

## Director Takes Formal Oath

### Healy Makes History, Pledges Commitment at Swearing-In Ceremony

By Carla Garnett

History was made June 24 as Dr. Bernadine Healy formally took the oath of office as NIH director. Greeted at her swearing-in ceremony by President Bush and DHHS secretary Dr. Louis Sullivan, NIH's first woman director had been unanimously confirmed for the position by the Senate Mar. 21 and officially took over the reins of NIH in April.

"Dr. Healy's appointment reinforces the commitment by the President and me to fully tap into the reservoir of women and minorities," said Sullivan, in opening remarks at the swearing-in ceremony. "This also signals our commitment to providing strong leadership in biomedical research."

Sullivan said NIH must have dynamic, visionary leadership at its helm. "We have found that person in Bernadine Healy," he said, adding that Bush said

(See *Swearing-In* p. 11)

## So Many Stories. So Little Time

### NIH Historian Harden Honored for Book

By Rich McManus

NIH's historian Dr. Victoria A. Harden, who has just won the Henry Adams Prize of the Society for History in the Federal Government for her book *Rocky Mountain Spotted Fever: History of a Twentieth-Century Disease* (Baltimore: Johns Hopkins University Press, 1990), has a problem that has afflicted perhaps every historian from time immemorial—time itself.

While there often tends to be too much of it in the past, the present also conspires to keep the historian interminably engaged.

(See *Harden* p. 17)



Dr. Bernadine Healy takes the constitutional oath of office June 24 that formally recognizes her position as NIH director. DHHS secretary Dr. Louis Sullivan (l) administers the oath while Healy's husband Dr. Floyd Loop holds the Bible, and President Bush and Healy's daughters Bartlett (second from l) and Marie (c) look on.

#### In This Issue

|  |       |
|--|-------|
| Kenneth Olden named NIEHS director   | p. 2  |
| In NIHAA Forum, Robert Martin writes about "Lessons from the Past: The Pied Pipers of Piltown" | p. 3  |
| Research Festival '91 schedule announced   | p. 5  |
| News from and about NIHAA members  | p. 7  |
| Notes from the NIHAA leadership  | p. 9  |
| Science Research Updates   | p. 12 |
| Bernadine Healy outlines framework of her directorship   | p. 15 |
| Research Bldg. 36 renamed in honor of Lowell Weicker   | p. 20 |
| Calendar   | p. 21 |
| NIHAA holds party at Italian embassy   | p. 22 |
| Excerpts from Albert Sabin's lecture on aging  | p. 24 |
| NIH Notes  | p. 26 |
| NIH Retrospectives   | p. 30 |

### NIHAA Members Invited to Alumni Symposium

The first morning of NIH Research Festival '91—Monday, Sept. 23—has been designated National Heart, Lung, and Blood Institute Alumni Day. This event is being celebrated with a symposium sponsored by NIH and NHLBI in honor of Dr. Joseph L. Goldstein, recipient of the NIH 1991 Distinguished Alumni Award. Dr. Edward Korn, chairperson of the symposium and director of NHLBI's Division of Intramural Research, has written the following invitation to NIHAA members:

In planning the second annual NIH Alumni Symposium, we established two  
(See *Symposium* p. 5)



## Howard's Kenneth Olden Named NIEHS Director

The director of Howard University's Cancer Center, Dr. Kenneth Olden, has been named director of the National Institute of Environmental Health Sciences. In addition to directing NIEHS, Olden will also be director of the National Toxicology Program, a cooperative effort within DHHS to strengthen the federal science base in toxicology and to coordinate the toxicological research and testing activities of four PHS agencies. Both these positions were opened when Dr. David P. Rall retired last October. The positions have been held on an acting basis by Dr. David G. Hoel, who is director of NIEHS' Division of Biometry and Risk Assessment.

Olden comes to the NIEHS directorship from Howard University College of Medicine, where during the past 12 years he has held a number of managerial and scientific positions. Since 1985 he has served as director of the university's Cancer Center and professor and chairman of the department of oncology, Howard University Medical School.



Dr. Bernadine Healy swears in Dr. Kenneth Olden as NIEHS director on June 18.

Prior to his appointments at Howard, Olden was a research scientist from 1974 to 1979 in the Division of Cancer Biology and Diagnosis, NCI. His major research interest is cancer cell biology, particularly cancer metastasis. Before coming to NIH, Olden spent 4 years as a research fellow and instructor of physiology at Harvard Medical School.

"Our agency is fortunate to have such an outstanding basic scientist and proven leader as NIEHS director," said NIH director Dr. Bernadine Healy. "Dr. Olden's work at NIEHS will impact on every man, woman, and child in the country. I am very pleased for Dr. Olden to be named the first appointment during my tenure as NIH director."

Olden received his B.S. degree in biology in 1960 from Knoxville College, his M.S. degree in 1964 from the University of Michigan, and his Ph.D. in 1970 from Temple University.

In January 1991, Olden was appointed by President Bush to the National Cancer Advisory Board, a position he relinquished when he assumed the NIEHS post. He is a member of the editorial boards of three journals: *Cancer Research*, *Cell Regulation*, and *Journal of the National Cancer Institute*. He is also the author of numerous basic science articles, and while at the Howard University Medical Center held a number of grants from NIH. He published two of the "one hundred most cited" papers in 1978-1979, one of which—on the subject of cancer cell biology—is now deemed a "citation classic."

The NIEHS is the principal federal agency for biomedical research on the effects of chemical, physical, and biological environmental agents on human health. It supports and conducts basic and targeted research focused on the interaction between people and potentially toxic agents in the environment.

## NIHAA Update

*The NIHAA Update welcomes letters and news from readers. We wish not only to bring alumni news about NIH, but also to serve as a means for reporting information about alumni—their concerns, information on recent appointments, honors, books published and other developments of interest to their colleagues. If you have news about yourself or about other alumni, or comments on and suggestions for the NIHAA Update, please drop a note to the editor. We reserve the right to edit materials.*

### Editor's Note

*The NIHAA Update, is the newsletter of the NIH Alumni Association. The NIHAA office is at 9101 Old Georgetown Rd., Bethesda, MD 20814, (301) 530-0567.*

**Editor: Harriet R. Greenwald**

### NIHAA Newsletter Editorial Advisory Committee

*Richard McManus, Chairman  
Bobbi P. Bennett  
Linda J. Brown  
Sheldon G. Cohen  
Peter G. Condliffe  
Michael M. Gottesman  
Harriet R. Greenwald  
Victoria Harden  
Joe R. Held  
Harvey Klein  
Robert G. Martin  
Abner Louis Notkins  
Lois A. Salzman  
Storm Whaley*

### NIHAA Newsletter Board of Contributing Editors

*Giorgio Bernardi  
H. Franklin Bunn  
Bernard D. Davis  
Roger O. Egeberg  
Henryk Eisenberg  
Donald S. Fredrickson  
Lars A. Hanson  
Walter W. Holland  
George Klein  
Richard M. Krause  
Robert Q. Marston  
Carlos Monge  
Roger Monier  
Seymour Perry  
Albert B. Sabin  
Michael Sela*



**NIHAA Forum****Lessons from the Past:  
The Pied Pipers of  
Piltdown***By Dr. Robert G. Martin*

Accounts of the fraud case associated with Rockefeller President Dr. David Baltimore, so much in the news of late, have focused on the personalities of Baltimore, his associate, Dr. Theresa Imanishi-Kari and whistleblower Dr. Margot O'Toole. But the real villain is the system — how scientific research is conducted, how data are selected for publication, how they are popularized and how in the minds of scientists and non-scientists alike they are transmogrified into dogma.

It may not be generally appreciated, but since 1987 at least five other articles besides the one Baltimore coauthored have been retracted from the scientific journal *Cell*. Furthermore, the journal *Nature*, whose editor, John Maddox, commented on Dr. Baltimore's hubris in the Week in Review section of the *New York Times* (Mar. 30) has had its share of retractions. Why?

The answer requires the luxury of distancing the debate from the current scene. One of the most celebrated cases of "fraud" in the history of science occurred nearly 80 years ago. Well over 200 books and articles have been published on "Piltdown man," that phantasm reconstructed from the jaw of an orangutan and the cranium of modern man. It is clear to us today that the bones in question cannot possibly date from the pliocene (pre ice-age) or even the early pleistocene (ice age). But much of the chemical and physical data "proving" this are unconvincing and even internally inconsistent.

Mr. Charles Dawson, an amateur archaeologist and geologist elected to membership of the British "Geological Society" at the early age of 21 for a series of important finds, announced the discovery of a number of fossils in a gravel pit in Piltdown, England in 1912. Among the fauna were parts of a cranium and jaw that Dawson took to Arthur Smith Woodward (later knighted for his work in paleontology), the keeper of fossils for the British Museum.

In announcing the finds, Smith Woodward also presented a model skull he had reconstructed from the remains. While Arthur Keith (also later knighted for his work) and others disputed details of the model and suggested it was that of a young female, few English scientists questioned the assumption that the jaw and cranium were derived from the same animal. Why were they so undiscerning, particularly in view of the fact that a number of paleontologists from France and the United States were vehement in their criticisms?

National pride seems to have been a major factor. Charles Darwin and Alfred Russel Wallace had proclaimed the theory of evolution and now the missing link between ape and man was discovered in the Home Counties and by Englishmen. To the man in the street, the existence of the Piltdown remains became almost as much a part of British history as Queen Victoria herself.

(Lest Americans and Frenchmen feel that patriotism could never influence their scientific thinking, let's remember that it required the intervention of President Ronald Reagan and Premiere Francois Mitterand to resolve the dispute between Robert Gallo and Luc Montagnier as to the discovery of HIV. We might also recall that the scientific value of landing a man on the moon was minimal.)

The excavations at Piltdown constituted a scientific discovery that no newspaper editor could, or should have rejected. It was spectacular, it appeared to verify established theory and it carried the imprimatur of recognized authority. But scientific journals have an obligation to be more critical. Their articles carry the implication of scientific review and approval. In this regard, the journals announcing the Piltdown finds were wanting.

Indeed, speculation was poorly differentiated from fact and time and further discoveries proved unkind to poor Ms. Piltdown. First came Raymond Dart's discovery of *Australopithecus africanus* and its multiple confirmations by Louis Leakey. Then an Englishman, Alvin Marston, discovered a Neanderthal-like skull at Swanscombe that seemed to pre-date Piltdown even though it was clearly more advanced. But Marston was a mere dentist so serious paleontologists paid little attention to his criticisms. Still, no independent example of a Piltdown-like fossil was discovered and further excavations of the original site yielded not a single artifact.

Then in 1953 James Weiner, a South African physiologist, became involved in the case. At age 28 he was a Reader at Oxford (a non-tenured position) in Le Gros Clark's anatomy department. His bibliography at that time contained only a few studies on the physiology of perspiration and a study of air circulation in British air raid shelters. Disturbed by the results of some chemical analyses performed on the Piltdown remains by Kenneth Oakley, Weiner decided to reexamine the Piltdown discovery.

Or did he? Reading Weiner's own account of his investigation makes it clear that from the start he was biased towards the view that the Piltdown skull was not merely a mistake, but a fraud.

(See *Piltdown* p. 4)



*Pitldown* (continued from p. 3)

Without restating the voluminous circumstantial evidence offered by Weiner and subsequently by others in support of the fraud theory, what new hard facts were uncovered? Amazingly, there were only four pieces of information that justified that label. The first were chemical analyses revealing that the fluoride content of the cranium was consistent with its being late pleistocene at the earliest, while that of the jaw suggests it was modern. These conclusions were confirmed by organic nitrogen analyses. Next, there was the observation that on boring a sample from the canine for chemical analysis it appeared that the coloration of the tooth was entirely superficial. And finally, there was microscopic evidence of artificial abrasion of the molars and canine — the claim by Le Gros Clark that file markings could be identified. There were of course additional questions of sulfate content, etc., but all of these were subject to nonincriminatory interpretations as well.

How hard was this data? In 1959, deVries and Oakley performed further fluoride and nitrogen analyses and in addition carbon-dated the cranium and jaw. Again the fluoride and nitrogen data suggested that the cranium might be late pleistocene but the jaw was modern. Yet the carbon-dating suggested an age of  $620 \pm 100$  years for the cranium and  $500 \pm 100$  years for the jaw, i.e., the jaw and cranium are contemporary and both are modern. Nonetheless, the discussion of the deVries and Oakley paper implies that the carbon-dating data confirm that the cranium is older than the jaw. (Elementary statistical analysis of such data indicates that approximately 30% of the time the jaw would be older than the cranium.) So the age of the fossils remains unclear and none of this confirms fraud.

The conclusion reached by Weiner concerning the coloration of the tooth is best summarized in his own words. It was, he asserted, "in all probability the

well-known paint—Vandyke brown. *It might have been argued that bituminous earth could produce a natural incrustation were it not known that bituminous matter is entirely out of place in a highly oxidized gravel.* [italics added]" In other words, Weiner was making an educated guess, but only a guess. Nonetheless, 14 pages later in his book Weiner's guess turns into, "The manifestly fraudulent elements in the man-ape combination called *Eoanthropus dawsoni* are the filed down molars and canine, the Vandyke brown staining of the latter and the iron-coloration of the jaw." (The argument concerning the coloration of the jaw disappears if the jaw and cranium are of nearly the same age.)

The suggestion that file markings are apparent on the molars is certainly damning. But I could find no evidence that forensic experts have confirmed this observation. Perhaps even that incriminating evidence remains unproven.

Weiner carried out additional extensive historical (as opposed to scientific) research in an attempt to confirm his suspicion that fraud had been committed. But would any of his accusations against Charles Dawson stand up in a court of law? Even Weiner admitted that everyone who was still living in 1953 who had known Dawson attested to his integrity.

Weiner's accusation that Pitldown was a fraud was another story that no newspaper editor could reject. Yet his data no more justified his conclusion than did Dawson and Smith Woodward's. And again, editors of the scientific journals seemed more preoccupied with increasing the circulation of their journals than with critical evaluation.

Books and articles speculating on the conspiracy theory and claiming one or another new co-conspirator have thrived since Weiner's announcement. But many of these, including that by Stephen J. Gould, focus on the personalities of the people involved without scrutinizing the scientific information. To Weiner's

credit, he soon dropped the subject of Pitldown and went on to establish himself in physiology.

What can we learn from Pitldown that is applicable to the current situation? I believe there are a number of lessons for both scientists and non-scientists alike.

First and foremost is that scientific data cannot be judged from afar. Painful and time consuming as they may be to accumulate and analyze, details are the substance of science. Great theories are no more valid than the minutiae on which they are based. It is therefore difficult to believe that scientists who conduct their research through hordes of students and postdoctoral fellows can be doing their job adequately. This in turn may explain why so many retractions and recent allegations of fraud (and theft) are associated with large laboratories.

Corollary to this, the increasing tendency to publish scientific articles on the basis of their sex appeal is stupid and dangerous. And journal editors hawking their wares in an effort to increase circulation are as guilty of promoting fraud as anyone. Inadequate review is nothing new to science but it invites those who would cheat. Furthermore, the reviewing process must not be influenced by irrelevancies like national pride, the spectacular nature of the conclusions, or the reputation of the authors.

