

## 1995 Annual Meeting To Attract Diverse Crowd

At its Jan. 24, 1995, meeting the NIHAA board of directors approved plans for the 1995 annual meeting as proposed by the annual meeting program committee. Cochaired by Drs. James Duff and Thomas Malone, the committee worked hard to restructure the annual meeting to reflect the broad membership of NIHAA and to attract participants from around the country and abroad.

In the past those attending the annual meeting have come primarily from the Washington metropolitan area. The committee hopes that the 1995 meeting will signal the reversal of this trend. It will be held on Saturday, June 10, in the Mary Woodard Lasker Center (the Cloister), Bldg. 60, on the grounds of the NIH campus.

Dr. Robert Butler, first director of the National Institute on Aging and presently chair of the department of geriatrics and adult development at the Mount Sinai School of Medicine in New York,

(See *Annual Meeting* p. 2)



Dr. Robert Butler, former director of NIA, will speak at NIHAA's annual meeting on June 10, 1995.

## NIH's Rodbell, Grantee Gilman Share Nobel Medicine Prize; Grantee Olah Wins Chemistry

A scientist in the NIH intramural program and an NIH grantee are the recipients of the 1994 Nobel Prize in physiology or medicine. Their work focuses on G proteins, key components of the communication system that regulates cellular activity. Another long-time grantee won the 1994 Nobel Prize in chemistry.

The NIH scientist, Dr. Martin Rodbell, recently attained scientist emeritus status in the Laboratory of Cellular and Molecular Pharmacology, NIEHS. The NIH grantees are Dr. Alfred G. Gilman, professor and chairman, department of pharmacology, University of Texas Southwestern Medical Center at Dallas, who shared the medicine prize with Rodbell, and

(See *Nobelists* p. 14)



Dr. Martin Rodbell

## No Longer 'Acting'

## Gottesman Named Intramural Deputy Director

By Rich McManus

He never acted like he was acting, and now he isn't "acting" any more: Dr. Michael Gottesman last Oct. 30 officially became NIH deputy director for intramural research, a post that surveys and guides the agency's multifaceted \$1.1 billion-per-year intramural research effort.

A well-known and respected basic cancer researcher who has focused on multidrug resistance in human cells, Gottesman has heightened his campus profile in recent years by accepting a succession of "acting" posts that he has handled with aplomb. After Dr. James Watson left as first director of the National Center for Human Genome Research, then NIH director Dr. Bernadine Healy tapped Gottesman to run the center while a successor to the famed Watson was sought. Gottesman was deeply involved in the successful

recruitment of Dr. Francis Collins to NIH in April 1993. Seven months later, new NIH director Dr. Harold Varmus picked Gottesman to succeed

(See *Gottesman* p. 16)

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*Annual Meeting (continued from p. 1)*  
will speak on the health prospects for an aging population. Butler won the Pulitzer prize for *Why Survive? Being Old in America* (1976). His most recent book, *Love and Sex After 60* (1993) has had enthusiastic reviews.

In great demand worldwide, Butler's comments will be of interest to every alumnus. His early research helped establish the fact that senility was not inevitable with aging, but is instead a consequence of disease.

Following a short business meeting presided over by outgoing NIHAA president Dr. Thomas J. Kennedy, Jr., there will be events designed to renew old friendships, meet other alumni, and just have a good time. The first will be a picnic with an international flavor on

the grounds of the old Convent, now the Mary Woodard Lasker Center. There will be good food, good music, good fellowship, and maybe a Judo demonstration by Tom Malone and members of the NIH Judo Club. Invitations will be sent to all members in the spring with details.

While the formal part of the 1995 annual meeting will take place on one day, the planning committee hopes that the meeting will encompass two days in the future, particularly in view of increased attendance from alumni outside the Washington area. Your ideas for future meetings would be greatly appreciated. Please send them, as well as any other comments you have about the NIHAA, to Mrs. Harriet Greenwald, NIHAA executive director.

## SAVE THE DATE!

*The Annual Meeting of the NIH Alumni Association*

*Saturday, June 10, 1995*

*at the Mary Woodard Lasker Center (the Cloister)  
Bldg. 60, NIH, Bethesda, Md.*

*Dr. Robert Butler will speak on*

***Health Prospects for an Aging Population***

*Watch for the invitation with full details in May.  
If you have any questions or would like more information,  
please call NIHAA at (301) 530-0567*

*Thank you and see you in June.*

## Thank you to our friends

The NIHAA warmly welcomes the following organizations that joined in the category of "Friends" and wishes to acknowledge its appreciation for their generous support:

*American Association of Retired Persons  
University of Alabama School of Medicine at Birmingham  
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We also would like to thank Glaxo Inc., Sandoz Research Institute, the Upjohn Company and Wyeth-Ayerst for bearing the considerable expense of underwriting NIHAA Update.

The Foundation for Advanced Education in the Sciences (FAES) has generously and continually supported NIHAA.

We would also like to express our deep appreciation to the following contributors to NIHAA-sponsored events:

*Charles River Laboratories  
National Foundation for Infectious Diseases  
Peptide Technology Limited  
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We would also like to thank our members who have contributed donations beyond their dues payment.

# Update

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's Note

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: **Harriet R. Greenwald**

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## President's Letter

### A Call to Arms...

By *Dr. Thomas J. Kennedy, Jr.*

The alumni of NIH may not be aware that, for the last 24 months, what I believe could become a tragedy of major significance to science and to the health hopes and prospects of the American people has been unfolding, quietly and largely unnoticed except in Bethesda. The "direct operations" of NIH—intramural research and the federal management of extramural research—are under severe and, unless modulated, perhaps ultimately ruinous retrenchment orders. Here's the story.

### Downsizing Government

Shortly after his inauguration, President Clinton announced that he intended to reform federal government operations and that Vice President Gore had been named to lead a "National Performance Review" effort to "Reinvent Government." Pursuant to this proposal, three Executive Orders (E.O.s 12837 - 12839), having the force of law, were issued on Feb. 10, 1993.

- The first requires each federal agency to identify the level of "administrative expenses" in the FY 1993 appropriation; and thereafter, in its next four budget submissions, to, seriatim, reduce these expenses, adjusted for inflation, to the levels of 3 percent, 6 percent, 9 percent, and 14 percent below the FY 1993 level.
- The second mandates termination of one-third of all existing federal advisory committees and sharply constrains the chartering of new advisory committees.
- The third orders agencies to eliminate 4 percent of their full time equivalent (FTE) positions (for an aggregate



**Dr. Thomas Kennedy, Jr.**

reduction of 100,000), with 25 percent of the target being reached by the end of FY 1993 (Sept. 30, 1993), 62.5 percent by the end of FY 1994, and 100 percent by the end of FY 1995. In making these reductions in workforce, 10 percent of the positions eliminated must be in the highest grades (GS 14 or above in the Civil Service system and the equivalent in other personnel systems).

Subsequent directives from the OMB made clear that all NIH "direct operations" were to be categorized as "administrative expenses" and that the 14 percent reduction in these expenses must be in addition to the savings accruing from the elimination of FTE positions in the workforce. Thus, the jargon of "reinvention" transformed every penny spent on scientists working at the laboratory bench or at the bedside of research patients or on administrators of extramural grants and contracts into "administrative expenses!"

In September 1993, the President accepted the recommendations of Vice President Gore's National Performance Review, under which the required reduction in the federal workforce was raised from 4 percent to 12 percent (or from 100,000 to 252,000 FTE positions) and ordered the agencies to each

(See *Call to Arms* p. 4)

*Call to Arms (continued from p. 3)*

submit an implementing "streamlining plan" to the OMB within less than 90 days. These plans were: to address how the agency proposed, within 5 years, to *halve* the current ratio of managers and supervisors to other personnel; to be "characterized by delegation of authority, decentralization, empowerment of employees to make decisions, and mechanisms to hold managers and employees accountable for their performance;" to propose ways to reduce "red tape"-generating and efficiency-hampering overcontrol and micromanagement, and to simplify the internal organization and administrative processes of the agency; and to seek to realize cost savings, improve the quality of government services, and raise morale and productivity.

Personnel ceilings established by the Presidential Executive Orders and their implementing directives from the OMB were subsequently enacted into law by the Congress in the Federal Workforce Restructuring Act of 1994 (P.L. 103-226) with a further increase in the mandated reduction in the number of FTE positions to 272,000; the savings attendant to these personnel reductions were dedicated, in the 1994 Violent Crime Control and Law Enforcement Act (P.L. 103-322), to the expansion of police forces, to the enlargement of the nation's prison capacity and to the financing of social programs directed at the prevention of crime.

Additional requirements to reduce the size of the federal workforce and of the Senior Executive Service, issuing from either the administration or the 104th Congress, are likely fall-outs from forces set in motion by the elections of November 1994.

**Downsizing NIH**

Information on the impact that this national policy is having on NIH is not

easy to secure and informants are both hard to find and cautious about discussing these matters. But here are what I choose to think are some of the "facts."

- In the proration of the workforce reductions, NIH took a disproportionately heavy "hit." While the DHHS share of the reduction in FTE positions was 11 percent—the overall government average requirement was 12 percent—the Public Health Service (PHS) imposed, for reasons unknown, a 15 percent downsizing on NIH. Additional cutbacks may be necessitated, unless some resolution acceptable to the administration of a complex and politically sensitive personnel ceiling problem in the Indian Health Service can be negotiated.

- NIH has been working valiantly to comply with the mandates imposed upon it. One notably vigorous effort has been spearheaded by the "NIH Resource Allocation Group" (RAG) and its Working Group, that transmitted a lengthy set of recommendations to the NIH director on May 23, 1994. But despite the energy and ingenuity manifest in NIH's planning to meet White House goals, reaching the prescribed personnel ceiling targets (a 15 percent reduction by the end of FY 1999) will still require surgery that I believe can only be called draconian.

- That NIH has so far managed to more than meet its FTE reduction target ceilings is largely accounted for by a hiring freeze on FTE appointments, in force since December 1993; the price: serious discrepancies between personnel needs and availability, especially with respect to specialized skills.

- Since about the same time, promotion of employees from the level of GS 13 (or equivalent) to GS 14 has been virtually impossible. The queue of productive scientists waiting for hard-earned and increasingly overdue promotions is steadily lengthening; and

even when vacancies at the upper levels open, only a trickle of promotions will be possible. Less obvious but probably just as significant, in the many instances in which promotion is coupled to the award of tenure, delay and uncertainty about the latter matter enhances frustration and depresses morale.

- From the point of view of intramural scientists, the specter of five more years of steady, progressive, inexorable, grinding truncation of resources, both personnel and materiel, coupled with very limited opportunities for new FTE hires and promotions, only to be followed, after FY 1999, by stabilization—until a new steady state of personnel turnover is reached—at a downsized level that permits new FTE recruitment and promotions only to the extent that vacancies are created by retirements or resignations, clearly does not constitute an incentive to remain in federal service. The cumulative result of the process now underway, should it not be halted and reversed, will likely be that many of NIH's best intramural scientists will elect to leave, thereby not only initiating deterioration of a world class biomedical research institution, but also leveraging its rate.

The unfolding of this doomsday scenario could not be happening at a more inopportune time for the nation. NIH is at the peak of its powers (*vide infra* for an assessment of its stature); it is blessed with a superb staff, visionary leadership, generally good and improving facilities and with extraordinary control over the quality of its staff, especially through authority on tenure appointments that is unique and unprecedented throughout the whole federal government. In short, it is poised as never before to tackle effectively the plethora of unbelievably promising scientific opportunities at hand to advance human health and well being.

The Presidential initiative to "rein-

vent" government is intended to make the federal government less costly as well as more efficient and responsive. It was designed to correct, wherever they existed in the vast bureaucracy, practices that subverted efforts to achieve the President's objective, such as excessive staffing and disproportionately large numbers of employees in higher salaried positions, leading to a top heavy and overly pyramidal hierarchical organizational structure that is widely believed to cause suppression of creativity and disempowerment of rank and file personnel. Whether or not the White House's diagnosis and prescribed therapy—including the overtones of Deming's "Total Quality Management" to which so much of Japan's economic growth and development has been attributed—are generally appropriate for the nation's federal bureaucracy as a whole is not an issue on which I have an opinion. But I can comment credibly on the applicability of the program to NIH's intramural research program.

The size of the intramural research program on the Bethesda campus has evolved as the outcome of a long series of legislative and executive branch decisions, extending over almost a half a century. True, the size of this program is discretionary—as also is that of the extramural research program—and could be reduced at any time, by legislative or executive branch action, to any level deemed to be appropriate to the prevailing circumstances. But a rational and defensible policy decision to shrink the intramural program should be argued, one would think, specifically on the merits of the case for redetermining the proper scale of a singularly outstanding federal research enterprise, and not simply be the non-specific outcome of a uniform, across-the-board, "one-size-fits-all" formula to stream-

line the federal government.

