years of age who have no disease symptoms but are infected with HIV. The study was a cooperative effort between the AIDS Clinical Trials Group (ACTG) funded by NIAID, and the National Hemophilia Foundation.

"This study confirms the benefit of early treatment of HIV infection," said NIAID director Dr. Anthony S. Fauci, "and demonstrates that giving AZT to persons with hemophilia does not appear to interfere with other treatments they may be taking."

Hemophilia is caused by deficiency of a blood clotting factor. There are two types of the disease: hemophilia A, characterized by a factor VIII deficiency, affects 80 percent of hemophiliacs; hemophilia B, a factor IX deficiency, accounts for most of the remainder. The disease overwhelmingly affects males because it is inherited as a sex-linked, recessive trait from the mother.

People with hemophilia have a chronic need for infusions of clotting factor concentrates. Most hemophiliacs became infected with HIV through tainted blood products they received before 1985, when screening for HIV-1 (the virus that causes AIDS) began.

Even today, clotting factor concentrates are not screened for either HIV-2 or hepatitis C virus. Nine of 10 hemophiliacs become infected with hepatitis C virus, and many suffer hepatitis-induced liver disease. Because the liver is critical to the metabolism of zidovudine, there was concern that the drug might not be as effective in hemophiliacs.

The study found that among hemophiliacs over 30 years old, those who received AZT fared better—fewer progressed to AIDS or

died—than those who received placebo. The study found no statistical difference between the placebo and treated groups in those younger than 30. The authors say this may be attributable to the fact that the study was stopped prematurely; therefore, there were fewer patients in this group and shorter followup than originally planned.

Because HIV disease appears to progress more quickly in older hemophiliacs, separate analysis was conducted on data from the 94 patients who were more than 30 years old. Among these patients, five in the placebo group and none in the AZT group were newly diagnosed with AIDS or died while on the study. There was also a significant difference in weight gain between patients in the two groups (8 pounds for those on AZT versus 2 pounds for those on placebo). Moreover, patients receiving zidovudine tended to have larger increases in CD4 T-cell counts and fewer diagnoses of AIDS or advanced or early AIDS-related complex.

To be eligible for the study, volunteers had to be 12 years or older and to have had no symptoms of HIV other than lymphadenopathy. Nearly 90 percent of the patients recruited had hemophilia A; the rest had either hemophilia B or more rare clotting disorders.

The most notable side effects of AZT treatment, occurring in 17 percent of the treatment group, were anemia and another blood cell disorder, granulocytopenia. No special problems related to liver dysfunction could be attributed to the drug despite the high incidence of underlying liver disease in these patients. Other subjective symptoms reported by those treated with zidovudine included nausea and weakness.—Laurie Doepel □



The NIGMS recently held its annual awards ceremony honoring employees for their outstanding contributions throughout the year. Pictured are (from l) Yvonne Williams, Office of Program Activities; Dr. Ruth L. Kirschstein, NIGMS director; Nancy Vess, Budget Office; and Pat Disque, Office of Program Activities. Williams, Vess and Disque received the NIH Award of Merit, the highest award given by an ICD director.

**TECH TRANSFER***(Continued from Page 1)*

for the government.

Additionally, FTTA authorized joint research and development projects with the private sector. Under new agreements called CRADAs, or cooperative research and development agreements, federal scientists and laboratories, private industry and, by extension the nation's economy, would all benefit. Framers of the new act considered that CRADA inventions would be licensed to collaborating companies. Because CRADAs ultimately boost marketplace competition, the public would benefit at the check-out counter.

By allowing federal researchers to profit financially from their work in much the same way as academic scientists do, CRADAs and licensing agreements offer incentives and give investigators a personal stake in their projects. In addition, the agreements generate extra funding for the individual institute from which the work originates, in Weintraub's case NIDDK. The collaborating company benefits by gaining access to NIH investigators and, sometimes, exclusive rights to manufacture and market a cutting-edge, relatively low-risk product or idea that already has been tested and proven in a study population—one of the most valuable but difficult to obtain components of biomedical research.

In theory, CRADAs, licensing deals, patents, mass production of new diagnostics and therapies, marketplace-regulated price tags and mutual profit between federal scientists and industry were all ideas whose times had finally come to the government research arena. In practice, however, as Weintraub and his partner would soon discover, the ideas and their implementation were miles—and years—apart.