Of course, scientists are driven by the same passions for recognition and advancement as are lawyers and politicians. But unlike those fields, science possesses an objective standard and a unique methodology. And despite what might be called scientific deconstructionism, there are truths that can be established beyond reasonable doubt.

While it may be amusing to ponder "facts" that can be neither confirmed nor denied, speculations must not be confused with conclusions. It is essential for scientists to convey to non-scientists that the response "It is not known" is neither a



cop-out nor an invitation for parasitologists to step in, but a firm assertion of the current state of knowledge.

Finally, while there is no intent to draw parallels between Dawson and Weiner on the one hand and Baltimore and O'Toole on the other, it should not be forgotten that the National Institutes of Health report condemning Dr. Theresa Imanishi-Kari was prepared without hearing her defense. And while many of my scientific colleagues may denigrate the legal profession, everyone in this case might do well to remember that the concept of due process has a venerable history.

*Dr. Martin is chief of the microbial genetics section in the Laboratory of Molecular Biology, NIDDK.*



Dr. Saul Rosen (l), acting Clinical Center director, and Dr. Harvey Klein, chief of the Department of Transfusion Medicine, dedicated the new state-of-the-art facilities on Apr. 8 by planting a red maple tree. Preceding the tree-planting ceremony, former blood bank directors talked about the bank's development over the years during a program in Lipsett Amphitheater.

### *Symposium (continued from p. 1)*

principal guidelines. We want to honor individuals whose early postdoctoral experience had been in the Intramural Division of the NHLBI, and whose accomplishments had been significant after leaving this institute. Not only is this appropriate for an alumni celebration, but it also fits well with the NIH Research Festival '91. NIH Research Festival is principally an activity of, by and for the present NIH postdoctoral community. What better way to begin than with a symposium honoring some of their predecessors. Also, we decided that the symposium should be broadly based scientifically so as to engage the interest of the maximum number of scientists at NIH.



Dr. Joseph L. Goldstein is the recipient of the NIH 1991 Distinguished Alumni Award.

We had no trouble identifying former NHLBI postdoctoral fellows whose achievements as alumni merited recognition and whose current research would contribute to an outstanding symposium of broad interest to the present intramural community. The problem was in narrowing the choice. In honoring Joseph Goldstein as the alumnus of the year, and with William Catterall, Alfred Gilman, Ronald Kaback, Philip Leder and Philip

Majerus as the major speakers, we are confident that we have met our goals.

We hope that many alumni will return to the Bethesda campus, attend the NHLBI symposium, join us in the reception on Sunday evening, Sept. 22, in honor of the speakers, and if possible, stay to participate in all the activities that follow.

## **Festival Schedule Announced**

NIH Research Festival '91 will be held in conjunction with the National Heart, Lung, and Blood Institute's Alumni Day activities on Monday, Sept. 23 and Tuesday, Sept. 24.

The Research Festival will officially begin in the Clinical Center's Masur Auditorium at 3:15 p.m. on Sept. 23 with opening remarks by NIH director Dr. Bernadine Healy. Her address will be followed immediately by the opening symposium entitled "New Molecular Approaches to Disease Prevention and Therapy." Three simultaneous symposia will be presented the next afternoon, Sept. 24, beginning at 3:30 p.m.: "Cellular Proliferation," "Molecular Developmental Biology," and "Molecular Pathogenesis of Infectious Disease."

More than 500 posters highlighting current NIH research will be presented early in the afternoon of Sept. 23, the evening of the 23rd and again during the afternoon of Sept. 24. In previous years, only two poster sessions have been scheduled; however, due to the high number and quality of poster submissions this year, a third poster session has been added. Posters will be displayed in the Research Festival tents that will be set up in parking lot 10-D southwest of the Clinical Center.

Thirty-three interactive workshops featuring NIH scientists will be held from 8:30-11:00 a.m. and again from 1:00-

*(See Festival p. 6)*



*Festival (continued from p. 5)*

3:30 p.m. on Sept. 24. These will be located throughout the NIH campus.

The evening of Tuesday, Sept. 24 will be set aside for a picnic. Free tickets may be picked up on campus. The final program and scheduling information with details will be available in late August.

The Research Festival tents will be used on Thursday and Friday, Sept. 26 and 27, for an exhibit of scientific research equipment from more than 300 companies serving the NIH community, sponsored by the Technical Sales Association.

The Research Festival was started 6 years ago by Dr. Abner Notkins, director of intramural research, NIDR. Efforts by Dr. Notkins and subsequent chairpersons, Dr. J. Edward Rall, former NIH deputy director for intramural research, and the NIH Special Projects Office have made the NIH Research Festival a great suc-



**Dr. Steven Paul of NIMH is the chairman of the organizing committee for NIH Research Festival '91.**

cess. Dr. Steven Paul, director of NIMH's Intramural Research Program and this year's chair calls it "a welcome and much anticipated yearly event." He went on to say, "As in past years, we continue to strive to include both our most seasoned and renowned scientists as

**Schedule of Events – Research Festival '91**

**Monday, Sept. 23, 1991**

- 8:30 a.m.-12:00 NIH Distinguished Alumni Symposium in honor of Dr. Joseph L. Goldstein, sponsored by NIH and NHLBI  
Opening Remarks and Award Presentation (Dr. Claude Lenfant)  
Masur Auditorium
- 12:00-2:00 p.m. Poster Session I (Festival tents in parking lot 10-D, southwest of Bldg. 10).
- 3:15-3:30 p.m. Opening Remarks (Dr. Bernadine Healy)
- 3:30-5:30 p.m. Symposia I: New Molecular Approaches to Disease Prevention and Therapy  
Masur Auditorium
- 5:30-7:30 p.m. Poster Session II  
Festival Tents

**Tuesday, Sept. 24, 1991**

- 8:30-11:00 a.m. Workshops 1-16
- 11:00 a.m.-1:00 p.m. Poster Session III  
Festival Tents
- 1:00-3:30 p.m. Workshops 17-33
- 3:30-5:30 p.m. Symposia II, III and IV:  
Cellular Proliferation  
Masur Auditorium  
Molecular Developmental Biology  
Lipsett Amphitheater  
Molecular Pathogenesis of Infectious Disease  
Wilson Hall
- 5:30-8:00 p.m. Picnic and music near Festival Tents

Programs with complete listing of symposia, posters and workshop titles and locations will be available at the Visitor Information Center in Bldg. 10 and in 31A. Lunches will be sold near the Research Festival tents. Shuttle bus service will be available on a frequent and regular basis throughout the NIH reservation during the festival. Parking spaces in the 4I-B lot will be available, but limited in number. Registration is not required for any of the events except the picnic dinner. Free tickets may be picked up on campus. For more information call the NIH Visitor Information Center at (301) 496-1776.

well as junior postdoctoral fellows.

"The 1991 NIH Research Festival program, is, in my opinion, one of the strongest scientifically and will combine

the best of intramural NIH research with a stellar group of scientific alumni participating in the NIH Alumni Day activities," said Paul.



## News From and About NIHAA Members

**Dr. Ernest M. Allen**, who served at NIH from 1946 to 1963 and as associate director of NLM from 1973 to 1981, retired after approximately 40 years in grant programs of DHEW, including the time at NIH. He writes: "My tenure at NIH afforded me great pleasure and satisfaction both in the progress made in the grant and fellowship programs and in my association with the marvelous staff." Since retirement he has kept busy visiting family and friends. He lives in Augusta, Ga.

**Dr. Bernard W. Agranoff**, who was a biochemist at NINDS, 1954-1960, and a Fogarty Scholar in 1989, is currently director of the Mental Health Research Institute at the University of Michigan. He was recently elected to the Institute of Medicine of the National Academy of Sciences.

**Dr. Nathaniel I. Berlin**, former director of the Division of Cancer Biology and Diagnosis, NCI, 1956-1975, writes: "After serving 12½ years as the Tenton professor of medicine and director of the Cancer Center of Northwestern University, I became professor emeritus and moved to Miami to become professor of oncology, and deputy director, Sylvester Comprehensive Cancer Center, University of Miami and briefly served as the director and vice-chairman, department of oncology."

**Dr. Edward N. Brandt, Jr.**, former assistant secretary for health, DHHS, and then president of the University of Maryland at Baltimore, is now executive dean of the University of Oklahoma College of Medicine, Oklahoma City, OK. Recently he has been appointed by the board of regents to the Lawrence N. Upjohn chair in medicine. The chair has been established

in memory of the college's founding dean, Dr. Lawrence N. Upjohn. His father and uncle founded the Upjohn Co. and he succeeded his uncle as president of the company in 1930 and became chairman of the board in 1943. The chair has been endowed with \$500,000 from the Upjohn Foundation. Another \$500,000 will be provided by the Oklahoma State Regents matching fund program.

**Dr. Peter G. Condliffe**, retired chief of the Fogarty-Scholars-in-Residence Branch, and now a scientist emeritus in the Laboratory of Cellular and Developmental Biology, NIDDK, last year spent 6 weeks in Japan exploring postdoctoral



During his visit to Japan last winter Dr. Peter Condliffe (l) met with Professor Setsuro Ebashi, president, National Research Center, Okazaki, Japan, and former Fogarty scholar-in-residence.

research opportunities for young Americans working in the biomedical sciences. Of the 80 or more scientists he interviewed, a substantial number turned out to be NIH alumni. He is currently preparing a report about his visit to Japan for the Japanese NIH Centennial Alumni Association.



**Dr. Donald S. Fredrickson**, former NIH director, recently lectured on NIH history—the topic of a book he is preparing—at NLM's Billings Auditorium. Combining scholarship and humor ("NIH's central files in the basement of Bldg. 1 are a fantastic treasure...where NIH's chief cooks have buried their unsuccessful souffles"), his talk focused on the origins of the Clinical Center, the central personalities involved in NIH's growth at mid-century, and NIH's pivotal role in American science.

**Dr. Ronald B. Herberman**, formerly with the Biological Therapeutics Branch of NCI from 1966 to 1985, is now director of the Pittsburgh Cancer Institute, which was recently awarded a \$500,000 unrestricted cancer grant by the Bristol-Myers Squibb Co. In addition, Pennsylvania Gov. Robert P. Casey presented him with the 1991 Governor's Award for Excellence in Science for his work in cancer research and treatment.

**Dr. Irving Kushner**, NMI, 1955-57, writes that he is currently professor of medicine and pathology at Case Western Reserve University and medical director of the MetroHealth Center for Rehabilita-

(See Members p. 8)



*Members (continued from p. 7)*

tion in Cleveland, Ohio. He is "actively involved in studies of the molecular biology and cell biology of the acute phase response."

**Dr. Walter M. Lovenberg**, who was at NIH from 1958 to 1985, and served as head of the section on biochemical pharmacology, Hypertension-Endocrine Branch, NHLBI, is currently president of



the Marion Merrell Dow Research Institute, executive vice president of Marion Merrell Dow and a member of the company's board of directors. He joined the Merrell Dow Research Institute in 1985. He was named to his current position in 1989.

**Dr. John D. Minna**, former chief, NCI-Navy Medical Oncology Branch, Division of Cancer Treatment, NCI, has been named director of the new Harold C. Simmons Cancer Center at the University of Texas Southwestern Medical Center, Dallas. He was also named holder of the Lisa K. Simmons distinguished chair in comprehensive oncology.

**Dr. Laurent F. Miribel**, a visiting fellow in the Laboratory of Genetics, NCI, from 1986 to 1988, writes that: "Since I left NIH in July 1988, I have

been working at Sandoz Pharma Ltd. in research and development as laboratory chief (biotechnology) and today as central monitor (Intl. clinical research, osteoporosis). I will leave the company in September 1991 as I have decided to go for a MBA. My interests lie in the international marketing and project management areas."

**Dr. Donald L. Morton**, who was chief of the tumor immunology section in the Surgery Branch, NCI, from 1960 to 1970, has left his position as director of the Jonsson Comprehensive Cancer Center's surgical oncology division at UCLA to become president and medical director of the new John Wayne Cancer Institute at St. John's Hospital and Health Center, Santa Monica.

**Dr. James A. Pittman, Jr.**, at NCI from 1954 to 1956, and for 18 years dean of the University of Alabama School of Medicine in Birmingham, received the 1990 Abraham Flexner Award for Distinguished Service to Medical Education. Pittman, a lifelong scholar, was honored for his dedication to the entire medical community. He is credited with the unprecedented growth in quality and size of the medical education complex at the University of Alabama School of Medicine over the past two decades. His experience as a leading thyroid specialist, his service in the Endocrine Society, and his presidency of the American Federation for Clinical Research add to his many contributions to medical education.



Dr. Arnold "Scotty" Pratt (l), former DCRT director, is helped by his successor Dr. David Rodbard to unveil his portrait (by NIH artist Al Laoang) in a recent ceremony. DCRT staffers also honored Pratt's 25 years of division leadership by naming a conference room after him and hailing his recent appointment as "scientist emeritus."



**Dr. Jay Shapiro**, deputy and acting director of the Clinical Center, 1978-83, has recently been appointed program director for the General Clinical Research Center, Division of Geriatric Medicine and Gerontology at the Johns Hopkins University School of Medicine. He is also a recipient of NIH research funding for studies in the area of inherited and acquired disorders of skeletal function. He joins the Johns Hopkins faculty from his prior position as chairman of the department of medicine at St. Vincent Hospital in Worcester and professor of medicine at the University of Massachusetts Medical School.

**Dr. Carlo H. Tamburro**, a fellow in hepatic diseases, NIDDK, 1965-68, and now director, Liver Research Center, and professor of medicine and community health at the University of Louisville School of Medicine, made a presentation at the symposium, "The Role of the Laboratory in Environmental Health," on July 24, 1990. His presentation discussed the limitations of traditional clinical chemistry tests in assessing the effects of exposure to toxic substances. His talk also covered the growing use of molecular biology methods in toxicity monitoring.

**Dr. William Tester**, a clinical associate at NCI, 1980-82, writes that he was "recently named associate director, Albert Einstein Cancer Center, Phila., Pa. From 1983-1991, I have been in private practice at Einstein and served as principal investigator of clinical cooperative group protocols. Major interests include combined modality treatment of bladder cancer, treatment of lung cancer, and chemoprevention studies. I am enjoying working under Dr. Martin Cohen. When I came to the NCI in 1980, Dr. Cohen was my first attending on the clinical service."

**Dr. Samuel O. Thier**, clinical associate, NIAMD, 1962-64, president of the



Institute of Medicine of the National Academy of Sciences, has been selected as the sixth president of Brandeis University. He is expected to assume his new post by Oct. 1.

**Dr. P. Roy Vagelos**, senior surgeon and then head of the section of comparative biochemistry, Laboratory of Biochemistry, NHLBI, 1956-66, recently received the 1991 Maxwell Finland Award in Infectious Diseases at a dinner sponsored by the National Foundation for Infectious Diseases. He is currently chairman and chief executive officer of Merck & Co., Inc. He was selected as this year's recipient "for his leadership in biomedical research leading to drugs and other therapeutic agents of direct benefit to mankind, his important influence on national science policy, and for his distinguished contributions to the advancement of knowledge as a teacher and head of one of the nation's outstanding research laboratories."