- The total expenditures of intramural research are surely misidentified as a federal government "administrative expense," a category whose curtailment was a major objective of the "National Performance Review," "Reinventing Government" and the "streamlining" plans. Intramural research expenses are undeniably programmatic, the cost of performing research, not administrative.

- The intramural research operation is not bloated, top heavy, inefficient, overstaffed, etc.—the principal charges against the federal bureaucracy as a whole to which "reinvention" is addressed.

- Flattening an overly vertical personnel pyramid, because the ratio of supervisors to other personnel is too high, may make sense in some situations. But it is not a rational policy for a scientific research operation and its imposition can only indicate a misunderstanding of the characteristics of the scientific research process. The civil service (or equivalent) grade levels of scientists in intramural research—as well as in other federal science agencies such as the U. S. Geological Survey—reflect the scientific expertise of, and the "market" for, that talent, rather than the managerial or supervisory responsibilities the incumbents shoulder. The relationship of scientists, inside or outside government, to lower grade level employees differs essentially from that in conventional workplace settings, of high level managers and supervisors to lower grade level employees. Typically, a scientist, of whatever eminence or distinction, collaborates with, rather than manages or supervises, a colleague or two, mentors one or two pre- or post-doctoral students and, perhaps, directs the work of a technical assistant or so. Compliance with the "reinvention" canons would

require either extending the span of control of scientists or reducing their grades—either a recipe for disaster.

- The emphasis placed thus far in this letter on the unfortunate impact of "reinvention" on NIH intramural research is not intended to ignore or minimize the baleful effect of the process on the staff entrusted with the scientific administration of NIH's extramural research activities. In this arena, the most detrimental consequences are to be felt in the reinvention specifications that target higher graded employees and the ratio of supervisors to other personnel. The grade levels of extramural scientist-administrators are based on the talent and expertise they embody. Many were only recently distinguished research scientists or renowned academic scholars. NIH relies on them, not to "manage" or "supervise" a large array of lesser bureaucrats, but for their knowledge of and good judgement about the science, the scientific priorities, and the science community at the cutting edge of the fields of science that fall within their portfolio of responsibility. The elimination of individuals of this calibre would surely impair the quality of the extramural programs over which they exercise administrative responsibility and, in the end, impair the totality of the nation's biomedical research program.

*The fundamental reality is that the conditions that reinvention of government was crafted to correct do not generally exist at NIH.* While several of the recommendations of NIH's internal study committee, the Resource Allocation Group, (RAG), make evident that slimming and streamlining of the management of several relatively small extramural and intramural research administrative functions

*(See Call to Arms p. 32)*

*Eighth Research Festival*

**Research Festival, Once Again a Success**

"Too many things overlapping."  
 "Hard to attend all sessions."  
 "Gave up experiments to attend."  
 "Very stimulating."  
 "Good way to find out what else is going on at NIH."  
 "Learned a lot."

These are some of the comments most often heard from Research Festival '94 attendees who were scrambling to get into a particular workshop or symposium. Most of the workshops filled early and it was standing room only—that is, if you were lucky enough to get into the room to stand.

Ask Cynthia Hinck from NIDDK, one of those sitting outside a crowded workshop. A newcomer to NIH in May, she was thrilled about the festival and had attended one symposium but was trying to get into the lecture by NICHD's Dr. Jennifer Lippincott-Schwartz on the "Role for microtubules and kinesin in membrane traffic between the ER and Golgi complex." Explaining why she was so disappointed, she said, "That is the general area I work in."

The '94 festival began on Sept. 19 and ran through Sept. 23, which included 3 days of symposia (6 total), workshops (53), and a poster session featuring NIH intramural research. The week-long event concluded with a 2-day Scientific Equipment Show.

Even though the festival ranks as one of the busiest weeks at NIH, preparations began long before that. In fact back in March 1994, calls went out to all ICDs inviting participation in the poster session. Only 420 applications could be accepted so requests were honored on a first-come basis. Dr. Richard Adamson, former director of



The speakers at the NICHD Distinguished Alumni Symposium on Sept. 19, 1994, were (front row, from l) Drs. Gerald Fischbach, Philip Leder; (back row, from l) William Chin, Stuart Orkin, Shirley Tilghman and Tasuku Honjo.

NCI's Division of Cancer Etiology, served as chairman of the organizing committee.

For the first time, NIH recognized the contribution of young scientists-in-training from across the country at this year's festival. Clinical residents in their first postgraduate year who had performed meritorious research were invited to participate. A committee of intramural scientists selected the 25 final abstracts chosen for presentation.

NICHD sponsored the 1994 Distinguished Alumni Symposium in which Dr. Philip Leder, a pioneer in the field of molecular genetics research, and five other distinguished alumni were honored. Leder began working for NIH during his summers as an undergraduate student, then later worked for several institutes—NHLBI, NCI, and NICHD—before leaving in 1980. He currently serves as the John

Emory Andrus professor of genetics and chairman of the department of genetics at Harvard Medical School and is also a senior investigator with the Howard Hughes Medical Institute. He was presented with the 1994 Distinguished Alumnus Award at the end of the first symposium on Monday, Sept. 19.

Visiting NIH's eighth research festival was Dr. Elija Spiva from California. After viewing the posters displayed in the tents during the poster session, he probably summed up the general feelings of most participants at the festival with his comments: "Inspiring. Science communication is a good thing. This research festival is a wonderful thing to do."

The 1995 Research Festival is scheduled for the week of Sept. 18-22. Details about the program will be in the next issue of NIHAA Update.

## Calendar of Exhibits and Upcoming Events

### SPRING

An exhibit entitled "The Birth of Clinical Medicine: Paris 1794-1848" will be on display in the main lobby of the NLM (Bldg. 38, 8000 Rockville Pike) through May 5. Prepared by NLM's History of Medicine Division staff from rare works in its collection, the exhibit will illustrate the revolutionary advances that took place in the medical world of Paris in the decades following the French Revolution. These include the development of the link between clinical diagnosis and autopsy, the working out of the pathology of tuberculosis, invention of the stethoscope, developments in medical education, and reforms in hospital design and administration. For more information call (301) 496-5961.

### APRIL

The NIH Director's Cultural Lecture will be on Tuesday, Apr. 25, at 3 p.m. in Masur Auditorium, Bldg. 10. The speaker is Dr. Sherwin B. Nuland, clinical professor of surgery, Yale School of Medicine. The title of his talk is "To See Ourselves as Others See Us: The Artist Looks at the Doctor."

The 8th Paul Ehrlich Lecture, sponsored by the Foundation for Advanced Education in the Sciences, Inc., is on Wednesday, Apr. 26, at 3 p.m. in Masur Auditorium, Bldg. 10. The speaker is Dr. Stanley B. Prusiner, professor of neurology and biochemistry, University of California, San Francisco. He will speak on "Present State of the Prions."

### MAY

On Wednesday, May 3, at 3 p.m. in Masur Auditorium, Bldg. 10, Dr. Roger E. Meyer, past president of the Ameri-

can College of Neuropsychopharmacology (ACNP), will celebrate the 25th anniversary of the National Institute on Alcohol Abuse and Alcoholism. He will talk about "Alcohol Treatment Research: New Prospects, New Methods."

Another NIH Director's Lecture will be on Wednesday, May 17, at 3 p.m. in Masur Auditorium, Bldg. 10. The speaker is Dr. Carla Shatz, professor of neurobiology, University of California, Berkeley. She will speak on "Brain Waves and Brain Wiring."

The NIH Director's Lecture will be on Wednesday, May 24, at 3 p.m. in Masur Auditorium, Bldg. 10. The speaker is Dr. Elizabeth H. Blackburn, professor and chair, department of microbiology and immunology, University of California, San Francisco, who will speak on "Altering

Telomerase RNA: Enzymatic and Cellular Consequences."

The Annual Fogarty International Lecture will be Wednesday, May 31, at 3 p.m. in Masur Auditorium, Bldg. 10. The speaker is Professor Manfred Eigen, head, department of biochemical kinetics, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany. He will speak on "Sorting Single Molecules in Evolutionary Research."

### JUNE

The annual meeting of the NIH Alumni Association (NIHAA) will be held on Saturday, June 10 at the Mary Woodard Lasker Center (the Cloister), Bldg. 60. Invitations with details will be mailed to NIHAA members in May.

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



This etching by Alexandre Lacauchie, showing bedside teaching in a hospital setting, entitled "The Birth of Clinical Medicine: Paris 1794-1848," is at the NLM exhibit.

## News From and About NIHAA Members and Foreign Chapters

**Dr. Habeeb Bacchus**, who was with the Metabolism Service, NCI, from 1957 to 1959, is now chief of medicine, and chief of endocrinology and metabolism at Riverside General Hospital in California and professor of medicine at Loma Linda University School of Medicine. In May 1994, he received the Lifetime Educator Award from the department of internal medicine at Loma Linda University "in recognition of lifetime dedication and commitment to excellence in the education and training of house officers."

**Calvin Baldwin**, former NIH associate director for administration and NIHAA vice president, has been elected to a second term on the Bethany Beach, Del., town council.

**Dr. William J. Blot**, who recently retired from the National Cancer Institute, where he was chief of the Biostatistics Branch, has established a new company based in Rockville, Md. The company, the International Epidemiology Institute, specializes in the conduct and management of research related to health and environmental issues.

**Dr. Paul Calabresi**, who was a field investigator at NCI from 1956 to 1960, is professor and chairman emeritus, department of medicine at Brown University. He recently stepped down as chair of the National Cancer Advisory Board, having served since 1991, but he will remain a member. At the October 1994 meeting of the NCAB, he was appointed cochair with Dr. J. Michael Bishop of the NCAB ad hoc working group that has been established to look at the intramural organization of NCI. Other NIHAA members of the committee include Dr. John Minna, director, Simmons Cancer Center, University of Texas and Dr. Samuel

A. Wells, Jr., Bixby professor and chairman, department of surgery, Washington University School of Medicine.

**Dr. Thomas Caskey**, who was at the National Heart and Lung Institute as a resident associate and senior investigator from 1965 to 1970, is president of the international Human Genome Organization and head of a major genetics group at Baylor College of Medicine in Houston. In January 1995, he became senior vice president for Merck & Co's West Point, Pennsylvania, facility, overseeing Merck's vaccine, cancer and HIV programs, and its new genomics program.

**Dr. Darla Danforth**, former director of the Nutrition Coordinating Committee, OD, NIH, and who was at NIH from 1986 to 1993, has accepted the position of senior nutrition science advisor in of the Office of Disease Prevention in DHHS.

**Dr. Glenn A. Evans**, an NIH predoctoral trainee in the Medical Science Training Program from 1975 to 1979, has left his position at the Salk Institute for Biological Studies in La Jolla, where he was director of the Human Genome Center concentrating on completing a physical map of human chromosome 11. In July 1994, he was appointed "Eugene McDermott Distinguished Professor in Human Growth and Development at the University of Texas Southwestern Medical Center at Dallas, and Director of the McDermott Center for Human Growth and Development. I am also professor of internal medicine and biochemistry and will be director of the Genome Science and Technology Center of the National Center for Human Genome Research at Southwestern Medical School," he writes.



**Vernice Ferguson** was chief of the nursing department at the Clinical Center from 1973 to 1980, when she became director of nursing at the Veterans Administration and then assistant chief medical director in 1992. Presently, she holds the Fagin family chair for cultural diversity in the School of Nursing, University of Pennsylvania and is president of the International Society of Nurses in Cancer Care. She is a fellow of the American Academy of Nursing and past president and an honorary fellow in the Royal College of Nursing of the United Kingdom, the second American nurse so honored. She also is past president of Sigma Theta Tau International. Recently she was elected to the NIHAA board of directors.

**Dr. Sid Gilman**, a research associate in neurophysiology at the National Institute of Neurological Diseases and Blindness from 1958 to 1960, is professor and chair of the department of neurology at the University of Michigan in Ann Arbor. He has been appointed to the National Advisory Neurological Disorders and Stroke Council, the major advisory panel of the National



Institute of Neurological Disorders and Stroke. He is an authority on cerebellar and basal ganglia motor functions, and is also widely known for his extensive PET studies of the brain.

**Dr. Robert N. Golden**, a medical staff fellow at NIMH from 1983 to 1985, has been appointed chair of the department of psychiatry at the University of North Carolina at Chapel Hill. Prior to that appointment, he served as professor and associate director of the General Clinical Research Center and the Mental Health Clinical Research Center at UNC, as well as director of the Clinical Psychobiology/Pharmacology Research Fellowship Training Program.

**Dr. Murray Goldstein**, director of the National Institute of Neurological Disorder and Stroke for the last 10 of his 40 years at NIH before retiring, was appointed medical director, United Cerebral Palsy Research and Education Foundation and medical advisor to the United Cerebral Palsy Association. In May 1994, he received a Doctor of Medicine *Honoris Causa* from the University of Lund in Sweden. He also has been appointed to the election committee of the Canadian Medical Hall of Fame and the Dana Foundation Awards in Medicine and Education. In addition he recently was elected to the NIHAA board of directors and the board of directors of the Academy of Medicine, Washington, D.C.