"At first it was very frustrating," says Weintraub, an NIH scientist for more than 20 years. "There were a lot of delays." The patent office, then part of DHHS's Office of General Counsel, was overworked and understaffed, he added, and therefore it couldn't really be responsive to government scientists, who were basically neophytes at establishing licensing agreements and filing for patents.

"It certainly wasn't all the fault of the office," Weintraub says. "Government scientists really are not trained to think in the business sense like investigators on the outside. It was never an issue for us before the FTTA. The FTTA legitimized it."

What FTTA also did was require all federal agencies to formalize procedures for sharing technology invented in government laboratories with the public. In response, NIH established, under NIH associate director for intramural affairs Dr. Philip S. Chen, Jr., the Patent Policy Board and an organizational unit initially called the Office of Invention Development. A specialized staff was needed to handle not only the legal intricacies of pat-

ents and licensing, but also the complicated aspects of "marketing" applied biomedical research.

At the time, expensive outside contract attorneys were being utilized for patent prosecution, and licensing was handled only by the National Technical Information Service. There was a major drawback to this setup, however: Use of these services decentralized NIH control of operations.

"Things tended to get lost in the shuffle," remembers Weintraub. "It took us almost 2 years from our initial submission before a patent advisor even commented on the potential of the project."

Enter Reid Adler in 1989 and a complete restructuring of the invention office. Renamed the Office of Technology Transfer (OTT), the new entity has a lot to recommend it. In May 1991, the patent operation was transferred from DHHS's Office of General Counsel to OTT. And although the office is still not fully

staffed, the gross deficiencies of the past have been rectified.

"Technology transfer really is a collaborative effort that involves many different levels of the NIH community," said Adler, OTT director. "NIH has put some excellent programs together and organized them very effectively in many institutes and in this office, but one thing we haven't had was a staff that was large enough to realistically transfer NIH's technology."

According to Adler, in an average university licensing office, or in fact, in most biomedical research-intensive institutions, there is generally about one licensing specialist for every 20 to 25 invention reports filed each year. A scientist's invention report is similar to a trial balloon. If reasonable potential for patentability and commercial marketability is shown in the invention report and in OTT's preliminary analysis, the first stages of locating licensing partners can begin.

**Getting Started: Voices Speak from Experience**

When Dr. Bruce Weintraub, chief of the Molecular, Cellular, and Nutritional Endocrinology Branch at NIDDK, first sought to take advantage of the new Federal Technology Transfer Act, he was admittedly naive. An NIH veteran of more than 20 years, he was submitting a project that, if all went well, might produce some very tangible results not only in patients, but also in his bank account. But all has not gone well, and he says he accepts part of the blame. So that others might learn from his tribulations, Weintraub offers the following advice to fledgling inventors.

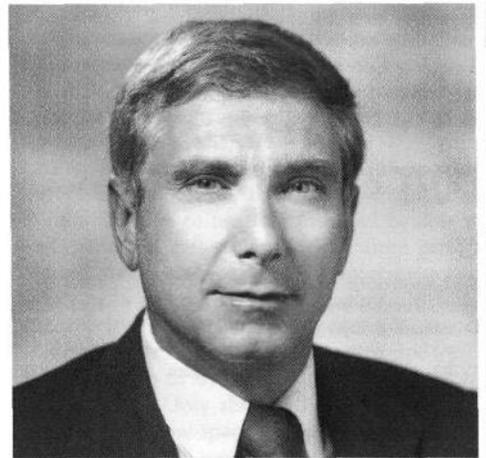
"Right from the very beginning of a new project, start thinking about the possible commercial applications and interests it might have." Prior to the FTTA, he says, federal researchers, isolated in their ivory towers, were not in tune to that aspect of science, but it will help them in the long run to plan ahead.

Next, Weintraub cautions investigators to "be careful about what and when they publish. I was idealistic. It used to be the most important thing to do to quickly publish your project in a peer-reviewed journal. But that also makes your idea vulnerable [to loss of patent rights]."

Finally, and most importantly, Weintraub says inventors must "stay in the loop" with the Office of Technology Transfer, with the lawyers, and with the company that is interested in the product.