## The State of the Alumni Association - Two Notes From the Past and Present NIHAA Presidents

### **Dr. Gordon D. Wallace**

My term of office as the first president of NIHAA has come to a close, and I appreciate this opportunity to present my evaluation of the organization's state, and its expectations for the future.

We presently have more than 1,400 members, a newly formed chapter in Birmingham, Alabama, and 12 foreign chapters. We have had several successful social/educational events, including receptions at the Japanese and Italian embassies. Dr. James Wyngaarden, former NIH director, attended the first, and Dr. Bernadine Healy, the new NIH director, attended the second. Last September, there was an Alumni Day symposium honoring Drs. Emil Frei and Emil Freireich during the NIH Research Festival. Our newsletter, the *NIHAA Update*, has been published six times. The NIHAA organizing committee, headed by Dr. Abner Notkins, provided leadership for our early accomplishments.

The board of directors and the executive committee of NIHAA have discussed extensively the objectives and policies of the organization. The consensus is that we continue our current course of activities in support of biomedical research, and expand our efforts as resources allow. For example, we hope to provide more assistance to the NIH Office of Education in recruiting Clinical Research Fellows and Associates, and be of service to those who join NIH. We are initiating a speaker's bureau to provide information to the public on biomedical matters such as the use of animals in research. The NIHAA is an advocate of a strong Intramural Research Program and shall assist it directly when appropriate.

(See *Presidents p. 10*)



*Presidents (continued from p. 9)*

NIHAA is fortunate to have two highly competent and dedicated part-time employees—Harriet Greenwald, who doubles both as editor of *Update* and executive director, and Mary Calley Hartman, our administrative assistant. Currently, we are attempting to recruit another executive officer who will focus on fundraising and membership expansion and allow Greenwald to concentrate on *Update* editorship. NIHAA volunteers have contributed to our progress, especially Dr. James Duff, chairman of the Washington chapter. Dr. John Sherman, NIHAA vice president, has chaired a committee to evaluate our original constitution and bylaws and to confer with legal advisors. A revision of the bylaws was recommended and passed by the board of directors on June 18. Through the efforts of Sherman and Tom Kennedy, several pharmaceutical companies have agreed to donate funds to support the publication of *Update*.

I have greatly appreciated the opportunity to serve as the first president of the NIH Alumni Association and look forward to continued service on the board and executive committee. The NIHAA has evolved into a unique organization that will continue to fulfill the needs of alumni, but also will provide significant support to one of the world's foremost biomedical research institutions.

**Dr. Joe R. Held**

The National Institutes of Health Alumni Association has had a good start. The credit for this goes to the exceptional organization skills of Dr. Abner Notkins and his NIHAA organizing committee, the valuable leadership provided by Dr. Gordon Wallace as the association's first president, the effective staff work of Harriet Greenwald and Mary Calley Hartman, and the dedication and hard work of all those who serve on the board of directors and on various committees.

Our membership has grown steadily.

We have sent out renewal notices; if you have not returned yours, please do so because dues are an important source of our income. The NIHAA newsletter editorial advisory committee, chaired by Richard McManus, has guided the organization in producing an outstanding newsletter, the *NIHAA Update*. We have instituted an annual Alumni Day in conjunction with NIH Research Festival. The membership has enjoyed a number of excellent and informative meetings and pleasant social events.

NIHAA has reached a milestone. We are leaving the initial organizing stages and must continue to build on the base that has been established. There is a great potential for membership, both in terms of individual members and chapters. We must find ways to reach more people and to make it attractive to join NIHAA. In this regard we must keep in mind the diverse reasons for which people join. This will require defining various ways in which we can contribute to NIH and the important activities that it supports throughout the world. We will have to learn from the members, and others whom we hope to serve, how they believe we can be most effective. Using the information gained through this process will be essential to developing a strategic plan that can guide us toward specific goals.

Besides the satisfaction of greater personal interaction with old friends and former colleagues, which attracted many of us to join, the NIHAA also affords us a variety of opportunities to continue contributing to NIH and the biomedical research community in general. For example, the NIHAA is a link in strengthening communications between the NIH intramural programs and the extramural community through its alumni who are now working in universities and other extramural research institutions. This could be beneficial in many ways such as facilitating recruitment and providing more opportunities for young scientists. Another

example might be in relation to information activities. Many alumni could help to explain sensitive scientific issues to the lay public, and communicate knowledge on research accomplishments. They also could highlight the need for continuing resource support to assure continued success in solving disease problems.

NIH is one of the most remarkable and beneficial institutions ever created, and it is a privilege to have an opportunity to continue to be actively involved with it. Seeing what has already been done by a group of devoted NIHAA organizers makes me enthusiastic. I look forward to being a part of the NIHAA team with Dr. John Sherman continuing as vice-president and Cal Baldwin as secretary-treasurer. The collaboration of all the members will be needed to attain our goals. Your suggestions regarding what we are doing, and what you believe we should do, will be especially valuable and welcome.

**NIHAA Board of Directors Approves Changes in Bylaws**

In order to avoid any appearance of conflicts of interest, the NIHAA Board of Directors agreed unanimously to limit voting privileges and the holding of office in the association to alumni members. Associate members (current employees of NIH) will receive all information, and otherwise participate in the affairs of the association. Associate members may not participate in fund raising. The board will establish an NIH Employee Council that will serve as a source of information and advice to the board. Persons wishing a copy of the revised bylaws should call or write NIHAA Office, 9101 Old Georgetown Rd., Bethesda, MD (301) 530-0567.



*Swearing-In (continued from p. 1)*

Healy the first person covered under the new pay reform legislation, which gave the NIH directorship an immediate pay raise.

"Dr. Healy, you bring the inspiration, soul and understanding necessary for building on NIH's already sterling legacy," said Bush, emphasizing the importance of individual effort to the goal of making this country "not only the wealthiest, but the healthiest nation in the world.

"Lives of dedication are exemplified here at NIH in healthcare workers, animal caretakers, grants administrators and support staff," he continued. "There are buildings full of unsung heroes right here."

The ceremony, held before a capacity crowd in Masur Auditorium, in addition to President and Mrs. Bush, Sullivan, DHHS assistant secretary for health Dr. James Mason, and Undersecretary Constance Horner, was attended by Healy's husband, Dr. Floyd Loop, her daughters Bartlett and Marie, and her mother.

"This is the proudest moment of my professional life, made all the more special by the presence of my husband and love of my life, my children and my mom," said Healy, who smiled and intermittently clasped her husband's hand during the ceremony. "I can think of no greater honor than to be named the first woman director of the National Institutes of Health."

Healy said that even as special as the moment was to her, she was not thinking only of herself and her own family during the swearing-in ceremony. She was remembering another woman, a 30-year-old mother of four who had been diagnosed with metastatic breast cancer.

During a recent Capitol Hill visit, Healy had met the woman shortly before the woman was to undergo a last-ditch, difficult treatment to stop the spread of her disease. As Healy was leaving, the

woman, who Healy described as displaying an inner beauty even in the face of the devastating effects of her cancer, took her arm and said, "Dr. Healy, hurry."

"Today, I take that young woman's farewell to me as a direct mandate from the American people," Healy declared. "NIH and the medical community must hurry. Human life is at stake, cures are desperately needed, and those cures are achievable—if we have resolve."

Bush, who praised all NIH'ers for their spirit of commitment, said Healy embodies what author Lewis Thomas meant when he spoke of "the capacity to do something unique, imaginative, useful and altogether right." The president also mentioned that he has asked Congress to increase NIH's 1992 budget to nearly \$9 billion.

"NIH-supported research has produced some of the most important medical advances in this century," he said. "In becoming director, Dr. Healy joins a long and noble tradition."

Bush also recalled his first introduction to Healy's work in 1984 when she worked for 2 years in the White House as deputy director of the Office of Science and Technology Policy. The office's director, Dr. Allan Bromley, Bush's chief science advisor, also attended the swearing-in.

Aside from being the first woman NIH director, Healy has made history in other ways: As Sullivan mentioned, the NIH directorship was the first position the president suggested for the "critical position" category, a recently approved federal pay reform measure that authorizes 800 government positions to be paid at salary levels approaching the Cabinet secretary level—about \$138,000. Healy is the first to hold the position under this new pay agreement, on par with an executive level I.

In addition, the first Black director of an NIH institute—Dr. Kenneth Olden of NIEHS—was the first appointment of Healy's young tenure.



President Bush and Dr. Healy, who worked in the White House science policy office 1984-85 when Bush served as vice-president, share private words during her formal swearing-in ceremony June 24, 1991.

"Dr. Healy is already making an impact," said Sullivan. "I am confident NIH will flourish under her dynamic and conscientious leadership."

A cardiologist by training, she has also introduced a historic new 10-year, \$500 million women's health initiative, the most definitive study of its kind ever undertaken in the United States. The three-pronged, comprehensive initiative will include a large prospective surveillance program, a nationally based community prevention and intervention study and randomized clinical trials investigating cancer, cardiovascular disease and osteoporosis.

"NIH is a national treasure," said Healy. Referring to the constitutional oath administered to her, Healy compared the 13 institutes to the 13 original states that signed the U.S. Constitution. "But we can, we must, continue to be better," she said. "For us there are many wars yet to be won, and each day is our own Operation Bethesda Storm.

"We can only be a strong nation if we are a healthy nation," she said, concluding her address. "To this end we solemnly pledge to improve the health of this nation through science and discovery. And to that young mother and her family, and to every man, woman and child who has ever been touched by the anguish of disease—we fervently pledge to each of you—We will hurry."



## Science Research Updates

### RECOMBINANT GAMMA INTERFERON EFFECTIVE IN CHRONIC GRANULOMATOUS DISEASE

A team of NIAID scientists and others have had dramatic success using recombinant gamma interferon to treat the inherited immune disorder chronic granulomatous disease (CGD). A genetic defect leaves people with CGD vulnerable to certain life-threatening infections. The drug reduced the frequency of serious infections by about 70 percent in patients with CGD, making the interferon twice as effective as antibiotics, the current mainstay of CGD treatment.

The International Chronic Granulomatous Disease Cooperative Study Group, composed of researchers at 13 medical centers worldwide, conducted the study under the sponsorship of Genentech, Inc., of South San Francisco, the biotechnology company that manufactures the drug. Dr. John I Gallin, director of NIAID's Division of Intramural Research, was one of seven principal investigators in the study.

CGD represents a group of closely related diseases caused by a defect in any one of four genes. As a result, phagocytes, the scavenger cells of the immune system, fail to produce the oxygen-rich chemicals needed to kill most fungi and bacteria. Symptoms of the disease include tumor-like masses called granulomas. Before 1970, children born with CGD often didn't live past their 10th birthday. Treatment with antibiotics, introduced in the 1980's, has helped reduce the average interval between life-threatening bacterial infections, but a serious infection can still necessitate a long hospital stay and intravenous antibiotics.

The study involved 128 patients whose average age was 15 years old. Half as many patients receiving gamma interferon developed serious infections as did those on placebo. In addition, patients who received the interferon required three times fewer days of hospitalization for the treatment of serious infections than did patients receiving placebo. The most dramatic treatment effects were seen among the 52 patients less than 10 years of age: 81 percent of those receiving interferon were free of serious infec-



CGD patient James Mann, at age 4, plays with his mother at the Clinical Center playground.

tion after a year as compared with 20 percent of those receiving placebo. The therapy was well tolerated and caused no serious side effects.

Patients treated with gamma interferon are expected to lead a nearly normal life, with significantly fewer and shorter hospitalizations required to manage their disease. In addition, gamma interferon may prove useful in other conditions in which immune function is impaired.

### NEW MOLECULAR PLAYER IN LIGHT RESPONSE IDENTIFIED

Collaborating scientists in Seattle, Stanford, and Moscow have identified a new member of the molecular team that ushers the ebb and flow of calcium ions in the process that enables eye cells to respond to light.

In work supported by NEI and NIGMS, grantees have identified a protein they call recoverin, so named because it helps a cell that has been exposed to light recover and be ready to respond to light again.

When a photoreceptor cell in the "dark state" is exposed to light, calcium ion channels in the cell membrane that are open in the dark state close. This reduces calcium levels by stopping the entry, but not the exit, of calcium ions from the cell. To reopen the channels and restore calcium levels, the enzyme guanylate cyclase needs to resynthesize cyclic guanosine monophosphate (cyclic GMP), which keeps the calcium channels open.

The drop in calcium concentration after light exposure frees recoverin from its dark state condition of being bound to calcium. When recoverin is no longer bound to calcium it sets guanylate cyclase in motion and dark state calcium concentration is restored.

Recoverin may have other roles in maintaining the structure and function of photoreceptors, and other investigators have found antibodies to recoverin in persons with cancer-associated retinal degeneration. The discovery of its role in reopening calcium channels adds an important piece to the puzzle depicting the process of photoreceptor response to light.

Grantees Dr. Lubert Stryer at Stanford University School of Medicine, Dr. Kenneth Walsh at the University of Washington School of Medicine, and Dr. James



Hurley at the Howard Hughes Medical Institute, University of Washington School of Medicine, and their colleagues at these institutions and the Moscow State University, reported these findings.

### **GENE FOR HUMAN PROTEIN TRANSFERRED TO RAT LUNG**

The transfer of the gene for a human protein to the lungs of rats suggests a new means of genetically correcting inherited human lung diseases.

A team in NHLBI scientist Dr. Ronald Crystal's laboratory, collaborating with researchers in France, used a disabled adenovirus into which the human gene for the protein alpha1-antitrypsin was inserted to transfer the gene to rat lung cells. Alpha1-antitrypsin normally protects the lung from the protein-digesting enzyme elastase. One reason for interest in alpha1-antitrypsin is that a genetically caused deficiency in the protein results in hereditary emphysema, a chronic lethal lung disease.

Adenoviruses have two assets that make them attractive as vectors for gene transfer into lung tissue. First, most adenoviruses infect the upper respiratory tract (they are one of the viral types that can cause the common cold). Second, unlike retroviruses, the type of vector that has been used in most gene transfer efforts, adenoviruses do not need rapidly dividing cells to work. Retroviruses are not as suitable for working with the lung, because epithelial lung cells divide infrequently if at all.

In *in vitro* tests and in cotton rats, the engineered adenovirus infected lung epithelial cells, which synthesized human alpha1-antitrypsin for at least a week. Future research is needed to determine the safety aspects of using adenoviruses, such as whether they could under any circumstances cause cancer. The scientists also need to identify the best way to administer the virus to ensure its dispersal in the lung and provide a lasting therapeutic effect.

This research has particular promise for two of the most common lethal inherited diseases affecting humans: hereditary emphysema caused by alpha1-antitrypsin deficiency and cystic fibrosis. In both diseases, an inherited defect results in chronic degenerative lung disease. Protein augmentation can be helpful in alpha1-antitrypsin deficiency, but existing treatment for CF is palliative. Correction of the defective genes in the target lung tissue would provide, for CF patients in particular, the first hope that the progressive lung deterioration caused by the disease could be halted.

### **LIVER CANCER MUTATION MAY PINPOINT ONE MECHANISM OF TOXIN-INDUCED CANCER**

Research in geographic areas where liver cancer is common suggests that cancer-causing toxins leave characteristic molecular fingerprints that may help scientists better understand how and by what cancers are set in motion.