**Dr. Joe R. Held**, past president of the NIHAA and former director of the Division of Research Services from 1972 to 1984, has returned to work part time for Microbiological Associates (MA), as director of laboratory animal health services. MA is the company for which he was working when he suffered a ruptured cerebral aneurysm in October 1992. MA carries out a wide

variety of testing services in the biotechnology and laboratory animal health fields.

**Dr. Henry R. Hirsch**, who was a physicist in the Laboratory of Neurobiology, National Institute of Mental Health, from 1961 to 1963, is now in the department of physiology and biophysics, University of Kentucky. He writes that his "current research is in theoretical biology, specializing in gerontology and cell kinetics. My latest project is a computer model of waste-limited cell culture growth."

**Dr. Walter Holland**, a member of the NIHAA board of contributing editors, and Fogarty scholar-in-residence, 1984-1985, has retired from the department of public health medicine, St. Thomas Campus, London. Recently, he was honored with a festschrift held in London and attended by more than 200 people representing 17 countries. Past and present members of his department presented papers showing the wide interests of his department.

**Dorothy P. Horlander**, who from 1969-1980 was chief of the International Visitor Center at Fogarty International Center and prior to that was in Special Events at the Clinical Center from 1956 to 1969, now lives in Snellville, Georgia, having moved there from Florida, where she lived from 1981 to 1992. She and her husband have travelled extensively throughout Europe and the British Isles; and also the Pacific Northwest. She is active in National Association of Retired Federal Employees and is president of her neighborhood homeowners association.

**Dr. Edwin Jacobs**, who was at the National Cancer Institute from 1976 to 1985, as program director for the cooperative groups, and associate chief,

Clinical Investigations Branch. DCT, is presently associate executive officer of Northern California Oncology Group, and a consultant to Monsanto and G.D. Searle. He also is clinical professor of medicine (oncology) at the University of California, San Francisco, and is attending physician for melanoma and head and neck cancer patients, and a member of the clinical scientific protocol review committee, Cancer Center, UCSF.

**Dr. Hussein M. Khaled**, secretary of the NIH Egyptian Alumni Association, writes that the group has launched a newsletter in both Arabic and English. They also helped organize a party celebrating the 25th anniversary of the National Cancer Institute of Egypt.

**Dr. Mark S. Klempner**, who was in the Laboratory of Clinical Investigation, NIAID, from 1976 to 1978, is now professor of medicine in the division of geographic medicine and infectious diseases at New England Medical Center Hospitals. Last Oct. 8, he was presented with the 1994 Squibb Award of the Infectious Disease Society of America. The award, the society's highest research honor, recognizes outstanding achievement overall by a society member who is under age 45. Klempner will donate the cash award to the Sheldon M. Wolff Professorship in Medicine. Wolff, who received the same award in 1976, was a mentor to Klempner.

**Dr. John LaRosa**, who was an NHLBI clinical associate from 1967-1969 and chief resident from 1969-70, has left his position at George Washington University Medical Center to become chancellor of the Medical School at Tulane University in New Orleans. His wife, Dr. Judith LaRosa, deputy director of the Office of Research on

(See *Members* p. 10)

**Members** (continued from p. 9)

Women's Health, also has left NIH after 17 years of service. She will join Tulane University School of Public Health and continue her work on women's health research.

**Terry L. Lierman**, an NIH intern in several institutes from 1971 to 1974, who is president of Capitol Associates, has also started a company with former Governor and Senator Lowell P. Weicker, Jr., and Robert Dresing, who was president of the Cystic Fibrosis Foundation. The company, DLW, Inc., located in Bethesda, Md., with programs already started throughout the U.S., is building a nationwide network of rural health centers. In addition, there is a mail order pharmaceutical division, a direct mail division, home infusion and an innovation project stressing the importance of medical research.

**Dr. Marc E. Lippman**, who was head of the medical breast cancer section, Medicine Branch, NCI, is now director of the Vincent T. Lombardi Cancer Research Center, Georgetown University, Washington, D.C. He received from the Susan G. Komen Breast Cancer Foundation the 1994 Brinker International Award for Breast Cancer Research. He was honored with the Basic Research Award for work helping "to bridge the gap between basic tumor biology and clinical application" in breast cancer. The award included a \$10,000 honorarium, a citation, and a statuette.

**Dr. Harald Loe**, director of the National Institute of Dental Research from 1983 to 1994, is now university professor in the department of periodontology at the University of Connecticut Health Center. Following his retirement, Loe has received several

honors: Gold Medal for Excellence in Research from the American Dental Association, an honorary doctorate from the University of Milan, the Paul Goldhaber Award from the Harvard School of Dental Medicine, honorary member of the American Dental Trade Association and a Public Health Award from the Scandinavian School of Public Health.

**Dr. Frank L. Meyskens**, who was at NCI in the Medicine Branch, Laboratory of Tumor Cell Biology, from 1974 to 1977, is director of the University of California at Irvine Clinical Cancer Center. The UCI Cancer Center was the only new NCI-designated cancer center in FY94. There are 54 NCI-designated cancer centers.

**Ollie S. Monger**, secretary to the director, National Center for Research Resources, retired on Mar. 31, 1994,

after a 41-year federal career (the last 39 spent at NIH). She has joined the Friends of the Clinical Center as an administrative assistant.

**Dr. Elizabeth Neufeld**, a biochemist with NIDDK from 1963 to 1984, during which time she served as chief of the Genetics and Biochemistry Branch, is presently professor and chair of the department of biological chemistry at the UCLA School of Medicine. In October 1994 at a White House ceremony, Neufeld received the National Medal of Science, the highest award for scientific achievement bestowed by the federal government. She was cited in particular for her research on Hurler and Sanfilippo syndromes. Her work led to diagnostic tests for the two disorders and later to the development of new therapies. Her selection "is an enormous honor," Neufeld said in an interview with the *LA Times*.



A portrait of Dr. Bernadine Healy, 13th NIH director, was hung in Bldg. 1 at a ceremony Oct. 12, 1994. On hand for the unveiling were Dr. Harold Varmus, Healy's successor, and the artist who rendered the portrait, Ruth Bryant of Amarillo, Tex. Many wellwishers gathered in Wilson Hall for a brief ceremony and remarks. The portrait was then placed outside the director's office door on the first floor of Bldg. 1, where this photograph was taken.

**Dr. Robert Oldham**, who was director of the Biological Response Modifiers Program for NCI's Division of Treatment, writes that since he left he has "continued in cancer research and continued my work as an oncologist, now as director of the Biological Therapy Institute and president of Cancer Therapeutics Inc. In addition, we have initiated comprehensive outpatient cancer therapies."

**Dr. Paul Parkman**, who was on campus from 1963 until his retirement in 1990 as director of the Food and Drug Administration's Center for Biologics Evaluation and Research, is now a consultant. Parkman is a collector of contemporary American art glass and is president of the James Renwick Alliance, the support group of the Renwick Gallery in Washington, D. C.

**Samuel Poiley**, who was at NCI in cancer chemotherapy as head of the mammalian genetics and animal production section from 1933 to 1974, is now living in Florida. He writes that he "has a photo of the old monkey house" and that "the first means of transportation at NCI was a horse and wagon. It was replaced by a small Ford truck which was confiscated from a bootlegger (a purveyor of white lightning)."

**Dr. Denis Prager**, who was at NIH from 1960 to 1983, has left his position as director of the Health Program for the MacArthur Foundation, to establish a private consulting practice devoted to helping organizations think, plan, and act more strategically. The company is called Strategic Consulting Services and is located in Chicago. Prager writes that "I hope to work with foundations, public and private research institutions, and other organizations in conceptualizing, planning, and implementing programmatic and institutional development initiatives."

**Linda Rhoads**, who was at NIH from 1971 to 1988, finishing as chief of Special Events at the Clinical Center, is now living in Virginia Beach and is the principal broker for Dragas Homes Realty.

**Dr. Richard L. Schilsky**, a clinical associate in the Medicine Branch and Clinical Pharmacology Branch, Division of Cancer Treatment, NCI, from 1977 to 1981, is now professor of medicine and director of Chicago Cancer Research Center. He became chairman-elect of the cancer & leukemia group B at the cooperative groups' board meeting in November 1994. He will become chairman of the group in April 1995.

**Dr. Paul J. Schmidt**, who was chief of the blood bank department (now transfusion medicine department) at the Clinical Center from 1954 to 1974, has been since 1975 head of transfusion medicine at Florida Blood Services in Tampa. He also is professor of pathology at the University of South Florida. He writes that "recently, I have been commuting to Puerto Rico twice a month for the Blood Services of the American Red Cross." He also is clinical professor of pathology at the University of Puerto Rico.

**Dr. David Scott**, who was at NIH from 1944 to 1965 and then from 1975 to 1982, as director of the National Institute of Dental Research, has moved back to this area from Arizona. He was recently elected to the NIHAA board of directors (see story on p. 22).

**Dr. Leon Smith**, senior assistant at NIAID, 1957-1959, is director of medicine and chief of infectious diseases at Saint Michael's Medical Center, N.J. In October 1994, he was named president of the board of directors of the National Foundation of Infectious



Diseases (NFID). Based in Bethesda, NFID was established in 1973 as a non-profit, nongovernment organization to support research, education and the prevention of infectious diseases. Smith also is professor and chairman of the department of internal medicine at Seton Hall University School of Graduate Medical Education, and professor of medicine and professor of preventive medicine/community health at the University of Medicine and Dentistry of New Jersey.

**Dr. Bing-Wen Soong**, who was a medical staff fellow, National Institute of Neurological and Communicative Disorder and Stroke, from 1985 to 1987, writes that he is with the Institute of Neurology at the Veterans General Hospital in Taipei, Taiwan.

**Dr. Harold "Red" Stewart**, who has had a long and distinguished career at the National Cancer Institute since 1937, is still on campus as an NIH scientist emeritus. He is a graduate of Jefferson Medical College Class of 1926, and at the school's opening exercises on Aug. 30, 1994, he was honored with the presentation of the Dean's

(See *Members* p. 12)

*Members (continued from p. 11)*

Medal for his achievements as a physician, educator, and cancer researcher.

**Dr. P. Roy Vagelos**, senior surgeon and then head of the section of comparative biochemistry, Laboratory of Biochemistry, NHLBI, from 1956 to 1966, has retired as chairman and chief executive officer of Merck & Co. Recently he became CEO of Regeneron Pharmaceuticals, Inc. The company, based in Tarrytown, N.Y., specializes in the discovery and development of biotechnology-based compounds to treat neurodegenerative diseases.

**Dr. Gary Williams**, who was at NCI in the Etiology Division, 1969-1971, is now director of medical sciences at the American Health Foundation in Valhalla, N.Y. He writes that the foundation will conduct an international course on the safety assessment of pharmaceuticals on May 7-13, 1995. For more information, contact the American Health Foundation, 1 Dana Road, Valhalla, N.Y. 10597, (914) 789-7140 or fax (914) 592-6317.

**Dr. W. Rodney Withers**, who was at NCI in the Laboratory of Physiology, section of radiobiology from 1966 to 1968, has been named chair of the department of radiation oncology at the UCLA School of Medicine. He currently is interim director of UCLA's Jonsson Comprehensive Cancer Center. As chair of UCLA's department of radiation oncology, Withers oversees the use of radiation therapy for patients with cancer. He also manages the department's research and education programs. Currently, he is an American Cancer Society clinical research professor studying the way in which cancer spreads through the body as well as how radiation can be most effectively used to treat cancers.

**Attention**

NIHAA wants to hear from its members. Please type or print your note for a future issue and mail it to *Update* at 9101 Old Georgetown Rd., Bethesda, Md. 20814

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**News, include dates/position at NIH and photo if possible**

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**Suggestions for newsletter**

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**Suggestions for NIHAA**

## Notes from Two NIHAA Committees

### The Membership Committee

By Dr. Thomas E. Malone

The goal of the membership committee when it first met a year ago was to find ways to increase the membership of NIHAA.

The initiatives described in the Spring 1994 *Update* are still ongoing but were temporarily reduced in tempo when it became apparent that the membership



Dr. Thomas Malone

database needed remodeling and updating. This not only reflected the need for a young organization to revise its method of collecting and storing information but also an opportunity to take advantage of the latest in computer technology. So, the membership committee set out to do this before adding any appreciable new data to the old system which, by the way, was found to be quite functional.

As a result, the membership committee, the NIHAA central office and volunteer help from the NIH Division of Computer Research and Technology have worked to vastly improve the ability of the NIHAA to access information in its membership database. New standards and systems for entering and retrieving information have now been established. This was a tedious but gratifying accomplishment. Many hours of work and discussion were needed to bring the old database into compliance with the new standards. In addition, the design of a much needed new membership application went

through many revisions before a satisfactory version was produced. One of the most visible and practical results of the database changes will be the production of a membership directory which should be available sometime in 1995. Special thanks are due Emma Shelton, Sol Eskenazi and Bel Ceja from the membership committee, Harriet Greenwald and Mary Calley Hartman from the central office, and Hal Fredrickson from NIH's Division of Computer Research and Technology. This was truly a team effort.