"There needs to be a dialogue," he says. "Keep track of deadlines yourself. One of my biggest errors was thinking that once I gave it to the invention office, my role was over. That's far from true."

Reid Adler, OTT director, agrees wholeheartedly. And, he adds, not only should the scientists remain active in the processes, the



*Dr. Bruce Weintraub*

institutes also play a vital role.

"Input from the institutes is very important," he says. "They can tell us that even though there is no apparent commercial value at this time, this is technology ahead of its time and we need to file a patent application. That kind of technical information is very important."

In addition, he notes, institutes need to commit themselves to providing training and education for their scientists about licensing and patent matters; processing invention reports; and helping to identify companies that may have an interest in certain products.

"We all need to be very aggressive about finding companies to develop this technology at an early stage," concludes Adler, "and also about encouraging scientists to submit invention reports. Making technology transfer happen takes a lot of work."

As Adler predicts, PHS can expect about 200 invention reports to be submitted this year, which suggests that to do an effective job of marketing the inventions to development companies, approximately 10 licensing specialists would be required.

"At the moment we are still short staffed," Adler says. "As a result everybody around here is working 60-hour plus weeks and scrambling to keep up with the paper flow. A concern I've had while technology transfer is really in a transition period right now at NIH is that people's expectations don't run too far ahead of what this office and the ICDs can deliver."

Adler notes, however, that NIH director Dr. Bernadine Healy has just recently approved a substantial staff increase for OTT. The increase should catapult an already greatly improved office into the fray of outside competition. "We've just hired two members of the board of appeals at the U.S. Patent Office," Adler says, "and we expect to offer jobs very soon to several top-notch patent and license professionals."

"We're moving on a track that's more expeditious," Weintraub now says of his project. He has realized an inventor's greatest fear—his patent application was dangerously delayed. After he and Wondisford had their discovery published—previously a federal scientist's only reward for new ideas—another research group developed a very similar product and filed a patent for it, before Weintraub's patent application made it through channels. "We remain cautiously optimistic," he says. "Their product is not at the level of ours. We feel we're still in a fairly strong position."

The difference between licensing and patenting is crucial. A licensing agreement is signed when a development company thinks an idea has commercial value, i.e., that other people will be interested enough to buy the product. A patent—sometimes the more expensive and time-consuming of the two to obtain—provides the market exclusivity needed to attract a licensee. A scientist can obtain a patent without a company ever marketing the product; however, usually NIH cannot convince a company to market a product without first owning a strong patent application or having been issued a patent on it. Ideally, the two processes occur simultaneously.

In contrast to the growing number of CRADAs, however, the number of employee invention reports submitted has remained static since 1988. This is disturbing, says Adler.

"I do not believe that by fiscal year 1988, NIH reached an equilibrium state and said, 'This is the right number of patents—let's not do any more,'" Adler asserted. "I think what has happened is that people have been turned off by inadequate patent and licensing services

## OTT Responds To Demand, Improves Service

Since its inception in 1989, the Office of Technology Transfer has been improving the way technology transfer is conducted at the Public Health Service. Innovative activities have been designed and implemented to ensure successful patenting of inventions, and licensing to the private sector. Additionally, OTT has grappled with such complex and politically sensitive cases as the inventorship dispute with Burroughs Wellcome over the use of AZT (zidovudine) to treat AIDS.

OTT has increased its staff to include professionals with patent, licensing, legal, scientific, marketing, and Wall Street backgrounds to handle the increasing PHS technology transfer demands. Dynamic programs to ensure comprehensive monitoring, evaluation, development and management of PHS inventions have been implemented.

One highlight of OTT's new activities is the Technology Management Team (TMT) program, an interactive process conducted to evaluate a specific technology. The team, which includes an OTT licensing specialist, the PHS technology inventor, an institute technology development coordinator(s) and an

OTT Patent Branch staff member, develops a strategic plan for licensing and commercial development of the technology.

Other developments at OTT include new computer information systems designed to assist in tracking patent status, licensing activity, and technology marketing information. In addition, OTT-sponsored programs such as the PHS Technology Transfer Forum and a joint Pharmaceutical Manufacturers Association/NIH Technology Transfer Conference encourage interaction with companies interested in licensing PHS technology. The next forum is scheduled for Nov. 14-15 at Lister Hill Auditorium; it will cover the topics of infectious disease research and human genome research.