Two teams of NCI and NCI-supported researchers studied liver cancer in China and South Africa. Infection with hepatitis B virus and exposure to aflatoxins—produced by fungi that grow on some poorly stored foods such as peanuts—are risk factors for liver cancer in these areas. The researchers examined a putative tumor-suppressor gene designated p53 in which mutations are known to be associated with breast, lung, colon, and bladder tumors. In liver cancer tissue from patients, scientists found that many of the mutations occurring in the p53 gene occurred in or near the same three-base codon of the gene. Moreover, base substitutions at this location were consistent with chemical effects of aflatoxins that have been observed in laboratory tests in previous research.

These results are the first to identify a single mutation-vulnerable hotspot in p53 (in other cancers, mutations have been found scattered throughout the gene).

The results suggest that it may be possible to trace the specific mutagenic effects of carcinogens on genes such as p53. Such information could facilitate testing compounds for carcinogenicity and ultimately lead to ways to interrupt the process.

The two teams reporting these findings were Dr. Curtis Harris and colleagues at NCI and the University of Maryland School of Medicine, collaborating with scientists in China, and NCI-supported scientists Dr. Mehmet Ozturk and colleagues at Massachusetts General Hospital who worked with scientists in South Africa.

### **GENE SWAPPING TECHNIQUES APPLIED TO PARASITE STUDIES**

The targeted insertion of new genetic material into the chromosomes of the parasite that causes sleeping sickness is an example of the diversity of potential applications for new, powerful techniques for swapping or correcting genes.

NIAD-supported scientists Drs. Mary Gwo-Shu Lee and Lex H.T. Van der Ploeg at Columbia University, New York, used homologous recombination to introduce a foreign gene into the protozoan *Trypanosoma brucei*. Homologous recombination uses a naturally occurring process in which strands of genetic material with matching sequences will sometimes exchange adjacent segments. Scientists can tailor the genetic material they want to insert into an organism's genome to increase the likelihood that homologous recombination will occur between the DNA vector, synthesized in the laboratory, and DNA at desired locations in the chromosomes of the organism. Techniques also exist to test whether and where recombination has occurred in order to select only the organisms in which the desired insertion has taken place. The ability to target gene transfers makes it possible for the gene to be inserted in a location where it will be expressed appropriately.

(See Updates p. 14)



*Updates (continued from p. 13)*

In the current study, a gene for resistance to an antibiotic was stably incorporated into a selected location in the parasite's chromosomes. The ability to manipulate genes in these organisms provides a means of studying their biology, and perhaps creating a harmless organism for use in vaccines. Parasitic protozoa cause an array of illnesses—among them, malaria and amoebic dysentery—that are serious health problems worldwide.

**NINDS TRIAL SHOWS THAT SURGERY PREVENTS STROKE**

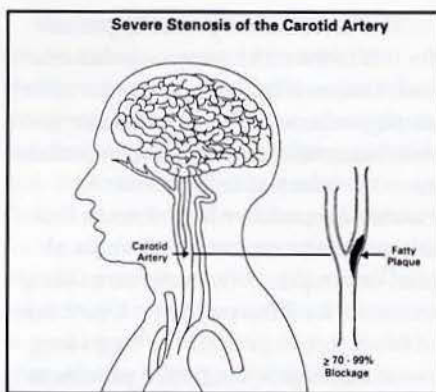
Surgery to remove fatty deposits from the neck's carotid arteries, which supply blood to the brain, prevents stroke in patients with severe, symptomatic carotid blockage, according to early results from a trial funded by NINDS.

The surgery, carotid endarterectomy, is frequently performed, but controversy over its effectiveness and improvements in nonsurgical treatments have triggered a sharp decline in its use in recent years.

According to NINDS scientists, these trial results show that surgery in selected patients, when added to appropriate medical care, cuts stroke risk by two-thirds from that of medical care alone.

As part of the 5-year trial, investigators at 50 centers in the United States and Canada studied 595 patients under 80 years of age with at least 70 percent narrowing of a carotid artery. All enrolled patients were symptomatic, having had either a non-disabling stroke or at least one transient ischemic attack in the preceding 120 days. In a transient ischemic attack, or TIA, stroke-like symptoms resolve within 24 hours.

Investigators provided all patients with the best available medical care, including aspirin or other blood-thinning drugs, dietary counseling and, when indicated, smoking cessation advice and



Fatty deposits can narrow the neck's carotid arteries and trigger formation of blood clots. When these clots choke off the brain's blood supply or break off to block smaller arteries, a stroke results. In carotid endarterectomy, surgeons remove fatty plaque to restore the artery's original contour.

treatment for high blood pressure, high cholesterol and diabetes. Three hundred randomly chosen patients also underwent surgery on the narrowed carotid artery by qualified neurosurgeons or vascular surgeons who had previously demonstrated the ability to perform the surgery with a very low incidence of complications.

After 18 months, 24 percent of medical patients, but only 7 percent of surgical patients, had suffered a stroke on the affected side. Because of the trial findings, NINDS halted the medical treatment arm for severe carotid blockage in February and issued a clinical alert detailing trial results to the medical community.

The investigators will continue to observe the 595 patients with severe carotid narrowing for the full 5 years of the study, and a second portion of the trial will continue to examine the effectiveness of carotid endarterectomy in symptomatic patients with moderate (30 to 69 percent) carotid narrowing. A second NINDS-sponsored trial is underway to test the efficacy of carotid endarterectomy in patients with carotid narrowing who are asymptomatic.

**GENE BLOCKS CANCER SPREAD IN MICE, MAY WORK IN HUMANS**

By inserting a suspected cancer suppressor gene into mouse skin cancer cells, scientists have demonstrated that the gene designated *nm23* can block the formation and spread of certain skin cancers in mice.

Based on evidence from earlier studies that the *nm23* gene could suppress metastasis, Dr. Patricia Steeg and co-workers at NCI, collaborating with scientists at Molecular Oncology, Inc. and Program Resources, Inc., used genetic engineering techniques to insert the *nm23* gene into highly metastatic mouse melanoma cells, which normally express this gene at very low levels. Some of the cells integrated *nm23* into their genetic material and formed clones, or colonies of descendants, that continued to express *nm23* at high levels.

When injected into mice, the clones with added *nm23* produced fewer tumors than clones without the added gene. In addition, the *nm23*-engineered clones produced 90 percent fewer metastases in the mice. The researchers did not see any significant effect of the added *nm23* gene on tumor growth.

Ultimately, gene therapy could be used to treat patients by inserting *nm23* into cancer cells. In the meantime, it should be possible, according to the researchers, to select for drugs that increase expression of *nm23*, or mimic its effect, in cancer cells. This could lead to development of a new class of anti-cancer agents. The researchers plan, along with other experiments, to insert human *nm23* into human breast cancer and ovarian cancer cells to see whether the gene inhibits spread of these cancers in laboratory systems.

*This material was compiled by Charlotte Armstrong, Office of Communications, OD.*



**Meets the Press****Healy Outlines Framework Of Her Directorship***By Rich McManus*

At a recent press briefing, NIH director Dr. Bernadine Healy outlined four initiatives that will distinguish her directorship—nurturing the talent base of science, long-term planning, good financial management and technology transfer—then answered two of the biggest criticisms the public has leveled at NIH recently with solid programs—a women's health initiative and buttressing for a declining research award rate.

Healy took immediate control of two new powers—a discretionary fund and budget transfer authority—to craft what she calls the "James A. Shannon Director's Award." Some 300-500 of these grants, limited to \$50,000 per year, would fund research proposals that just missed the cutoff for funding through regular channels.

"The Shannon awards are expected to provide a stabilization, so that you won't have a scientist suddenly going from a grant that may be funded at the rate of \$250,000 a year to nothing at all," she said. "That \$40,000 or \$50,000 can go a long way toward sustaining (scientists') effort."

Healy cautioned that the grants won't reverse a declining award rate—they won't even be counted in the research project grant success rate—but they will "help tide someone over" and may keep promising investigators from leaving science altogether.

Investigators won't apply for the Shannon grants, which are scheduled to begin in September. Rather, new and competing renewal R01 and R29 grant applications with priority scores just above the cut-off would serve as the basis for nominations by ICD staff.

**Dr. Bernadine Healy**

The women's health initiative (see p. 16), on the other hand, would be a massive undertaking that Healy imagines could one day rival the Framingham heart study in scope—maybe lasting 50-60 years in its surveillance aspect. The \$500 million project, spanning six ICDs, would have implications "for every woman in this room," Healy said.

Reporters pressed Healy for comment on her position regarding research with fetal tissue recovered from abortion. She used the opportunity to explain that the HHS moratorium on such work, in effect since November 1989, is "razor-sharp" in its application, restricting federal scientists only from using tissues recovered from elective abortion for use in human transplantation. Far from abandoning a promising new line of research, NIH continues to pursue fetal tissue studies. Healy said such efforts "will eventually result in transplants that are safer, more targeted, and more readily available."

As to the ban, "NIH will and must abide by the department's ruling," she said. "I have a moral responsibility to abide by that ruling, and I must say, I do it without hesitation."

Healy said that NIH "must find ways to attract and train and retain the best and brightest scientists...and to help them cope with the frustrations of research. Addressing the need of science includes particular outreach for minorities and women."

She quickly assured that these initiatives were not hers alone, but an expansion of efforts that were identified before she took office on Apr. 9.

Healy also called for long-term strategic planning, saying NIH owes the public "assurance that we know how to identify priorities, respond to emerging new scientific challenges, and remain sensitive to changing public need."

She emphasized good financial management and accountability for biomedical research, informing the media that NIH's Cost Management Plan, currently in draft, "is a start in the right direction."

Earlier that day, Healy opened an NIH conference on technology transfer—her fourth major priority—with remarks that emphasized her commitment to narrowing the lag between a clinically useful invention and bedside application.

"NIH has been the heaviest user of CRADAs (cooperative research and development agreements, between federal scientists and industry) of all federal laboratories," she said.

The new cooperation between scientists and private companies has raised questions about potential conflicts of interest, a subject Healy says will be addressed by guidelines currently being drafted.

"The idea (of technology transfer) is not to make scientists wealthy, but to bring cures to patients who need them," she said. "We have to ask ourselves (before entering CRADAs), 'Are we doing this for the right reason?' Ultimately, that answer is what matters most."

Healy fielded a variety of questions from the 48 reporters in attendance, who hailed from television, magazines and newspapers. Topics included:

Relations with Rep. John Dingell's oversight committee: "I have not met him in my current capacity, but I plan to in the next few weeks. I respect his authority and oversight responsibility."

*(See Healy p. 16)*



*Healy (continued from p. 15)*

The current "crisis" in science: "A 'sky is falling' mentality has been around for the past decade. I used to be skeptical (about it). I can remember in the mid-1980's, when I was at the White House (as deputy director of the Office of Science and Technology Policy) that I got about 6,000 letters describing a crisis in science. The letters ranged from all sorts of descriptions of distress including agonizing back pains from writing so many grant applications that were not funded. I must say, things are different now. The numbers speak for themselves."

The "scandal" over indirect costs: "I think we need to take a broader look at what is a systemic issue—it's not subject to a quick fix. This is not a new problem, but it is the first time people have been willing to tackle it." She said top NIH staff are part of an HHS working group on indirect costs. "NIH has scars and bruises from having looked into this issue in the past. The problem has been growing and developing for at least 20 years." More scrutiny and a method of incentives for saving money are potential cures, she said.

Science salaries and recruitment/retention of excellent scientists: "I am delighted that the SBRS (Senior Biomedical Research Service) will enable us to pay higher salaries, and to include Ph.D.s in eligibility for bonuses. I think NIH is approaching a more competitive stance." Healy said she recruited more than 50 scientists to the Cleveland Clinic when she directed the Research Institute there prior to joining NIH. "People don't go into science for the money. They go for the excitement of new knowledge and intellectual pursuit. It is a joyous career."

On fraud in research: "I personally don't think that fraud is that widespread." Healy did acknowledge, however, that the Office of Scientific Integrity "has been busy."

The new director demurred from answering questions about her private life, keeping the focus on her role as director.

Reminded by a reporter that, during Senate confirmation testimony, she insisted that science must make room both for its journeymen and its prodigies, Healy concluded, "Science cannot ultimately be regulated or contained in a box."

## Healy Proposes Historic Women's Health Initiative

NIH director Dr. Bernadine Healy recently introduced a new 10-year, \$500 million women's health initiative that will make NIH host of the largest, most definitive study of its kind ever undertaken in the United States. A three-component effort, the initiative will include a large prospective surveillance program, a nationally based community prevention and intervention study and randomized clinical trials.

"This novel and ambitious study will be based on excellent science, exciting epidemiology and also is responsive to a pressing social need," said Healy, announcing the initiative on Capitol Hill Apr. 19.

Healy said one of the challenges of being named NIH director is to provide the science base to adequately address the unique needs of disease prevention and health promotion in women.

"Research in women's health is one of my personal priorities," said Healy. "NIH can rapidly and effectively apply its scientific and administrative resources to this imperative. NIH will do so."

The comprehensive women's health initiative will be coordinated by NIH's newest component—the Office of Research on Women's Health. Established last September, the office has a mission to improve the prevention, diagnosis and

treatment of illness in women and to enhance research related to diseases and conditions that affect women. Healy's new initiative will be the office's first major project since its establishment.

Six NIH institutes and a center—NCI, NHLBI, NIAMS, NIA, NIDDK, NICHD and NCNR—were named to conduct the research of the multidisciplinary initiative, which will investigate the effects and/or benefits of such lifestyle factors as diet modification and dietary supplements, smoking cessation and physical exercise.

Hormone replacement therapy, an important but so far controversial treatment for the symptoms accompanying menopause, will also be studied. According to Healy, women in today's society can expect to spend one-third of their lifespan in the postmenopausal state.

"The good news is that women live longer," said Healy, noting the society's "awakening" to the fact that women's medical problems differ significantly from men's. "The bad news is that women's quality of life, from a medical and behavioral perspective, is not what it could be."

Cancer, cardiovascular disease and osteoporosis are the three leading causes of death and disability among women in the United States, according to Healy, who also noted that women have greater morbidity and chronic debilitating illness than men and that women seek medical attention more often, take more medicine—especially antidepressants and tranquilizers—and undergo more surgical procedures. "In this era," Healy said, "we understand that while women are equal to men, they are also different from men. That differences may be present, without loss of equal opportunity, must now influence the health and biobehavioral research agenda, and continue to do so for the future."



*Harden (continued from p. 1)*

"Spotted fever is just one NIH story," says Harden, who has been at NIH since 1984. "I could easily list dozens more. We could keep several historians busy writing about the contributions of NIH scientists."

Ironically, time both forms the boundaries of Harden's investigations (her first book was *Inventing the NIH: Federal Biomedical Research Policy 1887-1937*) and circumscribes her efforts to elaborate what goes on within those limits. "If I only had time...." could be the historian's official motto.

Offering additional opportunities for investigation into the history of science are Harden's duties as director of the DeWitt Stetten, Jr. Museum of Medical Research, which was established as part of the NIH centennial observance. "The Stetten Museum has filled a need at NIH to collect, preserve, and exhibit instruments and other artifacts of biomedical research, especially relating to the intramural program," she said.