In addition to changes in the database system, the membership committee recommended the following changes which have been approved by the NIHAA board of directors:

- The Membership year is now June 1 to May 31.

- A Two-Tiered Dues System. Members joining before December 1 pay \$35, those joining after Dec. 1, pay \$17.50.

- Active Membership. Dues notices will be sent on March 15 and July 1 in future years. Members delinquent in dues on Sept. 1 will be dropped from active membership.

- Increase in Dues for Life Membership. Life Members now pay \$350.

### The Historical Committee

This is a brief update on the historical committee. We are sorry to have to report that Leon Jacobs because of his health has had to resign as chairman of the committee. He still is interested

and will continue to work with the committee as much as he can. Richard L. Seggel agreed to take over as committee chair. Current members are: Richard L. Seggel, chair; Bayard Morrison, Paul Q. Peterson, Helen Schroeder, Marvin Schneiderman, and John Utz. Other members who have been involved are Jack Davidson,



Richard L. Seggel

Herman Kraybill, Lewis Sargent and Emma Shelton.

Members of the association who would like to join the group are urged to contact Harriet Greenwald, an

ex officio member of the committee, at (301) 530-0567.

Another way that members also can help the committee is by donating old documents or papers, dated and identified photographs, or other NIH historical memorabilia. Mildred Dougherty, who was at the Clinical Center, recently sent to the office several NIH booklets with many photographs from the 1950's and 1960's. Richard Henschel, who was the executive officer at the CC, NCI and NHL, 1947-1969, also sent us memorabilia. We want to thank both of them very much for their contributions. We still are interested in old NIH telephone books in use before 1954, and in Scientific Directories and Bibliographies for years prior to 1969.

Please remember that we welcome your donations and/or your active participation as a member of the NIHAA historical committee or as a volunteer for a particular project that the group might be involved with in the future.

*Nobelists (continued from p. 1)*

Dr. George A. Olah, who is Loker distinguished professor of chemistry at the University of Southern California.

In 1970, Rodbell discovered that signal transmission requires a cellular molecule called guanosine triphosphate, or GTP. In 1977, Gilman identified the proteins to which GTP binds and named them G proteins. G proteins



**Dr. Alfred Gilman**

are a family of proteins bound to the cell surface membrane that serve as intermediaries between incoming signals such as some hormones and drugs and the cellular proteins that respond to these signals. G proteins have been shown to play many roles in normal cellular function, including cell growth and neurotransmission. Aberrations in G proteins and their functions underlie a variety of disease states, from cancer to cholera.

Rodbell followed his discovery of the signal transmission function of GTP with continued work on the nature and mechanism of G protein action in cells and membranes. Today there are 16 known G proteins and scientists have identified more than 300 receptors on cells affected by them.

Gilman's most recent work has focused on the molecular details of the

shape and function of both G proteins and their cellular targets. Beyond their roles as premier researchers in molecular pharmacology, both Rodbell and Gilman have made important contributions in training a new generation of scientists who are performing at the forefront of biomedical research.

According to NIH deputy director Dr. Ruth L. Kirschstein, "Drs. Rodbell and Gilman have made significant findings in understanding how cells perceive and react in a coordinated way to the thousands of messages that bombard them. This Nobel Prize underscores how important such basic studies are to understanding normal cell function and the diseases that result when cell processes go awry."

Olah's work focuses on the chemistry of carbocations and oxonium ions. These are highly reactive, positively charged organic molecules that are intermediates in natural and synthetic chemical processes. He pioneered methods for the generation and stabilization of these reactive molecules using compounds called superacids. This enabled him to determine the structure of carbocations and oxonium ions directly, using solid-state NMR spectroscopy and X-ray crystallography.

Olah has received more than \$4 million in research grant support from NIGMS between 1967 and 1993. He has been at USC since 1977. From 1965 to 1977, he was a professor of chemistry at Case Western Reserve University.

Rodbell has worked at NIH since 1956, first in the National Heart Institute, then in the National Institute of Arthritis and Metabolic Diseases (NIAMD, now NIDDK)—where his Nobel Prize-winning research was done—and, since 1985, in NIEHS. He served as scientific director of NIEHS from 1985 to 1989.

Gilman, now a member of the NIGMS advisory council, has been an NIGMS grantee since 1985. From 1972 to 1985, his research was supported by the National Institute of Neurological Disorders and Stroke. His research support from NIH has totaled more than \$6 million.

His association with NIH began in 1962, when he received predoctoral



**Dr. George A. Olah**

training support for his M.D.-Ph.D. studies at Case Western Reserve University. From 1969 to 1971, he did postdoctoral research at NIH in the laboratory of Nobel laureate Dr. Marshall Nirenberg with support from the NIGMS Pharmacology Research Associate Program.

Rodbell, now a resident of Chapel Hill, N.C., and the father of four (including a son who is known to many NIH'ers as one of the R&W-authorized vendors who occasionally visit campus), is remembered as an enthusiastic mentor by those still at NIH who worked with him in the early 1970's, when a series of five papers on the subject of GTP won him the acclaim recognized by the Nobel Prize.

"He was a superb mentor," recalls Dr. Constantine "Dean" Londos, who succeeded Rodbell as chief of the mem-

brane regulation section, now a part of NIDDK's Laboratory of Cellular and Developmental Biology but then a component of NIAMD's Laboratory of Nutrition and Endocrinology. "Marty was in many ways the ideal mentor. He was very upbeat. He got excited about any piece of information you got. He was not the aloof, professorial type. He was here minute to minute, always available.

"The important thing he taught everybody was that it was not important if your data failed to conform to the preconceived ideas held either by you or by people in the field. We were not to worry about conforming, or to worry that our results were out of step. He would make you think about things. His approach was, 'Your information is real. It's telling you something.'

"He wasn't a plodder," Londos continued. "He was the kind who got inspirational flashes, then would run into the lab and do experiments. It was a good introduction for those of us getting started with our careers. He gave people a great deal of independence. Any reasonable idea that you would bring to Marty was just fine with him."

Londos, who spent 14 years with Rodbell starting in December 1971, does experiments today that he calls "a direct extension of work I was doing with Marty, only we're further downstream now from the work honored by the Nobel."

Rodbell phoned Londos shortly after learning of his honor early on Oct. 10. Already on the phone with another colleague who broke the Nobel news, Londos put that caller on hold only to find that Rodbell himself was on call-waiting.

"He was elated," said Londos, "and he wanted to share his elation with his colleagues."

"Marty Rodbell is one of the finest examples of NIH intramural science. He demonstrates what imaginative investigators working in an open and



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constructive environment can do," said Dr. Phillip Gorden, NIDDK director and a colleague of Rodbell's during the years he completed his prize-winning research. "It seems to me that all discussions of 'big science' and 'little science' vanish when we see what can be accomplished by creative people."

Of the 69 American Nobel laureates in physiology or medicine since 1945, 50—more than two-thirds—either had

worked at or were supported by NIH before winning the prize. In addition to Rodbell, the Nobel laureates who did their prize-winning research at NIH are Drs. Marshall Nirenberg (1968), Julius Axelrod (1970), Christian Anfinsen (1972), and D. Carleton Gajdusek (1976). Ten other Nobel Prize winners, including Gilman, worked in the NIH intramural program at some point during their careers.

*Gottesman (continued from p. 1)*

Dr. Lance Liotta as NIH deputy director for intramural research (DDIR), but in an acting capacity for starters.

During the asterisked year as acting DDIR, Gottesman made it clear from the beginning that he would not be a mere caretaker. "I told the scientific directors that I wasn't going to act like I was acting. People took me very seriously from the start."

Gottesman admits he had reservations about the job when it was first mentioned to him by Varmus just over a year ago. "I was a reluctant acting director," he divulges. "But I took it because I am very devoted to NIH. Dr. Varmus is also extremely persuasive, and he convinced me that we could improve the quality of life for scientists at NIH, and the quality of science, too."

"I think I got into [the DDIR post] pretty quickly. I really enjoy working with the senior staff in the Office of Intramural Research—Phil (Chen), Richard (Wyatt), Audrey (Boyle, his secretary) and my other associates in the office. I found that I enormously enjoyed the new NIH leadership—Ruth (Kirschstein) and Harold (Varmus) and the other deputy and associate directors. Obviously, working with Harold is a pleasure. It's very refreshing. We get to talk science a lot, which is an aspect of the job that I didn't think was possible. It's very valuable to both of us."

Both Gottesman and Varmus share a mentor at NIH—Dr. Ira Pastan.

"Ira brought us together, both scientifically and personally," Gottesman recalls.

Gottesman, who retains his post as chief of NCI's Laboratory of Cell Biology, got to know the intramural programs at NIH on a particularly intimate basis during the summer of 1993, when he served as cochairman with Dr. Jay Moskowitz of an internal NIH

group that gathered information on behalf of the external advisory committee (EAC), a congressionally mandated panel that studied intramural NIH from head to toe. Last May 4, the EAC issued 42 recommendations for improving intramural NIH. Gottesman adopted them as his marching orders in the past year.

"I became conversant with a lot of the issues of concern to the external advisors and the scientists during this process," he says. "It was a kind of tutorial for me."



**Dr. Michael Gottesman**

Two major issues identified by the EAC have been addressed during Gottesman's acting year: a new tenure-track and tenuring process that defines more clearly the rules governing these important appointments and makes the process more open to women, minorities and scientists with disabilities was instituted on June 17, 1994; also, review by the Boards of Scientific Counselors, which provide oversight of NIH's intramural research programs, has been made more rigorous and independent. The NIH manual chapter defining the functions of the BSCs is now finalized.

"These are both major documents," said Gottesman. "They form the cornerstone of our response to the EAC recommendations."

The third critical issue Gottesman tackled during his acting year was workplace diversity. As one way of addressing this topic he meets regularly with an executive committee of the NIH women scientists' advisory group. "The first issue was pay equity, and we hope to have resolution on that shortly," he said. A recent report on underrepresented minority scientists at NIH found that NIH is seriously underrepresented by minorities in scientific careers, especially at the tenure level, and that the mentoring of training fellows has been neglected. Gottesman responded by creating an underrepresented minority scientists working group charged with developing a mentoring program and by working proactively to attract minority researchers at all levels.

With Marc Horowitz, he also has initiated a clinical research loan repayment program, modeled on the successful AIDS research loan repayment program in the Office of AIDS Research, as a mechanism for attracting scientists from disadvantaged backgrounds to NIH; the program enables scientists to pay off their education debts in expedited fashion while gaining valuable training experience in NIH clinics and labs.

"With a much expanded search process for tenure-track candidates—one that emphasizes women, minorities and scientists with disabilities both on search committees and as prospects for the laboratory—we hope to diversify the campus," Gottesman said.

Not bad for an inaugural year agenda, but what next?

"We have a lot of unfinished business," he says, drawing a deep breath. "We will continue our oversight of the quality of science done at NIH and emphasize the recruitment of the



brightest young scientists. Diversity is going to be a very long-term process. Our mentoring program, coupled with a tracking component so we can see how our fellows are doing once they get here, will be ongoing. I'm also committed to building a very strong clinical research program, which I'm doing with (Clinical Center director) Dr. John Gallin.

"We're also doing a lot of reviews," Gottesman said. "We're looking at the imaging facilities on campus, and at the animal facilities both on and off campus. We're also completing an implementation plan and progress report on the EAC recommendations including plans for reinventing intramural administrative processes, technology transfer, and the new Clinical Center, which we'll submit to the director's advisory committee."

Though his platter appears full with DDIR duties, Gottesman clearly relishes his NCI lab work, an enterprise which, he chuckles, derives no material benefit from his wearing the DDIR hat. "I run a very active lab. I meet several times a week with my fellows. We're working on the molecular basis of drug resistance and cancer, and also on the development of selectable gene therapy vectors." Tuesday and Thursday afternoons are reserved for the lab, as well as three or four evenings, plus weekends—in all, some 20 hours a week by his reckoning.

Does this experience enhance his DDIR perspective?

"Absolutely. No question about it," he enthuses. "Harold (who is also an NCI lab chief on the side) and I are much more sensitive to the needs of scientists and science because of it. I really believe I'd lose touch if I weren't working in the lab."

The dual perspectives are not without their peculiar consequences, he relates. Because he is both author and recipient

of occasional DDIR memos, an odd sense of disembodiment can occur: "Let's just say that to send and to receive a DDIR memo are two very different experiences," he laughs. "It just looks different when you're in the trenches. When you get these memos, sometimes you can't help but wonder what was in the mind of the sender."