OTT plans additional outreach to small business, and "inreach" to NIH institutes in order to increase awareness among scientists about opportunities for technology transfer. The NIH research community can look for new activities and continually improving service.

For further information or assistance in technology transfer, contact OTT, 496-0750.

in the past. It takes a long time to recover from a bad reputation." Also, Adler believes a technology transfer "culture" is necessary for success of the program and he credits Healy with making her support clear and emphatic.

OTT is making headway. The office ultimately will move toward having all licensing work done in house and, following that step, it hopes to take on the bulk of the patent prosecution work now done by outside lawyers. Adler says hiring a contract attorney to prepare a patent application costs about twice as much—\$6,000 to \$7,000 each on average—as having the same application done in house. In the meantime, OTT is negotiating contracts with some of the nation's best patent firms.

"Over the last year we've consolidated operations with the patent group," Adler says, referring to the period when patenting and licensing were handled by two separate—and estranged—offices. "We now have an integrated patent-licensing operation, which is the way much of the private sector handles technology transfer. It gives us some real efficiency and limits duplication of effort."

OTT now has three branches—a licensing branch with a chief, three licensing specialists and a secretary; a patenting branch, of which Adler is acting chief, with a senior attorney and six patent advisors of varying levels of experience; and a technology management branch with a chief, two program analysts and a secretary. What is better, though, is that with Healy's newest allocations, OTT has

more help on the way. Adler and his office currently have several irons in the fire, but only one true goal.

"Along the way, we're trying to be innovative," he says, "and look for opportunities to make technology transfer happen smoothly without interfering unduly with research. We want the public to benefit as rapidly as possible from NIH research results that can be transformed by the private sector into health care products." □

## Circus Comes to Town

New York's renowned "Big Apple Circus" will premiere its all-new show, "Greetings from Coney Island" at Rio at Washingtonian Center in Gaithersburg through Oct. 14. The limited run precedes the circus' 11th annual holiday engagement at New York's Lincoln Center.

The one-ring circus provides an intimate environment for its audiences, with an emphasis on theatricality, artistry, and audience interaction. Each year the production centers around a specific theme. This year's show, "Greetings from Coney Island," will transport audiences back to the boardwalks of this legendary amusement empire.

R&W has discounted tickets to the following performances: Oct. 5 and 13 at 4 p.m.; Oct. 6 at 12:30 p.m.; and Oct. 11 at 7:30 p.m. Tickets are \$14. For more information, contact the R&W Activities Desk in Bldg. 31, 496-4600. □

## McGowan Appointed Extramural Activities Director, NIAID

Dr. John J. McGowan has recently been appointed director of NIAID's Division of Extramural Activities (DEA). He was formerly associate director of the Basic Research and Development Program of NIAID's Division of the Acquired Immunodeficiency Syndrome (DAIDS). In announcing his appointment, Dr. Anthony S. Fauci, NIAID director, said, "Dr. McGowan brings extensive experience in the integration of program and policy to this position. His scientific and programmatic leadership are well-known among his peers."

McGowan views as one of his major responsibilities as DEA director "giving the best possible service to the scientific community while getting the best science possible for each NIAID dollar." To accomplish this task, he works closely with the institute director, the National Advisory Allergy and Infectious Diseases Council, and other NIAID extramural divisions as well as NIH extramural components on issues pertaining to research grants, contracts, program policy, and training programs. Among its many activities, the division provides initial scientific merit review of some grants and all research contracts for NIAID, prepares final scientific and programmatic review by the council and coordinates council and scientific review committee activities, and prepares and issues awarding documents for all institute extramural programs.



Dr. John J. McGowan

McGowan joined NIAID in 1987 as a program officer and was soon tapped to establish and head the Development and Therapeutics Branch in DAIDS. Two years later, the division was reorganized and McGowan was appointed associate director. By forging partnerships among academic institutions and pharmaceutical companies, his pioneering efforts in preclinical drug development for HIV infection and AIDS paved the way for productive collaboration.