Documenting the history of AIDS at NIH is yet another project being pursued as time permits by Harden and one of her staff members, Dennis Rodrigues. "Because so much of today's activity is arranged over the telephone instead of by letter, we are trying to capture how the intramural NIH staff responded to AIDS by conducting oral histories. We have done 27 so far, with probably 100 to 200 still to do." The spoken histories will find a home at NLM's History of Medicine Division and in the National Archives.

Combining the oral histories with manuscript and published sources, she hopes to complete a book on the history of NIH intramural AIDS research, especially during the years before HIV was identified. "It will be a marvelous book to write—to detail the collaborations among experts in different institutes, the rise and fall of theories about etiology, the long hours spent by staff at all levels in treat-

ing AIDS patients in the Clinical Center," enthuses Harden.

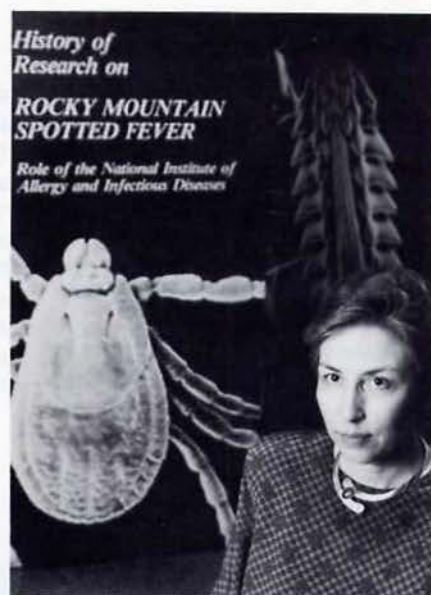
Yet she understands the pitfalls of writing about a subject with so many political overtones. "University-based historians are often highly skeptical of those of us who work for the government—that our work will be uncritical court histories glorifying the agencies," she said. Because of this, she prefers to publish where her work will be peer-reviewed. Long before the book on Rocky Mountain spotted fever (RMSF) was sent to a publisher, she said, she had sought advice on each chapter from many different scientists and historians. "None of the scientific experts ever pressured me to cast the story in a particular light," she said. "They were most generous, however, in providing an excellent scientific critique."

Harden also lauds supervisor Storm Whaley, NIH's associate director for communications. "He is just magnificent. His institutional memory about NIH—of individuals and of sources—has been incredibly valuable to me. And of course, he writes beautifully."

The advisory committee for the Stetten Museum also receives high praise. Comprised of NIH researchers and administrators, the committee "shares its wealth of knowledge about science and NIH—I can't say enough about its contributions," she said.

A native of Marietta, Ga., Harden planned to major in chemistry at Emory University in Atlanta. "In my sophomore year I took my first college history course at the same time I struggled with organic chemistry. I found that I enjoyed the hours in the library much more than the hours in the laboratory."

She trained as a history teacher and then took a master's degree in American history at the University of Florida. From 1968 to 1972 she taught at Huston-Tillotson College in Austin, Tex. Later she returned to her home town and taught high school social studies for 4 years.



This photo of Dr. Victoria A. Harden was taken in front of the NIAID exhibit on Rocky Mountain spotted fever, which is a part of the "Windows into NIH History" series sponsored by the DeWitt Stetten, Jr., Museum of Medical Research. The exhibit includes original bottles of the tick-tissue vaccine, samples of ticks in various stages of their life cycles, a table-top centrifuge, and an entomological microscope used by Dr. Ralph R. Parker.

"After earning extra money by writing curricula guides during the summers," she noted, "I discovered that I had an aptitude for researching and writing and, more importantly, that I really enjoyed it." She decided to return to Emory for her doctorate in history, and chose Professor James Harvey Young, a distinguished medical historian, as her dissertation advisor.

The first half-century of NIH history became her dissertation topic through a serendipitous discovery. "The papers of Charles Holmes Herty, a former president of the American Chemical Society, contained letters from Sen. Joseph E. Ransdell of Louisiana about their joint efforts to create a National Institute of Health."

(See *Historian* p. 18)



*Historian (continued from p. 17)*

Unable to find other sources about this story, she contacted Dr. Wyndham Miles at NLM. "He encouraged me to pursue the topic, because no one else had examined it yet." This study became both her dissertation and, after revision during a postdoctoral year at the Johns Hopkins Institute for the History of Medicine, her first book, *Inventing the NIH*.

As she was completing work on this book, Harden was invited by NIAID to write the history of Rocky Mountain spotted fever. "It was an ideal situation for a historian," she recalls. "For 2 years I did nothing but research, 8 hours a day." As NIH's centennial year approached, Harden began writing the RMSF book and discussing with Dr. DeWitt Stetten, Jr. his vision of a museum at NIH dedicated to medical research. Between helping Stetten launch his museum (NIAID had lent her to Stetten half time), aiding the centennial celebration, and writing about RMSF, she became hooked on the intellectual history of science.

Collaborating with institutes on exhibits for the Stetten Museum also provides an opportunity to point out how quickly the past can disappear. "Often institute representatives volunteer to locate old instruments for exhibit—'Everybody had one of them,' they will tell me. If much time has passed, they will be lucky to locate one!"

Time, the historian's bane and blessing, may not permit Harden to achieve everything on her ambitious agenda. For her part, she would be happy with a humbler legacy: "I want our office to serve the needs of the NIH community, whether that means finding biographical information on a scientist from the 1940's, researching material for an exhibit on an instrument developed in an NIH laboratory, or writing a book on AIDS. That is the value of an in-house history office."

## About the Prize, the Book and Its Subject

The Adams Prize that Harden recently won for her book on RMSF recognizes the book published in the previous year that makes the most significant contribution to the understanding of the history of the federal government.

NIAID and its predecessor laboratories, especially the Rocky Mountain Laboratory (RML) in Hamilton, Mont., have supported research on RMSF since 1902, making it one of the oldest continuing investigations by the federal government. Harden's book is dedicated to the late Dr. John R. Seal, former NIAID deputy director, who envisioned the history, and to Dr. William L. Jellison, a retired RML entomologist who devoted time, effort and personal resources to preserving the history of RMSF.

RMSF was first distinguished from other diseases during the late 19th century, and all of the research on it was conducted during the 20th century. In the 1920's, Drs. Roscoe R. Spencer and Ralph R. Parker of the U.S. Public Health Service developed a vaccine against RMSF made from the bodies of ground-up ticks. Harden's book details the resourcefulness and ingenuity employed in rearing millions of ticks each year to make this vaccine. The RML was built expressly to produce this vaccine.

In the 1930's, another federal scientist, Dr. Herald R. Cox, discovered that the rickettsial organisms that cause RMSF would grow in fertile hens' eggs. This not only revolutionized RMSF vaccine production but also provided a means to prepare the vaccine against epidemic typhus that protected

Allied troops during World War II.

After 1948, when broad-spectrum antibiotics were discovered that cured RMSF, research on the disease dropped off dramatically. During the 1970's, however, the number of cases of RMSF began to rise inexplicably, and NIAID investigators at the RML contributed to several new discoveries about this disease. Dr. Gregory McDonald and his colleagues produced a candidate subunit vaccine that is currently undergoing evaluation. Dr. Willy Burgdorfer and his associates made several contributions, and, in a classic example of scientific serendipity, uncovered the organism that causes Lyme disease while researching RMSF.

"When I began research for this book," Harden said, "I had no idea that the history of RMSF could illuminate the entire 20th century history of infectious disease research so clearly." She also credited the early investigators who saved their correspondence files and Nick Kramis, the RML photographer who labeled and indexed a collection of photographs about RMSF research. "It made my job much easier," she said.

Crediting the author herself in a book review that appeared Mar. 22 in *Science* is Duke University's Robert Korstad: "The prose is lively...Harden wishes her study to be read as a 'romance' about the efforts to diagnose, prevent, and treat spotted fever, and her affection for the determined researchers is evident throughout. But the book has more the feel of a good detective novel...Her excellent study greatly increases our knowledge and understanding..."



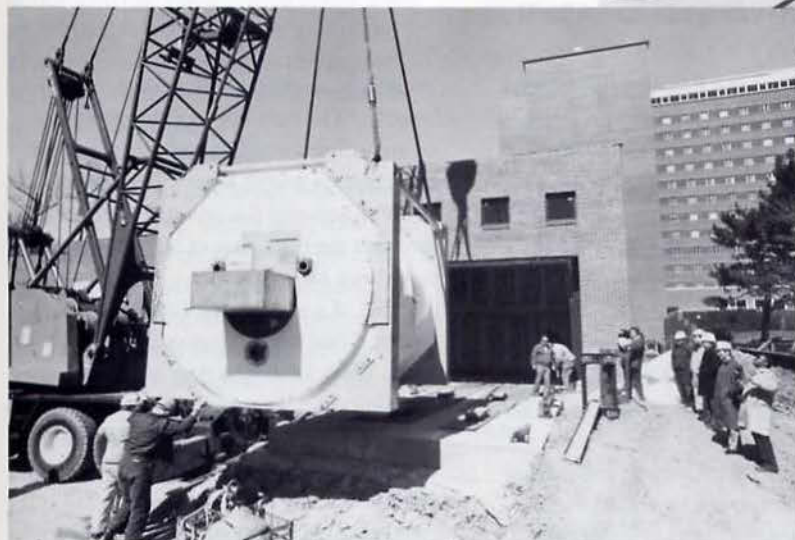
## Physical Changes Around the NIH Campus



The newly constructed Bldg. 6B, the first disease-free animal facility on NIH's campus, recently opened its doors to occupants. The uniquely sterilized structure will house such landlubbers as rabbits, mice, rats, hamsters and guinea pigs as well as such aquatic species as frogs, fish and sea urchins. At the building's open house, Dr. Arthur Levine, scientific director for NICHHD, which is the facility's lead institute, said, "This is not just a facility for the superb care of animals, but a place where scientists will continually discuss what is the right thing to do in terms of using animals for research."



Bldg. 49 dwarfs NIDR's Bldg. 30 (r) and only appears, from this perspective, to be larger than the CC (l). Construction will be complete in fall 1992, according to project officer Steve Hagan of ORS. The south side of the building, shown above, will be the entrance to the facility housing researchers from seven institutes, primarily NICHHD.



A 56-ton magnet, a noninvasive diagnostic tool used in magnetic resonance imaging, was recently transported to NIH from Schenectady, N.Y. Installation of the device into a newly constructed annex of Bldg. 10 required the aid of a crane and several workmen. The magnet is now installed in the In Vitro NMR Research Center annex.



***Staunch Patron of NIH*****Research Bldg. 36 Renamed in Honor of Lowell Weicker***By Rich McManus*

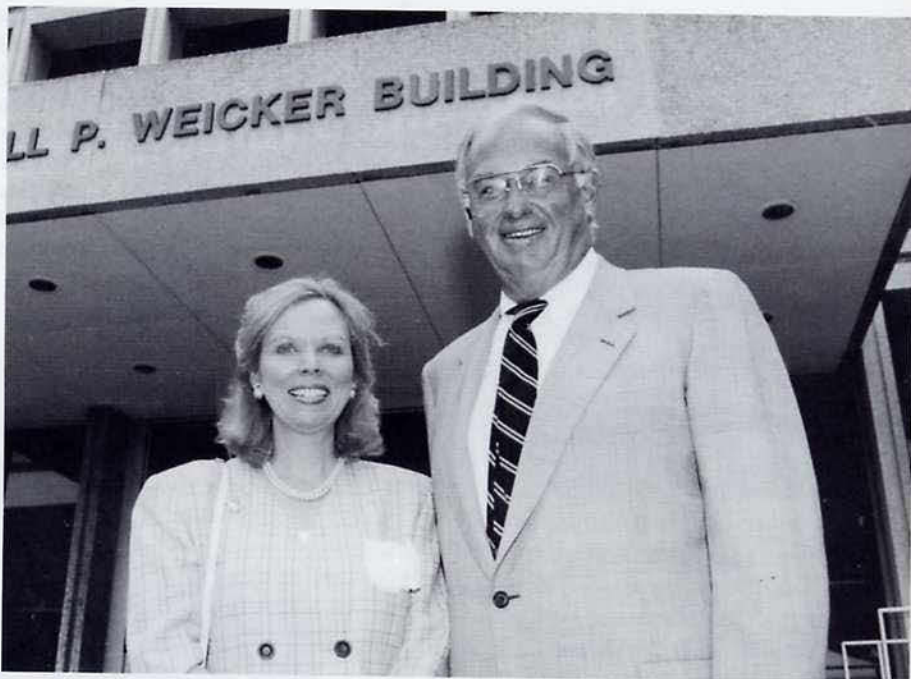
Gov. Lowell P. Weicker, Jr., of Connecticut came to the renaming of NIH's Bldg. 36 in his honor on May 30 with a sober and humble message to America—it's a shame we spend so little on biomedical research.

Carrying no prepared remarks, the 20-year veteran of Congress spoke instead from his heart.

"I doubt many people in this country know about NIH or about this building," he said, downplaying whatever personal grandeur NIH may have hoped to bestow on him. "But this little plot of land is our only hope to relieve death and disease." Though pleased to see his name emblazoned above the entrance by act of Congress, Weicker said that, after the hoopla, he was "just going out in the field to do what I do best—articulate your brilliance, so that health and life become the number one priority of the United States of America."

"It is hard to imagine a stauncher friend and more determined advocate of NIH than Lowell Weicker," said NIH director Dr. Bernadine Healy, who introduced him. "Over the 20 years that he served in the Congress he held to the unyielding conviction that biomedical research was absolutely vital to the future of this nation. And, as any senator can tell you, Senator Weicker was not someone you willingly opposed when he was holding an unyielding conviction."

Weicker's 18-year tenure in the Senate was marked by advocacy for biomedical research. For 4 years, 1983-87, he was chairman of the Labor, Health and Human Services Subcommittee of the Appropriations Committee, in effect the purser for NIH. He blocked spending cuts aimed at biomedical research during the Reagan years and obtained substantial



Standing in front of the former Bldg. 36 at a dedication ceremony on May 30 are NIH director Dr. Bernadine Healy and Gov. Lowell P. Weicker, Jr., of Connecticut, whose 20 years in Congress as a friend of NIH were memorialized. A plaque inside the building honors Weicker's advocacy of biomedical research.

increases in spending for NIH and NIMH. During his chairmanship, NIH funding increased from \$4 billion to \$6.7 billion.

"Nothing like this has ever happened to me in my long political career," said the governor who, together with Healy, pulled a cord unveiling the building's new name.

Redirecting praise from himself to the people who work in NIH labs, many of whom were peering out at the festivities from windows in Bldgs. 35 and 36, Weicker said, "I want you to know how much the nation owes to you (the audience of dignitaries), and to the people who work in this building.

"It must be discouraging to do your work, succeed at it, and get no recognition whatsoever," he said, lamenting the

country's evidently low priority on research. "The best hope of this nation overcoming its health care costs lies on this campus and in what you do here."

Weicker said the country's recent interest in the high cost of health care has long been his concern.

"All of a sudden the country has discovered that health care costs are too high. Well, I thought they were too high last year, and the year before that, and the year before that. We spend \$700 billion on health care every year in this country, both publically and privately, and only 3 percent of that sum goes to research.