Asked whether the DDIR post is qualitatively different from running NCHGR (where he was also acting scientific director for 6 months), he responds:

"For me, it's very different. The DDIR job is much more all-consuming. I feel [the issues] very strongly. At NCHGR, Elke Jordan was a terrific deputy. She had been running the place before I came. And the genome project was a very organized effort, which had the benefit of considerable strategic planning, all of which preceded my arrival. The DDIR is not as clean or as targeted a process. It's not as focused on specific areas as the NCHGR job."

Is the scope of the DDIR impossibly wide for one person to oversee? "I think anyone would find it hard, but I'm reasonably well suited to the task. I have a variety of interests and training, and a good deal of experience. But there are times when I need all kinds of expert assistance. And the scientific directors are really an outstanding group. They're primarily responsible for the quality of the science. My job is oversight, mainly."

Do his former trenchmates suspect he's turned bureaucrat? "I haven't detected any difference in treatment by my colleagues. I think people understand that I have the best interests of NIH at heart." He has begun to involve intramural researchers in the day-to-day activities of Bldg. 1 and has recently convinced Dr. Joan Schwartz, NINDS section chief, to be a part-time special assistant to the DDIR.

To keep in touch with the foot soldiers, Gottesman has instituted, with the help of Celia Hooper, also managing editor of the *NIH Catalyst*, a computerized DDIR bulletin board system (BBS, available under "NIH Campus Information" on gopher) that offers "direct means of communication with scientists. This office has a new openness, which is very important to me."

After the scientific directors meet every 2 weeks, Gottesman updates his BBS with minutes of their deliberations. Offering a visitor a quick desktop demonstration of the BBS, he recognizes an as-yet unmentioned initiative—the NIH environmental concerns task force—on the screen, and is quick to synopsise its proceedings. Another initiative—to advertise the availability of shared samples and kits among scientists in a sort of "Home Shopping Network" fashion—seizes his attention. That's the way Gottesman appears to operate—bright, fast, impassioned. Almost impatient for the next nifty idea.

"Anyone who ignores this BBS in favor of unsubstantiated hallway rumors is proceeding at their own peril," he half-cautions, half-advertises.

"Things have changed on campus," he concludes. "I think people are aware that we are committed to making it easier to do science around here. Our support of the trans-institute scientific interest groups and the two new NIH seminar series reflects ways we have encouraged intellectual interactions on campus. Also, Dr. Varmus is really vitally interested in the intramural program. That's important to me. It makes my job a lot easier because he's involved."

Gottesman's most difficult challenge might be to surpass the good start he's gotten in the past year. He may find himself saying, "Gottesman—he was a tough act to follow."

**'State of the NIH'****Director's Advisory Meeting Illuminates Issues***By Rich McManus*

The Dec. 2, 1994, advisory committee to the NIH director (ACD) meeting included a fascinating debate on the session's hottest agenda item—possible federal funding for and oversight of research on ex utero preimplantation human embryos.

The ACD voted 9-0 to accept the recommendations of its human embryo research panel, a 19-member group that studied the issue for 8 months before drafting guidelines.

There was surprisingly little drama over the 2-day discussion of the embryo issue—virtually no objections arose from either ACD members or from 21 advisory council representatives invited to the meeting—despite the fact that NIH logged nearly 60,000 pieces of correspondence last fall decrying the proposed research.

Several hours after the ACD meeting, however, the White House barred NIH from funding the most controversial of the approved studies—deliberate creation of embryos for experimental purposes.

The most impassioned testimony on the embryo issue came from Dr. Steven Muller, chairman of the embryo panel and president emeritus of Johns Hopkins University. Offering what he emphasized were his own views, not the panel's, he said, "Most members of the public know very little about the intricate details of human reproduction... The overwhelming bulk of the letters [against the research] are prepared responses, single-sentence postcards, or names on petitions. I believe that public ignorance was exploited, and that that ignorance was manipulat-

ed into hostility... This research needs restraint and regulation...the public interest is better served by [our] guidelines, not the current laissez-faire."

For several hours panelists and committee members traded insights on how best to persuade the American public of the merits of embryo research, which fall into roughly five categories: improved treatment of both male and female infertility; better contraceptives; preimplantation diagnosis and therapy of severe birth defects; better understanding of cancer; and avoidance of repeat miscarriages.

Dr. Robert G. Grossman, NINDS council member and chair of the department of neurosurgery at Baylor College of Medicine, described the promise of helping infertile couples and couples at risk of having children with birth defects, and proceeded from there to other anticipated benefits that might counterbalance public misgivings about tinkering with early-stage human life.

Panelists appeared to agree with Dr. Ralph Snyderman, NIAMS council member and dean of Duke University's medical school, who theorized that there is a core group of about 20 percent of the population that is unalterably opposed to human embryo research. Proposals to educate the public ranged from national town meetings, to Internet discussion groups, to massive mobilization of health voluntary organizations and scientific societies.

"An extended national debate on ethical issues in science is needed," said Dr. John W. Eckstein, a professor at the University of Iowa's College of Medicine and ACD member. "A sort of national steam blowing-off could be

therapeutic."

Echoed Muller, "A series of national conferences could not so much settle the issue as educate people. That would be a valuable exercise in itself, even if the research were eventually legislated against."

The rest of the meeting was rather newsworthy, even though reporters and audience members fled in droves once the agenda passed the embryo stage.

**Federal streamlining**

- The federal streamlining initiative is expected to result in a 15 per cent decrease in NIH workers by 1999; the employment level by then will be below the 1984 staffing level. While NIH is more than 500 positions below its 1994 ceiling due largely to a hiring freeze, the agency must cut 177 slots by the end of 1995 at the GS-14 level and above. "I'm not sure we'll be able to achieve that," said Varmus. "At NIH, you're talking about scientists or grant managers and program people. We're arguing quite vehemently in many quarters for some exemption."

- Although the NIH budget increased 3.51 percent in FY 1995, the gain was "subinflationary," said Varmus. "We're in the throes of working on the '96 budget... Our support in Congress has always been bipartisan—because disease is bipartisan—and I expect we'll maintain amicable relations with Congress."

**On Other Fronts**

- Some seven scientific director positions are currently being recruited for, reported NIH deputy director for intramural research Dr. Michael Gottesman. Also, the NCI intramural program is now undergoing a thorough review by a blue-ribbon panel.

- Gottesman's report on how intramural NIH has implemented 42 recommendations of the external advisory committee (chaired by ACD members Dr. Paul Marks and Dr. Gail Cassell) gained warm approval. "My admiration is enormous for how you've addressed not only the letter, but also the spirit of the EAC recommendations," said Marks, who is president of Memorial Sloan-Kettering Cancer Center.

- The Clinical Center is currently downsizing from over 400 beds to a tar-

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*Most members of the public know very little about the intricate details of human reproduction... ..public ignorance was exploited, and ... manipulated into hostility...*

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get of about 250 beds in anticipation of turning wholly into a lab building. A new 250-bed hospital, "including a prominent day hospital," will be built "in the shadow of the current hospital," said Dr. John Gallin, CC director. Cost is expected to be \$380 million.

- "ICD use of the CC has decreased steadily in the last few years and morale has slipped at the hospital," Gallin said. Average bed occupancy is only 237 per day. The new hospital will be "smaller but much more efficient."

- As current patient care units are closed in the CC, some areas will become offices while other space will convert to laboratories to be used as the NIH Director's Reserve, an important recruitment tool.

### ***NIHAA Forum***

## **Science Advocacy or Ethical Hubris?**

*By Dr. Robert G. Martin*

A panel of scientists and ethicists recently recommended unanimously that the NIH fund fetal research involving the intentional fertilization of human eggs for research purposes only. It took the White House less than a day to forbid implementation of this portion of the panel's recommendations. Something is amiss.

Individual members of the panel have released statements and given interviews suggesting that they were the victims of ignorance and malfeasance. They believe that if the public understood the benefits to be derived from this research, it would support their recommendation.

Maybe, and maybe not.

To my way of thinking, the problem of understanding lies more with the panel than with the public. And the understanding that is missing has to do not with science, but with moral philosophy.

Virtually all of the ethical constructs that man has devised over the millennia for regulating his behavior presume the sanctity of the human spirit. Yet each, from the most hedonistic, to the most divinely inspired, recognizes that conflicts can arise from the clash of fundamental principles. All hold that there can, and must be exceptions to "thou shalt not kill" but vehemently disagree as to where to draw the line.

Two irreconcilable points of view coexist in contemporary thinking and their incompatibility is the basis for much of the abortion conflict. There are those who hold that life commences at fertilization and only in the most dire circumstances can there be justification for terminating it. For them, use of the information on human fertility obtained from the type of research the panel rec-

ommended is as abhorrent as the use of information for the treatment of frost-bite and burn trauma obtained from the Nazi medical experiments. Others define human life as commencing after the first trimester, and hence can argue that the cumulative benefit to society is the paramount consideration.

Leaving aside the president's decision for a moment, is it the role of gov-

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*Choosing between moral philosophies on the public's behalf only serves to convince one side or the other that our leaders in medical research are arrogant and dangerous.*

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ernment and the NIH in particular to decide between two deeply held ethical points of view? I think not. Rather, it is, and should be, our aim to recognize the legitimacy of both. That is largely what the government is doing—to neither side's satisfaction—on the abortion issue. Allow access, but don't demand it. It is what the panel should have recommended. Allow fertilization experiments to proceed with private money and at the risk to the researchers of legal prosecution, but do not sponsor it with NIH support.

Choosing between moral philosophies on the public's behalf only serves to convince one side or the other that our leaders in medical research are arrogant and dangerous.

## Science Research Updates

### Recombinant Hormone Improves Diagnosis of Thyroid Cancer

Recombinant human thyroid-stimulating hormone (rhTSH) is a safe and effective means of diagnosing residual cancer cells after the thyroid has been surgically removed, according to NIH researchers. They announced the results of Phase III trials in 129 patients at the American Thyroid Association's annual conference.

The most prevalent cancer of the endocrine system, according to principal investigator Dr. Bruce Weintraub of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), thyroid cancer is commonly treated by surgically removing the thyroid gland and then internally irradiating the area with radioactive iodine to identify and destroy any remaining cancer cells.

Thyroid-stimulating hormone (TSH) must be present in the body for the tumor tissue to take up the radioactive iodine. When the body senses an absence of thyroid hormone, it produces TSH to stimulate thyroid hormone production. Prior to the development of rhTSH, patients had to experience hypothyroidism, which produces disabling side effects, including weakness, intolerance to cold, and constipation. Patients often cannot work, and some refuse follow-up examinations to avoid these unpleasant side effects.

Patients in the trial received a single dose of rhTSH for two days. Their quality of life was greatly improved, with no major adverse effects. "We have shown that using recombinant human TSH or Thyrogen in humans is

safe and effective in stimulating radioiodine uptake without the disadvantages of hypothyroidism," commented Weintraub. About 12,000 Americans are diagnosed with thyroid cancer each year.

"I am excited about the study results, and I look forward to the availability of recombinant TSH to the medical community," said Dr. Lewis E. Braverman of the University of Massachusetts Medical Center, Worcester.

The Phase III trials included researchers from NIDDK/NIH, and ten other U.S. medical centers. Thyrogen, an orphan drug, was developed by the NIDDK/NIH with Genzyme as part of a cooperative research and development agreement. Genzyme is a human health care company that develops pharmaceuticals, biotherapeutic and diagnostic products.

### Yo-Yo Dieting Benefits May Outweigh the Risks in Some

Contrary to popular opinion, weight cycling, also known as yo-yo dieting, does not have negative effects on body fat, metabolism, or the success of future weight-loss efforts, according to an article published in a recent issue of the *Journal of the American Medical Association*.

The National Task Force on the Prevention and Treatment of Obesity reviewed 43 studies on the effects of weight cycling on metabolism, psychological functioning, and health.

According to its report, there currently is no compelling evidence that weight cycling is riskier than remaining obese.

"While the notion that weight cycling has negative effects on metabolism and health has become accepted by many, careful review of studies in humans does not support this conclu-

sion," said Dr. Susan Z. Yanovski, an NIH researcher and executive secretary of the task force, which was established by the National Institute of Diabetes and Digestive and Kidney Diseases.

Most studies in humans did not find that weight cycling affects the amount of body fat, the location of fat, or the probability of future successful weight loss. In addition, weight cycling does not appear to have negative effects on risk factors for illness such as high cholesterol or high blood pressure.

"A weight loss of as little as 5 to 10 pounds improves obesity-related conditions such as diabetes, high blood pressure, and high blood cholesterol," said Dr. Van S. Hubbard, director of NIDDK's Nutritional Science Branch. "Therefore obese individuals who suffer from any of these conditions should not have any reservations about attempting modest weight loss."

The task force concludes that obese individuals who try to lose weight should be ready to commit to life-long changes in their eating behaviors, diet, and physical activity. The task force also recommends that individuals who are not obese and who have no risk factors for obesity-related illness should not attempt to lose weight, but should try to maintain a stable weight and to prevent future weight gain.