A native of Mobile, Ala., McGowan received his Ph.D. degree in microbiology from the University of Mississippi Medical Center. He was a postdoctoral fellow at the University of Virginia Medical Center under an NIH grant. □

## New Location for Uniform Center

The Uniform Service Center of the D.C. Metropolitan Area Branch, COA, has moved to the Park Bldg., 12420 Parklawn Dr., Rm. 1-18A. The center is open on Wednesdays from noon to 1 p.m. The phone number is (301) 443-9704. An answering machine will record your message when the center is closed.

The center sells new and used uniform items and apparel, PHS ribbons, flags, t-shirts, and mugs. All proceeds from the sale of these items are contributed to health-related charitable organizations.

The center needs your help in maintaining its inventory. If you have stashed away ribbon attachments, shoulder boards, rank insignia, uniform belts and uniforms, please donate them to CDR Ann Coppola by phoning (301) 427-1156. Active duty and retired PHS officers are also asked to volunteer 1 hour of their time to staff the center. Contact volunteer coordinator CDR Constance Burtoff, (301) 496-2292.

For more information contact CDR Jane McCarthy or LCDR Allen Jarrell, (301) 443-4974. □

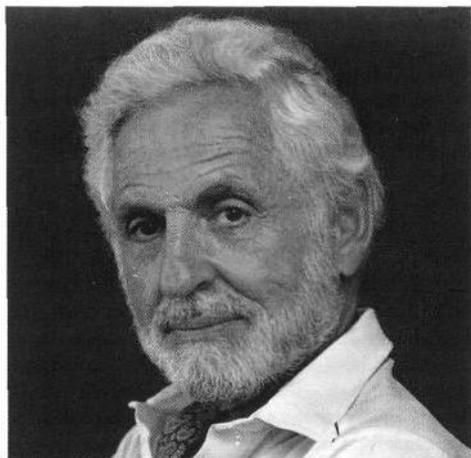
## DCRT Supports Latest DNAdraw

DCRT announces the release of version 3.5 of DNAdraw, an IBM PC program used to prepare publication-quality output of DNA sequences.

Recent improvements to DNAdraw include the following: PostScript output is available, with an option for changing the size of the output; highlights can be automatically generated for aligned sequence data; the manual has been completely redone (in PostScript), with an index added; block marks make drawing rectangular polygons simpler—only diagonal corners need to be specified; block marks can also be used to shift text left or right, closing up or creating more space; start/stop locations for translation are easier to find.

A seminar entitled "Drawing DNA Sequences with Computers" will be given on Oct. 2 from 1 to 3 p.m. Call 496-2339 for more information.

DNAdraw can be obtained from two NIH electronic bulletin boards—PCBull and PUBnet—or by calling Marvin Shapiro, DCRT, at 496-6037. You can also contact Shapiro to have a sequence drawn for you. □



Dr. Carl Djerassi, a Stanford University chemistry professor and NIGMS grantee, is the recipient of two prestigious awards, the 1991 Priestley Medal and the National Medal of Technology. The Priestley Medal, which is the American Chemical Society's highest honor, is regarded as the nation's top chemistry award. The National Medals of Technology, which are presented annually by the president, honor individuals and companies for helping to develop or commercialize technology. Djerassi, who is probably best known for developing the first oral contraceptive, has been funded by NIGMS for the last 32 years for research on the structure and synthesis of steroids, lipids, and antibiotics.



Dr. John C. Dalton has been named the first director of the Division of Extramural Activities, NIDCD. He is responsible for planning and executing extramural activities and for overseeing grants management, peer review activities and national advisory council functions. He comes to NIDCD from a similar position at NINDS. He received his B.A. degree from the University of Virginia, and his A.M. and Ph.D. degrees from Harvard, all in biology. In his long federal career, he has held positions in the intramural and extramural programs of the neurology institute, and in DRG, NIGMS, the Bureau of Health Manpower, and the Health Resources Administration. He also taught in the department of biology of the University of Buffalo (now SUNY-Buffalo) and was a grantee of the then NINDB.

## Cheung Joins MBRS Program

Dr. Geoffrey P. Cheung has joined NIGMS as a program administrator in the Minority Biomedical Research Support (MBRS) program. Prior to assuming this position, he was assistant director for operations and program procedures in NIAID's Division of Extramural Activities and acting chief of the NIAID Research Manpower Development Staff office. Among his responsibilities were NIAID's MBRS cofunding activities and the coordination of the NIAID Research Supplements for Underrepresented Minorities program. He previously served as a scientific review administrator in the NIAID AIDS review section.