"The disgrace is not the high cost of health care. It is the low investment in research—that is the disgrace."

Before he ran successfully for gover-



nor of Connecticut last fall as an Independent, Weicker had been founding president of Research!America, a grassroots organization aimed at increasing public awareness of the importance of biomedical research. His message there was the same as it is today—the key to lowering health care costs lies in boosting funds for basic research.

“The mechanisms are in place to fund biomedical research,” he said. “What it needs now is the funding. I read about the difficulties that the research community has encountered in recent years. What is needed by the nation is an understanding of this whole process.”

Weicker said he got back into politics largely to maintain his advocacy of medical research.

“I think I have a larger role (than governor) to all 50 states,” he said, “to educate them about NIH. As governor, I will continue to hammer away at what has been my life’s work. All the people of this nation should treasure NIH and the work that goes on here.”

Before leaving the podium to a standing ovation from an audience of NIH officials who had congregated under a tent erected outside the Weicker Bldg., the governor said, “Thanks for putting the Weicker name on the greatest endeavor of our government.”

During his brief remarks, Weicker expressed confidence that, in Bernadine Healy, NIH’s mission was “in very good hands.”

In her introduction, Healy had said, “It seems fitting that Congress decided to name this building after someone whose daring and caring is so much at one with NIH’s style and substance. With the same independence and innovation, the same tenacity and vigilance, NIH and Lowell Weicker have been one in pursuing the business of hope.”

The Weicker Bldg., completed in 1968 at a cost of \$13.4 million, comprises 184,217 square feet, “which is just a little larger than the state of Connecticut,” quipped Healy.

## CALENDAR

### SEPTEMBER

An exhibit on midwifery will be on display in the front lobby of the NLM (Bldg. 38, 8600 Rockville Pike) from Sept. 1 to Dec. 31, 1991. The exhibit, prepared in conjunction with the American College of Nurse-Midwives (ACNM), will illustrate important moments in the development of midwifery from the 16th century to the present.

In conjunction with the exhibit, the ACNM and NLM are sponsoring a symposium on the history of midwifery. It will feature presentations by professional historians and midwives on the development of midwifery in this country. The symposium will be held in the Lister Hill Auditorium in Bldg. 38A from 2 to 5:30 p.m. on Friday, Oct. 11. A reception for attendees will follow. For more information about the symposium or the exhibit, contact the History of Medicine Division, NLM, (301) 496-5963.

### OCTOBER AND BEYOND

The Foundation for Advanced Education in the Sciences will present its 1991-1992 Chamber Music Series: The concerts are held on Sundays at 4 p.m. in Masur Auditorium, Bldg. 10. The dates are: Oct. 6, Carol Wincenc and friends; Oct. 20, Aryn Quartet and Lilian Kallir; Nov. 17, Michel D’Alberto; Dec. 8, New World Quartet; Jan. 5, 1992, Pamela Frank; Jan. 19, David Geringas; Feb. 2, Beaux Arts Trio; Feb. 16, Robert Holl; Mar. 15, Ilan Rechtman. For more information about tickets call (301) 496-7976.

“Medicine for the Public,” is a series of seven lectures by NIH physicians on the human body—in health and disease—sponsored by the Clinical Center, NIH. All lectures are at 7 p.m. in Masur

Auditorium. The Fall 1991 schedule is: Oct. 1, “Food Allergy and Intolerances,” Dr. Dean Metcalfe, NIAID; Oct. 8, “Hyperactivity,” Dr. Alan Zemetkin, NIMH; Oct. 15, “Aging: Causes and Consequences,” Dr. George Martin, NIA; Oct. 22, “New Directions in Bone Marrow Transplantation,” Dr. Ronald Gress, NCI; Oct. 29, “Sports and Exercise,” Dr. Steven Gordon, NIAMS; Nov. 12, “Gene Therapy: Medicine of the Future,” Dr. R. Michael Blaese, NCI. For more information, call (301) 496-2563.

The DeWitt Stetten, Jr. Museum of Medical Research will open an exhibit on the Van Slyke manometric apparatus on Friday, Oct. 18 with a seminar in Bldg. 31, Conf. Rm. 8, at 2 p.m. The speakers will be Dr. Rollin Hotchkiss and Dr. Reginald Archibald. For information, contact the museum director, Dr. Victoria Harden, (301) 496-6610.

### NIHAA EVENTS

There will be a reception honoring Dr. Joseph L. Goldstein on Sunday evening, Sept. 22, 1991, from 6 to 7:30 p.m. at the Bethesda Marriott. On Monday, Sept. 23, 1991, from 8:30 a.m. to 12 noon in Masur Auditorium there is the alumni symposium. Details about the program and other Research Festival '91 activities are on pp. 1, 5-6 of *Update*.

A celebration of “Fifty Years in Bethesda,” commemorating NIH’s move from Washington, D.C., to Bethesda, will be held on Saturday, Nov. 23, 1991, from 2 to 6:00 p.m. at the Mary Woodard Lasker Center (the Cloister, Bldg. 60).

For more information about various lectures and events at NIH, call (301) 496-1766. For information about NIHAA call (301) 530-0567.



## NIHAA Holds Party at Italian Embassy

On Tuesday, May 21, the NIH Alumni Association held a successful and enjoyable reception at the Embassy of Italy in Washington, D.C. The party was attended by NIHAA members, guests, embassy personnel, and visiting Italian scientists at NIH.

More than 200 guests were welcomed by Dr. Emanuele Mannarino, science attache, and Dr. Gordon D. Wallace, NIHAA president. Then both Ambassador Rinaldo Petrignani and Dr. Bernadine Healy, NIH director, spoke to the audience gathered in the main room of the chancery.

"We are particularly pleased that our visiting scientists from Italy are the honored guests tonight," said Healy. "I speak for the NIH community in saying that the presence of our Italian colleagues adds immeasurably to the vigor and depth of our intramural research activities."

The reception was supported by a contribution from the Sigma-Tau Foundation, a philanthropic organization dedicated to advancing dialogue and understanding between scientific and humanistic cultures.

Among those attending the reception were (from l) Dr. Sheldon Cohen, NIAID; Constance Dillman, Dr. John Utz, Georgetown University Hospital; Caroline Davis and Dorothy Utz.



Dr. Bernadine Healy, NIH director, talked with Ambassador Rinaldo Petrignani of Italy.



The courtyard of the Italian Embassy provided a beautiful setting for the party.



Standing together at the party were (from l) Dr. Ugo Rysamonti, NIDR, now in South Africa, Dr. Francesco Merelli, NICHD, and Dr. Pietro Pietrini, NIA—all visiting scientists from Italy.





Attending were (from l) Dr. Abner Notkins, director of intramural research, NIDR; Dr. Peter Greenwald, director of NCI's Division of Cancer Prevention and Control; and Dr. James Duff, chairman, NIHAA Washington chapter and retired NCI scientist.



Dr. Michele Carbone (l), visiting scientist at NICHD, talked with Dr. Harold "Red" Stewart, scientist emeritus at NCI.



Enjoying the Italian food were Dr. Philip Chen (l), NIH associate director for intramural research, and Dr. Vaman S. Waravdekar, retired NCI scientist.



Eleanor Condliffe (l) visited with Dr. Seymour Wollman, NCI scientist emeritus, and his wife Cecelia.



Gathering at the Italian embassy reception were (from l) Dr. S. Aloj, University of Naples, presently with Walter Reed Hospital; Ambassador Petrianni; Giulia Celli, technical assistant, Dr. Francesca Lancillotti, guest researcher, and Dr. Luigi DeLuca—all from the Laboratory of Cellular Carcinogenesis and Tumor Promotion, NCI.



At the end of the reception Dr. Giorgio Bartolomucci (l), executive director, Sigma-Tau Foundation, spoke to the group, especially the visiting Italian scientists at NIH. Dr. Emanuele Mannarino, science attache at the embassy, was standing in the background.



## Aging of Individuals and Of Society: Concepts, Challenges and Priorities

By Dr. Albert B. Sabin

*Editor's note: This is excerpted from an essay given by Dr. Sabin as the Florence Mahoney Lecture on Aging, National Institute on Aging, NIH, Oct. 3, 1990.*

As a research scientist and physician I have spent my life acquiring new knowledge needed for the understanding and prevention of diseases that brought misery and premature death to many who have not yet begun to live. My special concern now for older persons is for all those who cannot help themselves, that society will do everything possible first of all to eliminate the misery that is especially a part of the last years of life—the misery that comes not only from disabling chronic disease, but also from poverty, loneliness and limited resources for enjoying life—and for dying with dignity, i.e., without pain and quickly, without unnecessary prolongation by modern technology—the best being to go to sleep and not wake up or to die suddenly while reading a truly interesting book or listening to soul-stirring music. It has happened to some of my friends—why not to me and to all? Thus, I have often said that a most important goal for biomedical and sociologic research in the present era should be to make it possible for everyone to die in good health at the end of a reasonable life span with mental and physical capacities reasonably unimpaired.

### Vicissitudes of Becoming Old

In a 1985 lecture to the American Gerontological Society, Dr. T. Franklin Williams, director of the National Institute on Aging, said that he banished the



Dr. Albert B. Sabin

following words from his own usage: "senility" and "senile dementia" because they carry the mistaken implication of inevitable failing in old age; and the words "the elderly" and the "aged" because they mistakenly imply that older people can be lumped together as a single group. Instead he speaks of "older persons" (Williams, T. F., *The Gerontologist*, 26: 345-349, 1986). Dr. Williams was undoubtedly influenced by the excellent, long-standing Baltimore longitudinal study of normal human aging (*Older and Wiser*, NIH Pub. No. 89-2797, September 1989), which has been called "the original myth buster." Here are some of the "busted myths":

1. Cardiac output invariably declines with age—it doesn't.
2. Personality changes with age—on the contrary the study showed that human personality remains remarkably stable. I found that Plato, in the 4th century B.C., reached a similar conclusion when he said: "He who is of a calm and happy nature will hardly feel the pressure of age but to him who is of an opposite disposition youth and age are equally a burden" (*The Republic, Book I, 329-D*).

3. Aging is a disease—it is not; individuals age differently.

4. The nervous system degenerates greatly with age—it does not in the absence of disease. The changes that do occur with age do so gradually, and sudden physical or psychological changes are most likely due to disease and not to normal aging.

5. Hypochondria is associated with age—it isn't; it is associated with personality.

### Perspectives on Longevity

At the present time about 75 percent of the deaths in older persons in the U.S. are caused by heart disease, cancer, and stroke. It has been estimated that eliminating deaths from heart disease would add some 7 years to life expectancy at age 65. If cancer were entirely eliminated as a cause of death, life expectation at age 65 would be extended by 2 years, and more persons would then die of heart disease and other causes. For me, it is the misery caused in older persons by chronic heart disease, cancer and stroke and not death that should form the basis for the ongoing search for greater understanding and ultimate elimination of these diseases. And for me by far the greatest tragedy among older persons is the loss of normal brain function—Alzheimer's disease and other irreversible dementias. When you irreversibly lose your brain you stop being a person and life as a human being stops.

### Challenges of Aging to Society

There can be no question of the debt that a civilized society owes to its elderly population—it is the work of their hands and brains that has made our present way of life possible. However, it seems to me important to realize that the vast majority of the older population in the U.S. is self-sufficient and does not need public support. Accordingly, public and social re-



sponsibility should, in my view, be limited to the many millions who cannot help themselves. Although many approaches are being discussed to limit the economic burden of helping the many elderly helpless millions, I believe that future public health care will have to be freed from the professional fee for service, the rising costs of high-technology medicine, and the huge hospital costs. There should be a universal type of pre-paid health insurance from birth to death such as is already being supplied by our best health maintenance organizations.

### Death with Dignity

I have already said that I hope that the current prerogative of the few who die in their sleep or suddenly at the end of a full life while still in reasonably good mental and physical health—as if by the running down of the “biological clock”—may become the privilege of all. But until that time comes we should not artificially prolong life after it has irreversibly reached its end, just because we have learned how to do it. Misery and suffering should not be allowed to plague the last years of our life, and society should develop safeguards for euthanasia. Human dignity requires not only a good birth but also a good death.

### Mission of the NIA

In 1974, the National Institute on Aging was established “to promote better health and more effective functioning of older Americans.” In its 1987-1988 report, the Advisory Council of this institute, while supporting the biological, clinical, epidemiological, behavioral, social and economic research on aging, said that “the special mission of NIH should be to understand the fundamental mechanisms of aging.” I think that the work the institute is now sponsoring on

Alzheimer’s disease, which by 1990 estimates is the cause of devastating misery for about 4 million Americans age 65 and older, and even more so for their families, at an estimated cost of about \$88 billion a year, should among the other disorders that make the last years of our life miserable receive the greatest emphasis. I believe Alzheimer’s disease is by far more important than AIDS as a national problem and should have much more public money allotted to it for research and care. In a June 25, 1990, *Time* magazine essay, Charles Krauthammer said: “Except for cancer, AIDS now receives more government research money than any other illness in America. AIDS is not everyone’s problem. . . (but) gets \$1.2 billion to \$1.3 billion. Heart disease, for example, receives about half as much, \$700 million. The AIDS research allocation is not only huge, it is hugely disproportionate.” I agree, and believe that Alzheimer’s disease should receive more government support than AIDS. When Albert Einstein was still writing in German he called our age: “Eine Zeit vollkommener Mittel und verworrener Ziel”, i.e., an age of perfected methods and confused aims.

*Dr. Sabin closed with stanza II from Swinburne’s poem, “The Garden of Proserpine”:*

“From too much love of living,  
From hope and fear set free,  
We thank with brief thanksgiving  
Whatever gods may be  
That no life lives forever;  
That dead men rise up never;  
That even the weariest river  
Winds somewhere safe to sea.”

*Dr. Sabin is a senior medical science advisor at the Fogarty International Center and a member of the NIHAA Board of Contributing Editors.*

## UAB Organizes Local NIHAA Chapter

At the invitation of Dean James A. Pittman, Jr. (NCI 1954-56), Drs. J. Edward Rall, former NIH deputy director for intramural research, and Thomas Kennedy, Jr., NIHAA, flew down to Birmingham, Alabama, on Apr. 5 to explore the possibility of forming a local chapter of the NIH Alumni Association. The visitors were given a royal reception. For lunch, Pittman assembled at the Center for Advanced Medical Studies Kenneth Roozen, Jim Lewis, Jay McDonald, Simon Gelman, George Barber, Jimmy O’Neill, Max Cooper, John Peters, Bill Scott, Will Deal, Bill Brinkley, Dick Marchase, Stephen Harvey and Antonietta Hyche. The splendid cuisine was outdone only by the camaraderie. After lunch, Rall and Kennedy had the opportunity to chat with Charles Buggs, Max Cooper, Claude Bennett and Bruce Greene about their current research activities.

The formal organizational program began in the late afternoon in the Margeret Cameron Spain Auditorium, where about 100 alumni had gathered. Rall talked about “NIH, Present, Past and Future.” Kennedy followed with a pitch about what an alumni association might be uniquely able to accomplish for the NIH in particular and for the biomedical research community in general. Pittman thereupon appointed the following members of the UAB faculty to serve as an alumni association organizing committee: Dr. David G. Warnock, (NHLBI 1973-75), chairman, Dr. Charles O. Elson, III, (NCI 1976-80), Dr. William J. Koopman, (NIDR 1975-78), and Dr. J. Claude Bennett, (NIAMD 1962-64).