### Scientists Solve 3-D Structure of HIV Enzyme

Scientists at NIDDK have determined the 3-dimensional structure for the catalytic domain of HIV integrase, a key enzyme that is required for the AIDS virus to replicate itself. Their work was reported in the Dec. 23, 1994, issue of the journal *Science*.

In order for HIV to reproduce, the virus must insert a DNA copy of its

genetic information into the genome of a host human cell. Integrase is the HIV-encoded enzyme that is responsible for splicing HIV DNA into the human genome.

Knowing the 3-D structure of this important enzyme, researchers may be able to design a drug that could inhibit the action of this enzyme and block replication of HIV.

"The structure of the enzyme has until now eluded researchers because integrase clumps together in solution. This behavior has defeated all previous attempts to determine its structure," explains NIDDK scientist Dr. David R. Davies, whose group solved the structure. The breakthrough came when Davies' collaborators, NIDDK scientist Dr. Robert Craigie and coworkers found that the problem could be overcome by changing just a single amino acid in the catalytic domain of integrase.

HIV has three major enzymes: protease, which cuts precursor viral proteins; reverse transcriptase, which copies the RNA of the virus and makes DNA; and integrase. All three are vital to the virus and are appealing targets for drug design, but integrase is a particularly attractive target because "unlike reverse transcriptase and protease, there are no known cellular analogs of integrase," Craigie says. Because the function of integrase is unique, it may be possible for researchers to develop an inhibitor that would block this enzyme's action without inhibiting enzymes that are essential for the host cell.

A number of inhibitors have already been found for both protease and reverse transcriptase, and these are currently being tested in clinical trials. "The problem," says Craigie, "is that the virus rapidly mutates to escape these inhibitors."

Most effective of all, according to Davies, would be a "cocktail" of drugs based on inhibitors for all three of HIV's enzymes. The chance that the virus could simultaneously develop a resistance to drugs against three different targets would be extremely low.

### HIV Inhibitor Identified in Saliva

Scientists have identified a protein in human saliva that blocks HIV-1, the human AIDS virus, from infecting cells. Their finding may help explain why AIDS does not appear to be spread by saliva.

Although HIV has been recovered from the saliva of infected individuals, the concentration of virus is low and recovery is infrequent. Additionally, laboratory studies have shown that saliva prevents HIV from infecting white blood cells, which are the normal targets of the virus.

For some time, scientists have been searching for the components in saliva that prevent HIV infection. It is known that saliva contains large molecules that help clear microbes from the mouth, but even when these molecules are removed, saliva's protective effect remains.

Now a research team led by Drs. Tessie McNeely and Sharon Wahl of NIDR have identified a factor that may play an important role. The scientists found that a small protein called secretory leukocyte protease inhibitor, or SLPI (pronounced slippy) attaches to the surface of blood cells and blocks infection by HIV.

In a series of test tube experiments, McNeely and Wahl tested a battery of purified salivary proteins against HIV and white blood cells to see which substances protected cells from infection. Of the compounds examined, only

SLPI conferred substantial protection at levels normally found in saliva.

Further experiments showed that SLPI works by binding to the white cells and not to HIV. Interestingly, SLPI does not react with CD4, the receptor on the surface of white cells that attaches to HIV and gives the virus a foothold leading to infection. "The ability of SLPI to block HIV infectivity by reacting with a molecule other than CD4 is a significant finding," said McNeely. "The next step is to identify the SLPI receptor and determine the role it plays in HIV entry into host cells."

The investigators caution that much about SLPI's protective effect remains unknown. SLPI is found in varying levels in the coating of most mucous membranes, and is believed to be a natural protector against the body's own protein-destroying enzymes. However, the extent of SLPI's activity against HIV in fluids other than saliva, as well as its potential as a protective agent against HIV transmission, is yet to be determined.

### RENEW NOW

RENEW NOW

RENEW NOW

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### RENEW NOW

## Fluoridation Marks 50 Years of Cavity Prevention

By Patricia Sheridan

On Jan. 25, 1945, at 4 p.m., one of the most successful public health projects in history began. Grand Rapids, Mich., became the first city in the world to fluoridate its drinking water, setting the stage for a dramatic national decline in the rate of dental cavities. Today, as water fluoridation celebrates its 50th anniversary, fluoride continues to be dental science's main weapon in the battle against tooth decay.

Fluoridation of the Grand Rapids water supply launched a 15-year study sponsored by the Public Health Service, the University of Michigan, and the city of Grand Rapids to monitor the rate of tooth decay among the city's 30,000 schoolchildren. After just 11 years, scientists announced that the rate of dental cavities had dropped more than 60 percent. For the first time in history, tooth decay—the inevitable cause of pain and suffering for generations of youngsters—was proven to be largely preventable. Today, more than 144 million Americans in approximately 10,500 communities drink fluoridated water, one of the best public health bargains. Water fluoridation costs an average of only 51 cents per person per year—the price of a candy bar. Over a lifetime, the \$38.25 expenditure for fluoride is less than the average cost of just one dental filling, about \$42.

Research on fluoride and its effects on tooth enamel began in earnest in the early 1930's under Dr. H. Trendley Dean, a dentist at what was then the National Institute of Health. Scientists had observed low decay rates among people whose drinking water contained high levels of fluoride, a naturally occurring mineral. Dean provided the first solid evidence linking the amount



**Dr. David B. Scott examines the teeth of a Grand Rapids schoolgirl. He was the only examiner to participate in all 15 years of the Grand Rapids study. He later became the director of NIDR.**

of fluoride in the drinking water with the incidence of dental decay. These studies provided the scientific foundation upon which the National Institute of Dental Research was established in 1948, with Dean as its first director.

By the early 1940's, dental scientists concluded that water containing 1 ppm fluoride would protect teeth from decay. Their theory was put to the test in 1945, when fluoride was added to the almost fluoride-free water supply of Grand Rapids. Former NIDR director Dr. David Scott was an investigator on the Grand Rapids project. He now recalls, "The most important historical feature of water fluoridation was that this public health measure simply replicated what had already been demonstrated in nature." The Michigan study and others carried out during the 1940's and 1950's confirmed that when fluoride was added to community water

supplies, decay rates dropped dramatically. Scott notes, "One of the most exciting experiences of my career was observing firsthand the benefits of fluoridation in the people of Grand Rapids."

From 1971 through the mid-1980's, three national surveys of children's oral health showed a continued decline in dental cavities, a trend attributed largely to the widespread use of fluoride in community water supplies, toothpaste, and other forms. The most recent survey in 1986-1987 found that American children had 36 percent fewer cavities than they did at the beginning of the 1980's. That decline followed a similar drop in the prevalence of tooth decay during the 1970's. And the news is good for adults too—studies show their tooth decay rates are also reduced as a result of water fluoridation. Despite these reductions, however, tooth decay remains a problem, particularly for those with poor oral hygiene and limited access to professional dental care.

Exactly how fluoride prevents cavities is not fully understood, but scientists do know that fluoridated water most benefits those who drink it from birth, and the protection holds throughout life for persons who continue to live in fluoridated communities. For the 26 million Americans who live in areas without central water systems, there are a variety of ways to receive fluoride, including fluoridated toothpastes, gels, mouth rinses, and other products. Although beneficial, fluoride from these sources is not as effective as water fluoridation in preventing tooth decay. Studies show that, even today, children who have always lived in a fluoridated community have up to 25 percent less decay than youngsters who have never lived in a fluoridated area.

## NIH Notes for August 1994 to January 1995

### AWARDS AND HONORS

**Dr. Robert S. Balaban**, chief of NHLBI's Laboratory of Cardiac Energetics, received the Gold Medal of the Society for Magnetic Resonance at the group's annual meeting in August. In its citation, the society noted Balaban's pioneering work in the application of nuclear magnetic resonance in biology and medicine, especially on the quantitation and visualization of water-macromolecule interactions in biological tissues ... **Dr. Bruce Baum**, chief of NIDR's Clinical Investigations and Patient Care Branch, was recently chosen as first recipient of the J. Murray Gavel Clinical Lectureship established by the Forsyth Dental Center. Baum, who is also NIDR's clinical director, presented the Gavel lecture on "From the Bench to the Clinic on a Salivary Gland," at the Forsyth Dental Center in Boston ... **Dr. Samuel Broder**, NCI director, was awarded the Jeffrey A. Gottlieb Memorial Award by M.D. Anderson Cancer Center. He was honored for his understanding of "the significant role of therapeutic research, recognizing the essential interaction between basic biology, therapeutic research, prevention research, and all related disciplines" ... **Dr. Richard Chadwick**, head of the biomechanics group in NCRR's Biomedical Engineering and Instrumentation Program, has been elected a fellow of the American Institute of Medical and Biological Engineering for his pioneering work in the application of engineering mechanics principles to research in biology and medicine, especially to the cardiovascular system and hearing ... **Dr. Giovanni Di Chiro**, chief of NINDS's Neuroimaging Branch, was awarded the Distinguished Scientist Medallion by the Institute for Clinical PET. He was recognized for his introduction of positron emission tomography with 18-fluoro-deoxyglucose (PET-FDG) in the assessment of brain tumors. This technique was later expanded for use in diagnosing tumors in nearly every part of the body ... **Dr. Jonas H. Ellenberg**, chief of the Biometry and Field Studies Branch, NINDS, has been elected a fellow of the American Association for the Advancement of

Science for "highly influential contributions in establishing the role of statistics in public health and medicine, particularly for statistical contributions to the understanding of the etiology, prognosis, and prevention of neurological disorders" ... **Dr. Gunther L. Eichhorn** has been named NIH scientist emeritus after retiring from NIA in May with 38 years of service. NIH gives the honorary title to distinguished retired research scientists so they may continue their research after retirement with lab space and technical resources ... **Dr. Robert C. Gallo**, chief of NCI's Laboratory of Tumor Cell Biology, received the first annual Dale E. McFarlin Award. The award was established in memory of Dr. Dale E. McFarlin, who served as chief of the NINDS Neuroimmunology Branch from 1975 until his death in 1992. Gallo was recognized for his pioneering achievements in human retrovirology ... **Dr. Clarence J. Gibbs, Jr.**, deputy chief of NINDS's Laboratory of Central Nervous System Studies, was recently elected an honorary member of the American Neurological

Association. He was chosen for his substantial academic contributions to the field of neurology ... **Dr. Ruth L. Kirschstein**, NIH deputy director, is the recent recipient of two awards: the National Public Service Award for 1994 as an outstanding practitioner in public service and the Roger W. Jones Award for Executive Leadership ... **Dr. Elise C. Kohn**, chief of NCI's signal transduction and prevention unit of the Laboratory of Pathology, has won the 1993 Arthur S. Flemming Award for her work leading to the first human clinical trials of signal transduction therapy ... **Dr. Henry Metzger**, director of the NIAMS Intramural Research Program, gave the R. E. Dyer Lecture on Jan. 4, 1995. He spoke on "Macromolecular Association and Signal Transduction" ... **Dr. Kenneth Olden**, NIEHS director, has been elected to membership in the Institute of Medicine of the National Academy of Sciences ... **Dr. Vivian Pinn**, NIH associate director for research on women's health, was recently nominated to the National Medical

(Continued on p. 24)



**Dr. Peter Kador** (second from l), chief of NEI's Laboratory of Ocular Therapeutics, was honored recently at the German Embassy with the Bundesverdienstkreuz (Cross of Merit of the German Federal Government). The medal was presented in the name of German President Roman Herzog by Thomas Matussek, minister of the Federal Republic of Germany for America. The award was presented to Kador for his longstanding achievements for cultural unity between the two nations, and for his organization of a 2-day National German American Choral Festival in which more than 2,000 singers representing over 50 choirs from the U. S., Canada and Germany participated. Kador is president of the Washington Saengerbund, a German choral organization founded in 1851. Shown at the ceremony are (from l) NEI Deputy Director Edward McManus, NEI director Dr. Carl Kupfer, and Matussek.

(Continued from p. 23)

Association's Hall of Fame, which honors those who have excelled in science and medicine ... **Dr. Lawrence J. Prograis, Jr.**, deputy director of the Division of Allergy, Immunology and Transplantation, NIAID, recently received the Clemens von Pirquet Award from Georgetown University Medical Center for significant contributions to the field of allergy and immunology. He also delivered the 22nd Annual Clemens von Pirquet Lecture, which focused on "Asthma: The National Cooperative Inner City Study" ... **Dr. John Ruffin**, NIH associate director for research on minority health, recently received a glass plaque and certificate from the National Medical Association at its 1994 board of trustees meeting. The awards recognized his "leadership, dedication, support and contributions toward improving the quality of life for youth" and for supporting the work of the association "in its endeavors to improve both the overall status of African American practitioners and the quality of health care for all Americans, especially the underserved" ... **Dr. Michael B. Sporn**, chief of the Laboratory of Chemoprevention, NCI, recently received the American Cancer Society's Medal of Honor. He received the award for "groundbreaking studies related to the growth of cells and chemoprevention," a term he invented in 1976 ... **Drs. Gary and Liliane Striker**, NIDDK researchers, were recently awarded the Malpighi Gold Medal for their contributions to renal pathology and for the use of molecular biology techniques to study glomerular diseases ... **Ronald Winterrowd**, chief of the Medical Arts and Photography Branch, NCRR, recently received recognition for the Branch from the Art Directors Club of Metropolitan Washington for continually meeting the highest standards in the graphic arts ... **Dr. Robert H. Wurtz**, chief of NEI's Laboratory of Sensorimotor Research, delivered the G. Burroughs Mider Lecture on Jan. 18, 1995, on "Brain Maps for Eye Movements."