Before coming to NIH, Cheung was president and CEO of Allergy Immuno Technologies, Inc., a diagnostic research and development company headquartered in Newport Beach, Calif. He also served as vice president of research, development, and operations at Physicians Laboratories in Los Angeles, and prior to that was manager of the P32 Division of ICN Radiopharmaceuticals in Irvine, Calif.

He has been on the faculty of the University of Colorado, the University of Kansas, the University of Illinois, the University of Hawaii, and the College of Osteopathic Medi-



Dr. Geoffrey P. Cheung

cine and Surgery in Des Moines, Iowa. While at the University of Hawaii, he was a faculty participant in the MBRS program.

Cheung received a B.A. in biochemistry from the University of California, Berkeley, and a Ph.D. in biochemistry from Oregon State University. He did postdoctoral research in physiological chemistry at the University of Wisconsin School of Medicine with support from an NIH fellowship. □

## Baldwin Named NICHD Deputy Director

Dr. Wendy Baldwin was recently named deputy director of the National Institute of Child Health and Human Development. In this role, she shares with the NICHD director the responsibility for overall planning, direction, and evaluation of NICHD activities, and will oversee the direction of the institute's extramural research and scientific review programs.

Baldwin, a social demographer, received her Ph.D. in sociology/demography/family planning from the University of Kentucky in



Dr. Wendy Baldwin

1973. She began her federal career with NICHD in 1972, serving as a health scientist administrator in the former Behavioral Sciences Branch of the Center for Population Research. She was appointed chief of the Demographic and Behavioral Sciences Branch in 1979 with responsibility for planning and administering a broad range of training and research grants relating to social, economic, and behavioral aspects of population. She is internationally recognized as an authority on fertility-related behavior and on adolescent pregnancy, and she is the recipient of numerous honors and awards for her leadership and direction of social and behavioral research programs in the population sciences.

Baldwin is listed in *Who's Who in the United States*. Her professional activities include membership in the American Public Health Association, Society for Research in Child Development, the Population Association of America and the American Psychological Society. She is a member of the American Sociological Association Council and chairs the WHO steering committee for the task force for social science research in human reproduction. □

## Carpenter Has Bright Idea

A. Hoover Sherron has been on the Facilities Engineering Branch staff, NIEHS, since the early days in the 1970's, when the institute rented a few 1-story buildings down the road from its present 334,000-square-foot Bldg. 101 laboratory and office headquarters in Research Triangle Park, N.C. A licensed locksmith and longtime carpenter, Sherron grew up in North Carolina before there was a Research Triangle Park. So when it turned out that there were no replacements for worn out closure devices on about 300 interior and exterior doors in Bldg. 101, he took the problem home with him and came up with an adapter that will make currently available closure devices fit the current doors.

Once he had the concept in mind, he took the idea to his colleague Bob Hall in the NIEHS machine shop, and the two worked out the details of a prototype adapter device. With that in hand, they approached a manufacturer to obtain enough of the adapter devices to fill current and future needs throughout the building. The manufacturer was excited. Apparently the worn-out door closure problem is widespread, but no one had yet come up with an effective solution. The company expressed a desire to make and distribute the adapter for a national market. NIEHS administrators are now exploring patent arrangements for the device. In the meantime, Sherron has received a cash award

for developing the door device.

When he isn't on the job as a carpenter and locksmith, Sherron has a second career as a formally trained clown. He attended clown school on weekends, and enjoys performing for his grandchildren and other groups of children.—Thomas R. Hawkins



Hoover Sherron of NIEHS' Facilities Engineering Branch, holds a door closure device fitted with the adapter he developed. The adapter allows new closure devices to be fitted to existing doors. The device saves the government money at the NIEHS facilities, and a patent agreement is being arranged with a manufacturer who plans to market the device to the public.

## Blumstein To Give NIDCD Third Anniversary Lecture

On Oct. 18, noted linguistic scientist Dr. Sheila E. Blumstein will present "Language Deficits in Aphasia: A Window Into the Mind," as the third anniversary lecture of the National Institute on Deafness and Other Communication Disorders. Her talk will begin at 10:30 a.m. in the lecture hall at the Cloister, Bldg. 60.