The activities related to the NIHAA were held in conjunction with UAB’s an-

(See Chapter p. 31)



## NIH Notes for March— June 1991

### HONORS AND AWARDS

**Valerie Barbour**, NEI personnel officer since 1987, was selected 1991 recipient of the Senior Professional Award presented by the Montgomery County Chapter of the International Personnel Management Association for her "dedicated and outstanding contributions in the personnel management field, and her continual efforts to initiate total quality management at the NEI." She has worked at NIH for 23 years, 15 of which have been in the personnel management field ... **Dr. John E. Bennett**, head of the clinical mycology section in the Laboratory of Clinical Investigation, NIAID, was elected a Master in the American College of Physicians for his distinguished contributions to the medical profession ... **Glen Bennett**, coordinator of NHLBI's Smoking Education Program, received the Army's Outstanding Civilian Service Medal for developing and teaching a series of smoking cessation training programs for Army physicians ... **Dr. Roscoe O. Brady**, chief of the Developmental and Metabolic Neurology Branch, NINDS, was recently awarded the Jessie Stevenson Kovalenko Medal by the National Academy of Sciences for his "outstanding and revolutionary work" in research on human sphingolipid storage disorders ... **Dr. Samuel Broder**, NCI director, was honored by the Institute for Advanced Studies in Immunology and Aging with its 1991 Lifetime Science Award. He was cited for his "pioneering efforts which have led to the first effective antiviral drugs to treat AIDS." He also received from the National Coalition of Hispanic Health and Human Services Organization its National Hispanic Award because he "has consistently emphasized the importance of reaching out and tailoring cancer prevention and control efforts" to Hispanics and other populations ... **Dr. Maurice B. Burg**, chief of the Laboratory of Kidney and Electrolyte Metabolism, NHLBI, has been elected to membership in the National Academy of Sciences ... **Dr. Willy Burgdorfer** was recently presented with the Walter Reed Medal of the American Society of Tropical Medicine and Hygiene by Dr. John David at the 39th annual meeting of the society. Burgdorfer, scientist emeritus at NIAID's Rocky Mountain Laboratories in Hamilton, Mont., received the



**Dr. Willy Burgdorfer (r) was presented with the Walter Reed Medal of the American Society of Tropical Medicine and Hygiene by Dr. John David.**

award for his scientific contributions during 35 years with NIAID; his pioneering work in arbovirology, rickettsiology, and relapsing fever spirochetes; and his discovery of the spirochete that causes Lyme disease, *Borrelia burgdorferi* ... **Dr. Fernando Cassorla**, NICHD's clinical director, was presented with the Clinical Teacher Award by the NIH's Office of Education. He was cited for his "excellence in teaching clinical medicine" and his significant contributions to the diagnosis and treatment of disorders of puberty, particularly as they relate to bone growth ... **Dr. Charles L. Coulter**, director of NCRR's Research Facilities Improvement Program and acting director of its Biomedical Research Technology Program, has been elected to the rank of fellow of the American Association for the Advancement of Science. He was nominated "for work in guiding many NIH programs in biophysics, cell biology and medical research" ... **Dr. Felix F. de la Cruz**, chief of the Mental Retardation and Developmental Disabilities Branch, NICHD, received an award from the president's committee on mental retardation for his outstanding contributions to the field of mental retardation research ... **Dr. Anthony S. Fauci**, director of NIAID, was recently elected a fellow of the American Academy of Arts and Sciences. He also received in May an honorary doctor of science degree from St. John's University in Jamaica, N.Y. ... **Dr. Joseph F. Gallelli**, chief of the Clinical Center's pharmacy department, received the Distinguished Alumni Award from Long Island University on June

2. He received a B.S. from LIU in 1957 and the award is given for exceptional achievement and scholarship by an alumnus ... **Dr. Victoria A. Harden**, NIH historian and curator of the DeWitt Stetten, Jr. Museum of Medical Research, was awarded the Henry Adams Prize of the Society for History in the Federal Government at the society's annual meeting on Apr. 22. The Adams prize annually recognizes the book published in the previous year that makes the most significant contribution to the understanding of the history of the federal government. Her book, *Rocky Mountain Spotted Fever: History of a Twentieth-Century Disease*, was prepared for NIAID ... **Dr. Miles Herkenham**, chief of the section on functional neuroanatomy, Clinical Neuroendocrinology Branch, NIMH, was the 1991 recipient of the Mathilde Soloway Award for outstanding achievement in scientific research. He delivered a lecture on his work May 21 entitled "Understanding Drug and Neurotransmitter Actions in the Brain" ... **Dr. Alan Hinnebusch**, chief of NICHD's Laboratory of Molecular Genetics, presented the annual Hoffman-LaRoche Lecture at the New York Metropolitan Area Yeast Molecular Biology Meeting. He was honored for his notable contributions to the field of yeast genetics ... **Dr. Jay Hoofnagle**, director of NIDDK's Division of Digestive Diseases and Nutrition, has been selected by the Rotterdam Liver Foundation to receive the first Appel Prize for "breakthrough work in hepatology in the last 5 years" ... **Dr. Jon Huibregtse**, a postdoctoral fellow at NCI's Laboratory of Tumor Virus Biology since 1989, won a postdoctoral fellowship from the American Cancer Society to continue his research on papillomaviruses in human cervical cancer ... **Dr. Ruth L. Kirschstein**, NIGMS director, received an honorary doctorate from Long Island University on May 29. The degree, a doctor of humane letters, is her fourth honorary doctorate. She received a B.A. from LIU in 1947 ... **Dr. Herbert C. Lansdell**, a health scientist administrator in the Division of Fundamental Neurosciences, NINDS, has been elected to a 3-year term on the Council of the American Psychological Association ... **Dr. Robert J. Lutz** of the Biomedical Engineering and Instrumentation Program, NCRR, has received the 1990 Washington Academy of Sciences Award for Outstanding Achievement in the Engineering Sciences ... **Dr. Louis H. Miller**, chief of the malaria section in NIAID's Laboratory of Parasitic Diseases, has been elected to membership in the Institute of Medicine of the National



Academy of Sciences ... **Eleanor Nealon**, chief of NCI's Reports and Inquiries Branch in the Office of Cancer Communications, was given the 1991 Fox Chase Cancer Center Communication Award for her role in raising public awareness about cancer and related issues ... **Dr. Karin Nelson**, NINDS Neuroepidemiology Branch medical officer, recently received the Child Neurology Society's 1991 Hower Award in recognition of her creative contributions to the study of child neurology ... **Dr. Robert B. Nussenblatt**, clinical director and acting scientific director of NEI, has been selected as co-recipient of the 1991 Proctor Medal for excellence in basic and clinical eye research ... **Dr. William Paul**, chief of NIAID's Laboratory of Immunology, was recently a Wellcome professor at Wayne State University School of Medicine in Detroit, where he also delivered the Wellcome Lecture on "Interleukin 4: Function and Regulation of Production" ... **Dr. Joram Piatigorsky**, chief of NEI's Laboratory of Molecular and Developmental Biology, delivered the G. Burroughs Mider Lecture on Apr. 3. The title of his lecture was "Gene Sharing: Lens Crystallins, Enzymes, and Stress Proteins" ... **Dr. Roger J. Porter**, NINDS deputy director and a captain in the Commissioned Corps, has been awarded the U.S. Navy Commendation Medal for his initiative and dedication to training residents, interns and medical students as a consultant to the National Naval Medical Center ... **Dr. Steven A. Rosenberg**, chief of NCI's Surgery Branch, received from the Institute for Advanced Studies in Immunology and Aging its 1991 Lifetime Science Award for his development of cancer immunotherapy using tumor infiltrating lymphocytes and interleukin-2. He also received the Karnofsky Award at the 27th annual meeting of the American Society of Clinical Oncology in May. He used the occasion of the award lecture to talk about the possibilities for cancer treatment in the future ... **Dr. Bernard A. Schwetz**, chief of the Systemic Toxicology Branch, NIEHS, was named the winner of the Arnold J. Lehman Award from the Society of Toxicology at its national meeting in Dallas. The branch he heads conducts research to help characterize the toxicological profile of chemicals, to improve the methods for toxicological evaluation, and to understand better the mechanism of the toxicity of selected chemicals and the award recognizes his contributions to the field ... **Dr. Thomas A. Waldmann**, chief of NCI's Metabolism Branch, has been awarded the 1991



Artois-Baillet Latour Health Prize for his contributions to the development of monoclonal antibodies in diagnosis and immunotherapy ... **Dr. Watt W. Webb**, a Fogarty scholar-in-residence from Cornell University, was awarded the American Physical Society's 1991 Biological Physics Prize. The society cited him "for his seminal work on the biophysics of cell membranes and cell motility, for his dedicated training of future generations of critical biophysicists, and his longstanding contributions to the biophysics community." While at NIH, he has been evaluating new physical optics instrumentation for use in biophysical research and studying cell surface receptor dynamics, including collaborative studies of the immunoglobulin-E receptor with Dr. Henry Metzger, scientific director of NIAMS ... **Dr. Eugene C. Weinbach**, chief of the physiology and biochemistry section in NIAID's Laboratory of Parasitic Diseases, was honored at a recent meeting of the NIH Library committee for his 13 years of generous service as its chairperson ... **Gladys M. Whitted** of NIH's Division of Procurement recently received an advocacy award from the White House Conference on Small Business, Minority Delegates' Caucus Inc., for "her tireless efforts in bringing small and minority businesses into the procurement mainstream of the National Institutes of Health" ... **Mary Ann Wilson**, NINDS Neuroepidemiology Branch secretary and Neurofibromatosis, Inc. board member, was awarded the 1990 DHHS Public Health Service Award for Exceptional Achievement in Orphan Products Development. She was commended for her contributions to the passage of the Orphan Drug Act and her efforts to encourage voluntary health organizations to work together to find a cure for orphan diseases.

## APPOINTMENTS AND PERSONNEL CHANGES

**Dr. Michelle Broido**, associate professor of chemistry at Hunter College of the City University of New York and the director of CUNY's nuclear magnetic resonance facility, has been appointed a program administrator in the Biophysics and Physiological Sciences Program, NIGMS. She will be responsible for research and research training grants in the areas of structural biology, the structure and dynamics of proteins, and nuclear magnetic resonance spectroscopy ... **Dr. Michele Carter** has been named acting chief of the Clinical Center bioethics program. Her predecessor, **Dr. Alison Wichman**, resigned as chief in order to take a joint position as clinical neurologist in NINDS and a consultant in the bioethics program ... **Dr. Anne Clark**, a grants associate with NIH's Office of Extramural Programs, has been appointed scientific review administrator of the lung biology and pathology review committee in the Referral and Review Branch of the Division of Research Grants ... **Dr. Bruce Howard**, senior investigator in NCI's Laboratory of Molecular Biology, has been chosen chief of a new molecular biology laboratory named the Laboratory of Molecular Growth Regulation. It was established by NICHD to expand its studies of the molecular control of growth ... **Dr. Classie G. Hoyle**, associate professor of community and preventive dentistry, assistant to the dean, and director of planning and development in the College of Dentistry at the University of Iowa in Iowa City, has been appointed as a special expert in science education for NIGMS and its minority programs ... **Dr. Daniel C. Ihde**, chief of the clinical investigations section of the NCI-Navy Medical Oncology Branch and editor-in chief of the *Journal of the National Cancer Institute*, has been appointed NCI deputy director ... **Dr. H. Clifford Lane** has been appointed clinical director of NIAID. He will continue to serve as chief of the clinical and molecular retrovirology section of the Laboratory of Immunoregulation, NIAID ... **Dr. Judith H. LaRosa**, coordinator since 1989 of the National Heart Attack Alert Program and since 1978 of the Workplace Initiative, both at NHLBI, has been named deputy director of NIH's Office of Research on Women's Health ... **Dr. Yvonne Maddox**, a health scientist administrator at NIGMS since 1985, has been appointed deputy director of the NIGMS Biophysics and Physiological Sci-

(continued on p. 28)



*NIH Notes (continued from p. 27)*

ences Program ... **Dr. Bruce Nisula**, chief of the section on medical endocrinology, NICHD, has been named head of the Developmental Endocrinology Branch, NICHD's largest clinical program ... **Geraldine Pollen**, chief of the Office of Information and Legislative Affairs, NCNR, has been appointed executive director of the NIAMS Advisory Board. She will also serve as special assistant to the director, NIAMS ... **Dr. J. Edward Rall**, deputy director for intramural research at NIH since 1983, has returned to NIDDK's Clinical Endocrinology Branch ... **Gloria Richardson**, DCRT's administrative officer for nearly 13 years, has been chosen EEO officer for DCRT ... **Dr. Allen Spiegel**, chief of NIDDK's Molecular Pathophysiology Branch, has been named director of NIDDK's Division of Intramural Research. He is known for his research on the function and structure of G proteins ... **Dr. Stephen E. Straus**, chief of NIAID's medical virology section, has been appointed chief of the Laboratory of Clinical Investigation, a major component of the institute's intramural clinical program ... **Dr. Warren Strober**, chief of the mucosal immunity section in NIAID's Laboratory of Clinical Investigation, has been named deputy director of NIAID's Division of Intramural Research ... **Dr. Alan P. Wolfe** of NIDDK's Laboratory of Molecular Biology has been recruited to head a new Laboratory of Molecular Embryology, which has been founded by NICHD to understand how the development of the embryo is controlled at the level of the gene ... **Andrew Tartler**, executive director of The Children's Inn at NIH, left there at the end of March to return to NIH as deputy director of the Division of Technical Services, Office of Research Services ... **Dr. Joshua Zimmerberg**, who has been with the Laboratory of Biochemistry and Metabolism, NIDDK, has been named chief of the Laboratory of Theoretical and Physical Biology at NICHD.