**APPOINTMENTS AND PERSONNEL CHANGES**

**Dr. Carl Banner** has been named scientific review administrator of the neurological sciences-1 study section in the Division of Research Grants ... **Dr. Kate Berg**, former-

ly acting chief of the Schizophrenia Research Branch and chief of the Genetics Research Program, NIMH, has been named deputy scientific director of the National Center for Human Genome Research. She will assist in the management of NCHGR's new intramural research program as well as continue studies on multi-gene disorders and on ethical and policy issues related to genetics research ... **Fernando Burbano** has been named director of information systems at the National Library of Medicine ... **Naomi Churchill** has been appointed director of NIH's Office of Equal Opportunity. Her last job was EEO director at the Federal Deposit Insurance Corp. and prior to that she headed EEO at the Department of Agriculture ... **Dr. Maria C. Freire**, head of the Office of Technology Development at the University of Maryland, Baltimore, and the University of Maryland, Baltimore County, has been named director of the NIH Office of Technology Transfer ... **Dr. Joseph F. Gallelli**, former chief of the Clinical Center Pharmacy Department, has been named senior advisor for biotechnology product development in the CC's Office of the Director ... **Dr. Michael Gottesman** on Oct. 30, 1994, was named NIH deputy director for intramural research (see article on p. 1) ... **Dr. Jorge Gomez** has recently joined the Grants Associates Program, Office of Extramural Research. The Grants Associates Program prepares scientists interested in science administration to become health scientist administrators. The program has contributed to the formation of future leaders at NIH and has a history of increasing diversity in the workplace ... **Dr. Zach Hall**, Lange professor and chair of the department of physiology at the University of California at San Francisco, has been appointed director of the National Institute of Neurological Disorders and Stroke. While at UCSF, Hall established one of the nation's leading programs in neuroscience research and graduate training. As the sixth NINDS director, he will oversee a staff of some 700 scientists, physician-scientists, and administrators and an annual budget of more than \$630 million ... **Janyce Hedetniemi** has been appointed first director of NIH's newly established Office of Community Liaison, located in the Office of the NIH Director. Among her responsibilities will be oversight and monitoring of activities such as: NIH's disposal of medical and pathological waste; the develop-

ment of NIH's campus master plan, including construction and transportation issues; and improvement in the way NIH interacts with people who live and work near NIH ... **Dr. David Henderson**, associate Clinical Center director for quality assurance and hospital epidemiology since 1988 and acting clinical director (1990), has been named Clinical Center deputy director for clinical care ... **Dr. Suzanne S. Hurd** has been named acting director of the National Institute of Nursing Research. She replaces former director Dr. Ada Sue Hinshaw, who left the institute June 30, to become dean of the School of Nursing, University of Michigan. Hurd comes to NINR from NHLBI, where she will continue in her current position as director, Division of Lung Diseases, until a permanent NINR director is appointed. **Dr. Joseph Jacobs**, director of the Office of Alternative Medicine, has resigned from that position. He has returned to New Haven, Conn., where he is a consultant. Dr. Alan Trachtenberg from the National Institute of Drug Abuse was acting director. Recently, **Dr. Wayne B. Jonas**, a lieutenant colonel in the U. S. Army, who has been director of the Medical Research Fellowship at Walter Reed Army Institute of Research, Washington, D.C., has been named director of the NIH Office of Alternative Medicine ... **Walter L. Jones** has been named Clinical Center deputy director for management and operations. He will be involved in cost containment, introduction of new systems, and in construction and renovation planning ... **Margaret Kerza-Kwiatecki**, NIAMS's first budget officer, has been appointed executive officer of the institute ... **Dr. Dushanka Kleinman**, deputy director of NIDR, was named acting director of NIDR following the retirement of Dr. Harald Loe. Recently, **Dr. Harold Slavkin**, head of the University of Southern California craniofacial molecular biology department has been named NIDR director ... **Dr. Leamon Lee** has been named director for administration, OD ... **Dr. Pamela Marino** recently joined the staff of NIGMS as a program administrator in the Minority Opportunities in Research Programs Branch. She is responsible for administering research and training grants in the institute's Minority Biomedical Research Support and Minority Access to Research Careers Programs. Prior to coming to NIGMS, Marino was a senior staff fellow in the Laboratory of Mycobacteria at



FDA's Center for Biologics Evaluation and Research. Her research there focused on multidrug-resistant tuberculosis ... **Dr. Gregory J. Morosco** has been appointed NHLBI associate director for prevention, education, and control. He also becomes director of NHLBI's Office of Prevention, Education, and Control and has responsibility for the development, implementation, and evaluation of national disease prevention and health promotion programs to reduce the incidence and magnitude of heart, blood vessel, lung, blood diseases, and sleep disorders, and to improve the utilization and management of blood resources. He was named OPEC's deputy director in 1992, and, since 1993, had served as acting director ... **Dr. Paul Plotz** has been appointed chief of the Arthritis and Rheumatism Branch at NIAMS. He will be the fourth chief of the 40-year-old branch. Prior to the appointment, he was chief of the connective tissue diseases section in the branch ... **Rose E. Pruitt**, formerly with the Department of Labor, where she served as senior equal opportunity specialist in the Office of Federal Contract Compliance Programs, has been named NIDDK's equal employment manager ... **Dr. Louise E. Ramm** has been appointed deputy director of the National Center for Research Resources ... **Dr. Clarice D. Reid** has become director of NHLBI's Division of Blood Diseases and Resources (DBDR), which administers research for transfusion medicine and all blood diseases, including sickle cell disease, hemophilia, thalassemia, and conducts a bone marrow donor program. Reid is a pediatrician with extensive experience in primary patient care, medical education, and research administration ... **Dr. Pamela Gehron Robey**, chief of the skeletal biology section in NIDR's Bone Research Branch, and a biochemist known for her work on connective tissues, has been named chief of the branch ... **Dr. Michael Sesma** recently joined the staff of NIGMS's Office of Scientific Review as a health scientist administrator. He comes to NIH from the department of psychiatry at Washington University School of Medicine in St. Louis ... **Dr. Adolphus Toliver** has been appointed director of the NIGMS Minority Access to Research Careers Program. He comes to NIGMS from the Division of Research Grants, where he served as scientific review administrator for the biochemistry study section since 1975.

## RETIREMENTS

**Dr. Richard Adamson** retired as director of NCI's Division of Cancer Etiology on Aug. 31. He had been director of DCE since 1983, and had been at NCI since 1963. In September 1994, he became vice president for scientific and technical affairs of the National Soft Drink Association, Washington, D.C., where he will be responsible for representing the soft drink industry's scientific and technical issues before the public and government agencies. **Dr. Jerry M. Rice**, head of Frederick Cancer Research and Development Center, has been named acting director of DCE ... **Dr. Samuel Broder**, director of the National Cancer Institute, announced in December 1994, his intention to retire from Public Health Service duty and take a position with Ivax Corporation, Miami, Fla. NCI director since January 1989, Broder served 22 years in the PHS and plans to leave his post in March. He will become Ivax's senior vice president for research and development, and chief scientific officer. The company makes generic drugs, intravenous drug delivery devices, and personal care goods. **Dr. Edward Sondik**, acting deputy director of NCI, has been named acting NCI director ... **David L. Chicchirichi**, executive officer since National Institute on Aging's inception in 1975, has retired. He began his career at NIH 33 years ago in the Division of Research Grants and then moved on to the National Institute of Child Health and Human Development as a grants management specialist, administrative officer, and, finally, assistant executive officer. As NIA executive officer, Chicchirichi was principal advisor to top NIA staff on program and administrative management policies. His future plans include everything from writing a book and continuing his hobby of collecting and restoring antiques to collaborating on media productions and a comic strip ... **Eileen Dybvad**, a computer programmer with the management information systems section of the Financial Management and Information Systems Branch, has retired after 20 years of government service, 15 of which were spent in NIAID. She plans to spend more time with her family traveling and visiting ... **Luz Galito** recently ended her 35-year career with the federal government. She had worked as a cytotechnologist in the Laboratory of Pathology, NCI.

**Galito** plans on spending her retirement enjoying her family at her home in Clinton, Md. Her dream is to travel throughout the United States ... **Mattie Jackson**, chief of the mid- and senior-level recruitment section in NIH's Recruitment and Employee Benefits Branch, has retired after 31 years of federal service, 26 spent at NIH. She plans to travel, take courses in the guidance counseling field and visit with her grandchildren more often ... **Thomas A. Johnson**, deputy executive officer at NIDDK for the past 11 years, has traded in his desk for a fishing boat. He retired recently after 36 years of federal service. In 1967, he joined NIH as a personnel management specialist in the Clinical Center's Personnel Management Branch. He remained at the CC for 16 years, serving as personnel officer, administrative officer, and hospital administrator. He came to NIDDK in 1983 as deputy executive officer. Johnson plans to devote more time to boating and working with the Coast Guard Auxiliary, a group that educates the public about boating safety and safety patrols ... **Dr. Igor Klatzo**, a senior scientist in the NINDS Stroke Branch, recently retired ending a 38-year career of service in the NIH community. He began his NINDS career in 1956 as head of the clinical neuropathology section of the Surgical Neurology Branch. Since then he has held many positions within the institute including chief of the Laboratory of Neuropathology and Neuroanatomical Sciences, and senior scientist and head of the section of cerebrovascular pathophysiology in the Stroke Branch. During his distinguished career, he did extensive work in the areas of blood-brain barrier disruption, edema, and other pathophysiologic mechanisms associated with ischemic or traumatic injury to the brain. Klatzo plans to continue his research interests through collaborative research projects. His immediate retirement plans, however, including traveling to Florida in his newly purchased state-of-the-art mobile home ... **Nat Lindsey**, who was the small and disadvantaged business utilization specialist for research and development programs at NIH's Division of Contracts and Grants, has retired after 35 years of federal service. Since 1964, when Lindsey began at NIH as a nursing assistant with the arthritis institute, his career has crossed from bedside to laboratory to office.

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In retirement, he plans to do some volunteering, traveling and consulting ... **Dr. George R. Martin**, scientific director of the National Institute on Aging, left in October 1994 to become the first employee of a new company in Palo Alto, Calif., conducting research on fibrotic diseases and wound healing. His NIH career began in 1958 when he came to work at the Heart Institute. In 1959, he joined the National Institute of Dental Research and worked there until becoming scientific director of NIA and head of the intramural program. He will continue to live in the Bethesda area while commuting to Palo Alto ... **Dr. Daniel R. Masys**, director of the National Library of Medicine's Lister Hill National Center for Biomedical Communications since 1986, retired from the Public Health Service Commissioned Corps in September to become director of biomedical informatics at the School of Medicine, University of California, San Diego ... **Dr. John A. McLachlan**, whose NIEHS career progressed from research associate to scientific director over the past 21 years, has retired to accept directorship of the Tulane-Xavier Center for Bioenvironmental Research and professor of pharmacology at Tulane University in New Orleans ... **Dr. Charles A. Miller** retired recently after 35 years of government service, 33 of which he spent with the National Institute of General Medical Sciences and its predecessor. At the time of his retirement, he was director of the institute's Cellular and Molecular Basis of Disease Program Branch ... **Dr. Laurence H. Miller**, the first director of an extramural skin diseases program at NIH, recently retired after 30 years of government service. At the time of his retirement, he was a special advisor for skin diseases at NIAMS. He first joined NIH in 1966 as the Dermatology Program director and served in that capacity until 1982, when he became a special advisor to NIAMS. Miller will continue with his active clinical practice in dermatology and his commitment to the voluntary organizations devoted to skin diseases research ... **Gary Payne**, a computer equipment specialist in the Standards and Specifications Branch, OA, retired recently after 33 years in government. He came to NIH in 1968 as a medical equipment repairer in the Biomedical Engineering and Instrumentation Program. He spent 10 years in this position before transferring to

the Standards and Specifications Branch in 1978. Payne has been an avid bowler all of his adult life, and plans to do more bowling after retirement ... **Dr. Ann Schluenderberg**, chief of the Virology Branch in NIAID's Division of Microbiology and Infectious Diseases, has retired after 15 years of federal service. She served as branch chief since 1990. Throughout her scientific career, she lived a triple life. She is an amateur artist and musician. During retirement, she will pursue all of her artistic endeavors, sail and travel with her husband ... **Joan Shariat** of OD's Office of Communications recently retired from NIH after 33 years of service. She came full circle by starting and ending her career in the information office ... **Dr. Lawrence Shulman** has retired as director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases. He joined NIH in 1976 as associate director for arthritis, musculoskeletal and skin diseases of the then National Institute of Arthritis, Metabolism, and Digestive Diseases to create and implement the programs recommended by the National Arthritis Act and in the "Arthritis Plan." In 1983 he was appointed director of the Division of Arthritis, Musculoskeletal and Skin Diseases. He was named the institute's first director in January 1987. He plans to stay at the institute in an emeritus capacity to continue his personal research and will work with Dr. Harold Varmus as a senior science advisor. **Dr. Michael Lockshin**, director of the NIAMS Extramural Program since 1989, has been named acting director ... **Dr. Edward Steers, Jr.**, after 31 years with NIDDK as researcher and deputy director of the Division of Intramural Research, has retired. A prolific writer and researcher on the Civil War era, Steers plans to become a fulltime historian and author.