Aphasia is loss of the ability to understand language, including the inability to recognize the written word. It does not affect intelligence; sufferers are mentally competent even though what they say can be jumbled and incoherent. The communication disorder is similar to being in a foreign land with no language skills. Scientists estimate that there are nearly a million people who suffer from aphasia. Most of these individuals are victims of stroke or head injury.

Blumstein's recent work explores speech and language processing deficits in aphasia. She and her colleagues are investigating the mechanisms of speech production and perception, vocabulary access, and sentence processing. Their goal is to delineate the nature of language deficits and ultimately develop a model of language-brain relations.

An authority in language deficits, Blumstein is the author of the book *A Phonological Investigation of Aphasic Speech* and coauthor of *Speech Pathology, Speech Perception, and Acoustic Phonetics*. She has also edited and critically reviewed many other books and has written nearly 100 scientific articles and chapters pertaining to linguistics, cognitive science, and aphasia.

Blumstein's professional honors and awards include a Woodrow Wilson fellowship, an NIH predoctoral fellowship, a Guggenheim fellowship, and the NIH Claude Pepper Investigator Award. She is also a member of Phi Beta Kappa and Phi Sigma Iota.

She received her A.B. from the University of Rochester in 1965 and her Ph.D. from Harvard University in 1970. At Harvard, she was a teaching fellow from 1968 to 1970. Since that time, she has been a research associate at the Boston Aphasia Research Center.

In 1978, she became chairman of the department of linguistics at Brown University. She earned full professorship in linguistics in 1981 and became a professor of cognitive and linguistic sciences in 1986. She served as chairman for the department of cognitive and linguistic sciences in 1986, and was named dean of the college at Brown in 1987.

In addition to her work at Brown, Blumstein has served as a consultant to the MIT laboratory of electronics from 1974 to 1977 and was a visiting scientist at the laboratory in both 1974 and from 1977 to 1978. More recently, she was the visiting Henry R. Luce professor of language, mind and culture at



*Dr. Sheila E. Blumstein will give NIDCD's third anniversary lecture on Friday, Oct. 18 at 10:30 a.m. in the lecture hall at the Cloister, Bldg. 60.*

Wellesley College from 1982 to 1983. She is currently a research associate at the Veterans Administration Medical Center in Providence, R.I., and a member of the scientific staff in the department of medicine at Roger Williams Hospital. She has held both of these positions since the mid-1980's.

For more information call 496-7243; TDD 402-0252. □

## Physician Assistants Honored

Oct. 6 is National PA Day, celebrating the birth of the "physician assistant" profession 26 years ago.

Physician assistants (PAs) are skilled members of the health care team who are trained in AMA and CAHEA-accredited programs, certified by a national board, and supervised by licensed physicians. They provide diagnostic and therapeutic health care traditionally performed by physicians. Currently there are 20,000 clinically active PAs providing more than 104 million patient care visits per year in primary and most subspecialty care areas. Most states have PA practice legislation, and 30 states and the District of Columbia have granted PAs prescribing authority.

Not only have PAs impacted health care by providing cost-effective, quality health care, they also have improved access to medical care in rural and underserved communities, which was the main reason for starting the profession.

PAs currently on staff at NIH include Karen Kobayashi, M'Lou Stevens and Catherine Vangellow of OMS, and Patricia Steele and Cheryl Talar-Williams of NIAID. □

## Normal Volunteers Wanted

The Experimental Therapeutics Branch is seeking volunteers, age 40 to 90, for psychological testing. Volunteers must be available for up to 6 weeks, and will be compensated for their time. If interested, call Michael, 402-3735. □



*The new class of presidential management interns and NIH management interns is pictured with NIH administrative training committee chairman Kenneth G. Carney (standing, c). They are (standing, from l) Todd Danielson, Brett Phillips, Sherrie Davis, Melissa Bronez, Randy Rupp, and Camille Hoover. Seated are (from l) Gladys Bohler, Jane Loewenson, Wayne Henry, Mary Lawrence, Gloria Kotula, and Janie Garrison. Not shown is Sabira Rafiullah. The goal of both programs is to develop beginning managers who have the potential to reach the highest positions in their field at NIH or with the federal government. Program graduates have been and continue to be a primary source of future senior managers at NIH.*