**RETIREMENTS**

**Dr. James B. Carlos**, chief of the Epidemiology Branch in the Epidemiology and Oral Disease Prevention Program, NIDR, retired on Feb. 1 after 23 years with the institute. He came here in the late 1960's to conduct applied research for the institute. In 1972 he was appointed NIDR associate director for the National Caries Program. This program, the first targeted research program at NIDR, and the first program at NIH to combine intramu-

ral and extramural research under one management, sought to eliminate tooth decay as a major health problem ... **Thomas J. Cook**, chief of the Grounds Maintenance and Landscaping Branch, DES, has retired after 31 years at NIH. Many physical changes have occurred during these years at NIH, but he still calls it a "landscaper's dream place." He plans to continue pursuing his hobby of building model airplanes and will continue working in landscaping and maintenance ... **Peg Fisher**, a patient care technician at NIH, retired from the Clinical Center nursing department on Apr. 30. Throughout her career at the CC she worked in many clinics with many patients and families. Her retirement plans include rest, gardening and traveling through the United States ... **Doug Jones** of the Audiovisual Program Developmental Branch, NLM, retired recently from government service. He joined the library in 1980 when NLM's photo department was being formed. He studied at the New York Institute of Photography and, before joining NLM, worked for the NCI Laboratory of Viral Carcinogenesis ... **Dr. James E. (Jim) Pierce, Jr.**, special assistant to the assistant director for operations, Division of Personnel Management, retired on Apr. 3 after 34 years of federal service. He arrived at NIH on Apr. 3, 1961, joining Dr. Baruch S. Blumberg, chief, Geographic Medicine and Genetics Branch, NIAMD. He later transferred to the Program on Mental Retardation in the newly created NICHD, where he performed duties related to enzymatic and chromosomal mappings. He left the scientific field in 1966 to become an NIH management intern and the rest of his career was devoted to personnel work ... **Arnold Sperling**, director of the Clinical Center's patient activities department, retired on Apr. 30. He joined the hospital as chief of the patient activities section in 1961 and, because of his innovations and accomplishments, the program was granted department status more than 20 years ago. When he retired he passed on the 'key' to the Clinical Center. The silver key mounted on a wooden plaque is held by the person who has been a CC department chief the longest. To whom he passed the key is a secret ... **Helen Stafford**, assistant director for operations, Division of Personnel Management, retired on June 30 after 21 years at NIH. She began working here May 31, 1970, when she signed on as a personnel management specialist. In 1973, she was selected as the personnel officer for NICHD, NEI, and DRR. In 1976, after receiving a departmental Superior Service Award for her performance in this three-unit

assignment, she was promoted to her present position. She has served on many NIH-wide search committees and she was described as "one of the great stalwarts of NIH and its people" by former NIH director Donald Fredrickson.

**DEATHS**

**Rose Marie Almasy** died on Apr. 3. She began her career at NIH in 1951 and worked as a receptionist and then in the Office of Special Events—all at the Clinical Center. She retired in 1977 ... **Evelyn Attix**, former executive officer at NHLBI, died May 5 of a cerebral hemorrhage. She was stricken at her home in Washington, D.C. She began her career in the NHI in the early fifties. She started as a GS-2 clerk and in 1975 was appointed executive officer, thus becoming one of the highest ranking women at NIH. She retired in 1984 ... **Daniel Carangi**, graphics director at NLM, died Mar. 23 at a health care center in La Crosse, Wis. He had been with the library for 23 years before retiring in 1989 ... **Mabelle W. Fletcher**, 71, who had been an administrative assistant at NIH, died of cardiac arrest June 11 at her home in Gaithersburg ... **Dr. James Q. Gant, Jr.**, 83, died of a heart attack on Sept. 2, 1989, at Sibley Memorial Hospital. He was a retired physician who had served as the first dermatologist with the Food and Drug Administration and came to NIH in 1941 in the Industrial Hygiene Research and Investigation division. After leaving the PHS he practiced and taught in Washington specializing in dermatology. He was an amateur astronomer and in 1954, the lunar crater Archimedes was renamed "Gant" by the lunar section of the British Astronomical Association. He was buried at Quantico National Cemetery with full military honors ... **Gloria Grauman**, a grants technical assistant in the NIGMS Office of Program Activities who retired in July 1989, died of cardiac arrest Feb. 16 in Wheaton. She spent 14 years with the federal government, the last 12 in NIGMS ... **Dr. Jonathan L. Hartwell**, a retired research chemist at NCI, died of pneumonia Mar. 22 in Bethesda. He retired in 1975 as head of the natural products section in NCI's Drug Development Branch. He had worked at NCI for nearly 40 years and he had also served as chief of NCI's research communications branch. He was the author of many articles and books on the effects of extracts and compounds of natural origin for use in chemotherapy ... **Dr. Herman Moritz Kalckar**, 83, professor emeritus of biological



chemistry at Harvard Medical School, died of pneumonia on May 17 in Cambridge, Mass. He did pioneering work on metabolism and was a visiting scientist at NIAMD and later a professor of biology at Johns Hopkins University. In 1961 he was named head of the biochemistry research laboratory at Massachusetts General Hospital and a professor at Harvard Medical School. He was a member of the Board of Contributing Editors for *NIHAA Update* ... **Dr. Toichiro Kuwabara**, 71, a retired NEI scientist, died Apr. 2 at his home in Indianapolis of apparent heart failure. In 1971 he joined NEI as chief of the Laboratory of Ophthalmic Pathology. While at NIH he extended his interests and provided important contributions in several areas, most notably ocular development, senile cataract, cornea wound healing, diabetic retinopathy, and experimental uveitis. He retired from NEI in 1989 to become professor of ophthalmology and pathology at the University of Indiana School of Medicine, where he worked until his death ... **Dr. Ernest V. deMoss**, 69, a surgeon with NCI, died of a heart ailment May 21 at a hospital in Plano, Tex., where he was visiting relatives. He had worked at NCI since 1973 ... **Dr. Peter Dean Olch**, 61, a retired deputy director of the History of Medicine Division, NLM, died of a pulmonary embolism Apr. 26 at Suburban Hospital. He had been ill with cancer and was stricken at his home. A trained surgeon and pathologist, he was an authority on the history of surgery and the history of medicine on the American frontier ... **Richard L. Pierson**, who retired from NIH in 1985 after 26 years of service in the Veterinary Resources Branch, DRS (now part of the National Center for Research Resources), died Apr. 14 at his Bethesda home. He overcame disability caused by severe wounds received in World War II and came to work at NIH in the late 1950's as an animal husbandman. He performed ably and took increasingly responsible positions in VRB, including 10 years as assistant chief of the animal production section and 10 years as chief of the ordering and contract unit of the small animal section ... **Dr. Anthony A. Rizzo**, 62, a periodontist and science administrator with NIDR, died suddenly of a heart attack Apr. 20 in Mexico while attending a meeting. He was chief of the Periodontal and Soft Tissue Diseases Research Branch, NIDR. He had been with the

institute since 1957, holding a broad range of positions in both intramural and extramural programs. He was a 33-year member of the PHS until he retired from the Commissioned Corps in December 1990 ... **Dr. Barrett Scoville**, 55, a pharmaceutical executive, psychiatrist and professor who was a former FDA official, died Apr. 7 after his single-engine plane crashed after takeoff from Great Barrington (Mass.) airport. He had joined NIH in 1979 as a drug development expert in the Epilepsy Branch of the Neurological Drug Disorders Program. He went to work for Otsuka American Pharmaceuticals of Rockville and at the time of his death was vice president for clinical development ... **Dr. Sidney Silverman**, 75, died May 7 at the Washington Hospital Center. He worked as a bacteriologist at Ft. Detrick in Frederick and after the laboratories there were closed, joined NCI. In 1979 he became a professor of biology at Hood College, where he stayed until his retirement in 1989. At the time of his death he was working on a history of the college for its centennial celebration in 1993 ... **Dr. Katherine Suydam Brehme Warren**, 82, a retired grants official at NIH and a former professor of biology at Adelphi and Hofstra universities in New York, died of respiratory ailments Mar. 23 in Laurel. She moved to the Washington area in 1961 and joined NIH. She reviewed research grants in the field of cell biology and later in cooperative clinical projects. She retired in 1971.

### Memorial Contributions

The NIH Alumni Association recently received contributions in memory of Dr. John R. Heller and Dr. Jonathan L. Hartwell given by Mrs. Onie (Powers) Adams. Contributions in memory of Dr. John R. Heller and Mrs. Rose Marie Almasy were given by Mrs. Mary Calley Hartman. We have established the NIHAA Memorial Fund; the board of directors will decide on an appropriate use.

### Book Briefs

## Recent Books of Interest To Alumni Members

Robert Gallo. *Virus Hunting: AIDS, Cancer, and the Human Retrovirus: A Story of Scientific Discovery*. New York: A New Republic Book, Basic Books, 1991. 352 pp.; index; illus; \$22.95.

Dr. Robert C. Gallo, chief of NCI's Laboratory of Tumor Cell Biology, presents in this book his view of the discovery of HIV, the retrovirus that causes AIDS. The discoverer of the first cancer-causing retrovirus and two-time Lasker award winner explores not only his own work and the controversy surrounding AIDS research, but also the nature of proof in scientific discourse, the competition between laboratories and institutes, life at NIH, and the recent politicization of biomedical science.

Victoria A. Harden and Guenter B. Risse, eds. *AIDS and the Historian: Proceedings of a Conference at the National Institutes of Health, 20-21 March 1989*. Washington, DC: U.S. Department of Health and Human Services, NIH Publication No. 91-1584, 1991. 161 pp. illus. No charge.

This book contains the proceedings of a conference at which historians, scientists, physicians, AIDS activists, museum curators, archivists, and others discussed how historical perspective could contribute to public discussion of AIDS. The conference was sponsored by NHBLI, NIDR, NLM, the DeWitt Stetten, Jr. Museum of Medical Research, and the University of California, San Francisco. Copies of the proceedings may be obtained at no charge by writing the NIH Historical Office, Bldg. 31 Rm. 2B09.



**NIH Retrospectives**



**SUMMER 1951**

President Harry S. Truman laid the cornerstone of NIH's Clinical Center on June 22. Items placed in the cornerstone included a list of all NIH employees, Senate and House hearings on the Clinical Center, and copies of speeches delivered at the ceremony. Photographs were included of the Clinical Center in various stages of construction. Symbols of advances in clinical medicine also placed in the cornerstone were cortisone, penicillin, and blood plasma to represent therapeutic treatment; a radioactive isotope and photofluorographic x-rays to represent diagnostic aids; and vaccines and sera representing preventive measures ... Dr. George W. Beadle, geneticist and Chairman of the Biology Division, California Institute of Technology, has been awarded the first R. E. Dyer Lectureship. His talk delivered June 21 was on "Genetic Control of Metabolism."



**SUMMER 1961**

On May 26 DHEW Secretary Abraham A. Ribicoff dedicated the \$4 million National Institute of Dental Research building ... In the Labor-HEW appropriations bill passed by the House, NIH would receive an operating appropriation of \$641 million for the fiscal year 1962. This compares with the President's budget request of \$583 million and last year's final appropriation of \$560 million ... NIH scientists, Drs. James Watt and Andrew G. Morrow, re-

cently returned to Bethesda after a two-week trip to Russia as members of a United States delegation of cardiologists and surgeons. The group was in the Soviet Union under a 1960-61 agreement between the two countries for cooperation in exchanges in the scientific, technical, educational and cultural fields.



**SUMMER 1971**

Dr. Rolla E. Dyer, NIH Director from Feb. 1, 1942, to Sept. 30, 1950, died June 2 of a heart attack at his home in Atlanta, Ga. In a tribute to him Dr. Robert Q. Marston, current NIH Director, wrote "He was precisely the right man at the right time. He laid the groundwork for what was to become this Nation's—and the world's—foremost biomedical research institution."

**The NIH Record**

U.S. Department of Health, Education, and Welfare  
September 18, 1981  
Vol. 12, No. 19  
National Institute of Health

**SUMMER 1981**

The National Institute of Arthritis, Metabolic, and Digestive Diseases was renamed the National Institute of Arthritis, Diabetes, and Digestive and Kidney diseases (NIADDK) on June 23 ... On June 30 Dr. Donald S. Fredrickson announced that he was stepping down as NIH Director. In his statement he said: "This July I am completing my fourth 7-year term at NIH. It seems as exhilarating and worthwhile as in the summer of 1953, when I arrived. This last 6 years, however, have been spent in the relentless company of the administrative burdens of the Director. It is time to shed them for a while, lest I forget completely how to be a scientist and a physician." Dr. Thomas E. Malone, Deputy Director, has been named Acting Director of NIH.



The mystery photo in the last issue of *Update* was taken at the first NIH Hamster's theatrical production. Both Phil Janus and Jane Sundelof Jones were the first to correctly identify that photo. Above is another photo about which National Library of Medicine prints and photographs curator Lucinda Keister needs help. We believe this may be a photo of Dr. G. Robert Coatney's malaria research laboratory. Is this correct? Does anyone know the names of the two women in the picture and their position in the laboratory? Please send information to *Update*.



**Attention**

NIHAA wants to hear from its members. Please type or print your note for a future issue and mail it to *Update*.

Name

Home address

Home phone

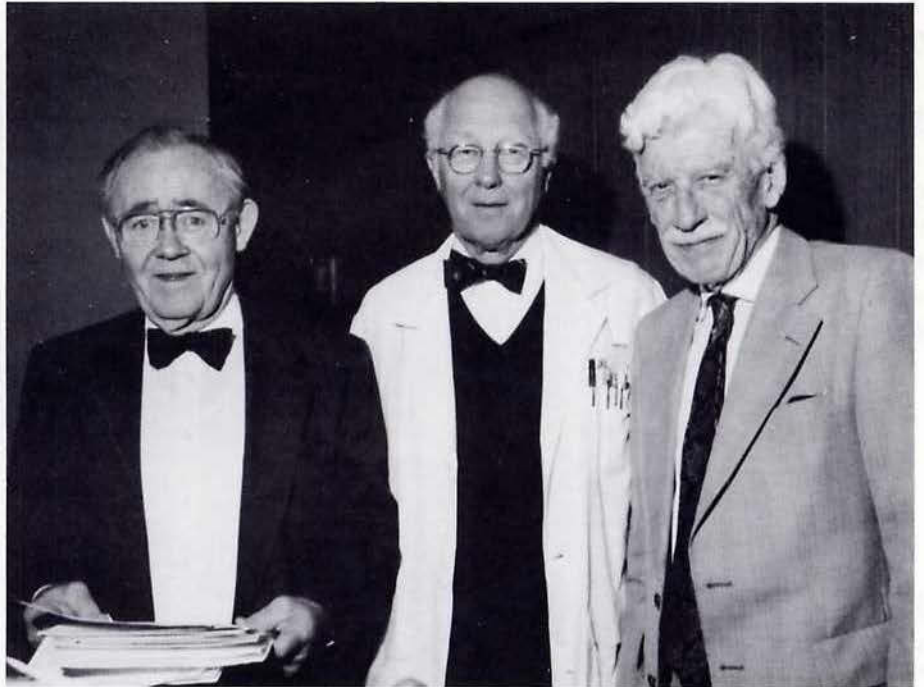
News, including dates/position at NIH and photo if possible.

*Chapter (continued from p. 25)*

nual Alpha Omega Alpha/Minority Student Day. Thus, the aforementioned program was quickly followed by a stirring AOA address by DHHS secretary Dr. Louis Sullivan. After his talk, all adjourned to the Birmingham Civic Center for a reception and a gala dinner. The after-dinner speeches allowed Rall and Kennedy each to make yet another comment on the utility of a strong alumni association.

The next morning, Pittman gave the visitors a tour of the UAB medical campus and delivered them to the airport for their return flight.

A number of alumni have, from time to time, expressed interest in having a chapter of the NIHAA in their area. The national office would welcome any offers from alumni to undertake organizational efforts along these lines and would be pleased to provide as much assistance as possible. Write or call the NIHAA office, 9101 Old Georgetown Rd., Bethesda, MD 20814 (301) 530-0567, or Tom Kennedy (301) 942-3122.



Among those attending the first meeting of the NIHAA chapter in Birmingham on Apr. 5 were (from l) Dr. Thomas Kennedy, Jr., NIHAA; Dr. James A. Pittman, Jr., dean, University of Alabama School of Medicine; Dr. J. Edward Rall, former NIH deputy director for intramural research.