#### DEATHS

**Steven Adelberg**, 43, a biomedical researcher who specialized in molecular cell biology at NCI for the past 15 years, died Oct. 2 at home in Silver Spring. He was part of the team that discovered a gene that may show the link between smoking and lung cancer. The group discovered that a particular gene could produce a protein that turned chemicals contained in cigarette smoke into cancer-causing substances ... **Doralee Agayoff**, NLM senior reference

librarian and an employee of the library for nearly five decades, died on Dec. 28 after a long illness. She entered government service on Apr. 23, 1946, when she joined the staff of the Army Medical Library located in downtown Washington, D. C. In 1962, the library changed its name to NLM and relocated to its present site in Bethesda. Her 48-year career with the library was spent in the collection access section ... **Emma Louise Akers** died July 16 in Gaithersburg. She was the financial management officer in the National Institute of General Medical Sciences ... **Dr. David Axelrod**, 59, died July 4 in Cohoes, New York, of respiratory failure. He was commissioner of health in New York State from 1979 until 1991, when he had to retire because of a severe stroke. As commissioner he was the most influential member of Gov. Cuomo's cabinet. He was responsible for establishing innovative models in hospital regulation, AIDS, and antismoking legislation. He was at NIH in the Laboratory of Biology of Viruses, NIAID, from 1962 to 1965 and then a virologist at NIH from 1965 to 1968 ... **Dorothy L. Barteman**, 78, a retired administrative assistant with the National Cancer Institute, died July 21 at Suburban Hospital after a stroke. She worked for NCI from 1962 until retiring in 1977 ... **John A. Beglin**, a retired accountant who worked for NIH from 1950 to 1969, died June 30, at Johns Hopkins University Hospital. He came to NIH from the PHS Hospital in Baltimore, where he had been a fiscal and budget officer. His first job at NIH was chief accountant for the Financial Management Branch. In 1958, he joined the Management Policy Branch, OD, NIH. He was instrumental in designing the automated payroll for NIH. He served on the steering committee that recommended the direction NIH's data processing functions should take, and prepared the groundwork for the establishment of DCRT, where he worked as a special assistant to the division chief for automatic data processing policy ... **Dr. Edgar Andrew Bering, Jr.**, 77, who was associate director of the National Institute of Neurological Diseases and Blindness and a pediatric neurologist, died Aug. 11 at his summer home in Islesboro, Maine ... **Dr. Le Thi Bich-Thuy**, 42, who worked at NIH as a research fellow in molecular biology in the late 1980's, was murdered outside her home in Rockville on Oct. 3. In January 1993, Thuy joined the

Children's Research Institute at Children's Hospital where she worked on pediatric pulmonary medicine research. She was also on the faculty of the department of pediatrics at George Washington University Medical Center. The murder is still under investigation ... **Clarence E. Black**, 66, a maintenance supervisor at NIH who retired in 1989 after 31 years of federal service, was murdered in Washington, D.C., on Sept. 26. He was a "courtesy driver" who helped people in his neighborhood when they needed a ride for shopping. He was slain while sitting in the driver's seat of his car after dropping off a shopper ... **Rose D. Calisto**, 80, a former nurse at NIH, died Oct. 8, in Silver Spring ... **Dr. Thomas S. Cantrell**, 55, died after a long illness on Apr. 8, 1994. He was an associate professor of chemistry at American University. Cantrell, who spent a year at NIH in 1970, then joined the faculty at American University where he taught organic chemistry at the graduate and undergraduate levels ... **Mary L. Cochran**, 79, who was employed as a stenographer at NIH in the 1950's, died of emphysema Oct. 26 at Holy Cross Hospital ... **Walter Bevil Coleman**, 68, a psychiatric social worker who worked at NIMH from 1972 until 1984, died Jan. 2 at Shady Grove Adventist Hospital of complications from diabetes ... **Bessie M. Corbin**, 83, a personnel clerk who worked at NIH from 1950 to 1965, died of a heart attack Sept. 25 at Washington Adventist Hospital ... **Frank Curtis**, 75, who retired as chief transportation officer at NIH after 30 years of federal service, died Oct. 4 in the R. Adam Cowley Shock Trauma Center in Baltimore from injuries received in an auto accident ... **Sara Hibbs Darter**, 83, a grants reviewer at NIH in the 1950's, died of cardiopulmonary arrest Oct. 13 at Suburban Hospital ... **Dr. W. Palmer Dearing**, 89, a former deputy U.S. surgeon general, died Oct. 15 of cancer at Sibley Memorial Hospital. He worked with NIH officials during his tenure ... **Dr. Margaret Edwards**, 79, a pioneer in cancer education who was at NCI from 1965 to 1982, was found dead in her home in Seattle on Sept. 10 ... **Dr. Kenneth F. Finger**, 65, associate vice president for health affairs at the University of Florida Health Science Center, died July 11 at Shands Hospital following coronary bypass surgery. Early in his career from 1957 to 1959, Finger was a guest worker at the National Heart Institute's Laboratory of Chemical Pharmacology.

After leaving NIH, Finger had a distinguished career not only professionally at the University of Florida Health Science Center, but also as an humanitarian and community leader in the south Florida region ... **Dr. Norman F. Gerrie**, 87, a Public Health Service officer who was a dentist, died Oct. 3 of a heart attack at Bethesda Naval Hospital. Gerrie served as chief of the division of dental public health and retired as a grant review official at NICHD ... **Irving Gerring**, a former health science administrator with the Division of Research Grants, died July 26 of kidney failure. He came to NIH in 1947 when he was appointed as a health science administrator in the newly created Division of Research Grants. During his 25 years there, he served as a science administrator and executive secretary to several study sections. Among his study section assignments were the environmental sciences, particularly in the water pollution, air pollution and occupational health areas. Other sections in which he served as executive secretary were parasitology; radiology; public health research involving medical care, nursing and epidemiology; biostatistics and biomathematics; nutrition; and population research. He also served as an executive secretary in the U.S.-Japan Medical Cooperative Research Program. He retired in 1977 ... **Sophia H. Grabinski**, a retired laboratory technician at NIH, died Dec. 24 at her home in Bethesda ... **Dr. Bernard T. Kaufman**, 66, a retired biochemist who was an expert on folic acid, died of cancer Nov. 19 at his home in Potomac. He joined NIH in 1960 and retired in 1993 as chief of the section on nutritional biology in the Laboratory of Cellular and Developmental Biology, NIDDK. His work focused on the functions and enzyme pathway of folic acid. With a colleague, he developed a technique called affinity chromatography to isolate an enzyme, dihydrofolate reductase, that activates folic acid in the body. His later work characterized the structure of this enzyme and the way it behaves in the body ... **John F. Kuster**, 68, who worked for NIH for 40 years, died Oct. 9 in Montgomery General Hospital in Olney ... **Dr. Elliot Liebow**, 69, an anthropologist and sociologist who wrote about the lives of black men in the inner city, died of cancer Sept. 4 at Holy Cross Hospital. He worked for 25 years for NIMH at the mental health study center in Prince George's County and later as chief

of the Center for the Study of Work and Mental Health at NIMH. He retired in 1984 and began research for a book that was published in 1993. "Tell Them Who I Am," focused on women who lived in shelters in the Washington area ... **Dr. Orlando Wesley McBride**, 61, a geneticist who was chief of the cellular regulation section of NCI's Laboratory of Biochemistry, died Aug. 28 at Suburban Hospital after a heart attack. In 1960, he joined the U.S. Public Health Service and began his career as a research scientist at NCI. He was the author of 134 articles on genetics and cell biology ... **Dr. Orsell Montgomery Meredith**, 70, a research administrator specializing in grants review at the National Cancer Institute since 1975, died of pancreatic cancer Sept. 19 at his home in Vienna, Va. ... **Henry A. Miller**, 81, a retired statistical processing clerk with NIH, died Aug. 16 at Shady Grove Adventist Hospital after a stroke. In 1946 he went to work at NIH and retired in 1978 ... **Dr. Guy Newell**, 57, who served as deputy director of the National Cancer Institute from 1973 to 1979, died Nov. 12 after a long illness at a hospital in Houston. After leaving NCI he had worked for the University of Texas M.D. Anderson Cancer Center. A cancer epidemiologist, he was the center's associate vice president for cancer prevention. In the mid-1960's he spent two years at NCI as a research planning associate. He returned to NCI in 1973. At NCI, he served as deputy director and as liaison between NCI and the U.S. Food and Drug Administration for the national study of saccharin as a possible cause of bladder cancer and coordinated NCI's Diet, Nutrition and Cancer program. He also served as acting director of NCI for a 10-month period in 1976-77 ... **Barbara J. Odle**, 41, a contracts clerk in NCI's Contracts Review Branch, died July 11 at Suburban Hospital of a cardiac arrest ... **Dr. Betty A. Peters**, 34, a former research associate in NIDDK's Laboratory of Chemical Biology, died on Sept. 11. She came to NIDDK in 1989 as an intramural research training award fellow. Her laboratory investigations focused on developmental globin gene expression and gene silencing research. In July 1994, she left NIH to continue her clinical training in gastroenterology at Georgetown University and was planning to return to NIDDK next year to begin a gastroenterology fellowship with

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the Digestive Diseases Branch ... **Lillian T. Platt**, 85, a retired grant administrative aide who worked at NIH from 1961 until she retired in 1976, died of cardiorespiratory failure Oct. 6 at Washington Adventist Hospital. She had been a violinist in the Chicago Women's Orchestra and at NIH had served as a concert matron in the NIH employees' symphony ... **Mary K. Povich**, 82, a retired government executive secretary who had lived in the Washington area since 1915, died of pancreatic cancer Jan. 27 at the Washington Hospice. From 1960 to 1975, she worked for the National Institute of Mental Health ... **Charles Estee Sartor, Sr.**, a long-time NINDS employee, died after an accident during a fishing trip. A native of Washington, D.C., he had retired from the federal government in September with more than 36 years of service. For almost 30 years, Sartor worked in the Surgical Neurology Branch where he held a variety of positions including operating room technician in the Clinical Center and laboratory technician specializing in animal surgery in Bldg. 9. In 1989, he became a photo lab technician in the NINDS Electron Microscopy Facility, a position he held until his retirement ... **Dr. Julius Segal**, 69, a psychologist and author who was director of the Office of Scientific Information at the National Institute of Mental Health for 12 years, died of cancer on Sept. 26 at his home in Bethesda. He was an expert on the trauma faced by prisoners of war and hostages. In 1959, he joined NIMH as chief of program analysis and then became the information director in 1974 and retired in 1986. Following his retirement, he continued to write and research and taught at the University of Maryland and Montgomery College ... **Dr. Richard Barton Simpson**, 75, a retired physical chemist at NIH who specialized in hemoglobin and other macromolecules, died of cancer Oct. 11 at his home in Bethesda. In 1952, he joined NIH and worked at the National Institute of Arthritis, Metabolism and Digestive Diseases. He retired in 1984 ... **Pauline B. Spaulding**, 78, who worked for the government 32 years before retiring in 1974 as a social science analyst with NIMH, died of a heart ailment June 25 at Arcola nursing home in Silver Spring ... **Dr. William A. Thompson, Jr.**, 55, a psychiatrist who was killed when his single-engine plane crashed Sept. 17 after hitting a power line near

Barstow, Md., was on the staff of the Lorton Correctional Complex. He served in the Public Health Service at NIH in the 1970's ... **Dr. Frank H. Tyler**, 78, one of the founding fathers of the University of Utah School of Medicine, died Sept. 7 of pancreatic cancer. A world-renowned specialist in endocrine and metabolic disorders, especially muscular dystrophy and other neuromuscular diseases, he was chief clinician on the first extramural research awarded to a university by NIH. Funding for the study of metabolic and hereditary disorders began in 1946 and was renewed annually for 33 years ... **Dr. George Zur Williams**,



**Dr. George Zur Williams, founder and first chief of the CC Clinical Pathology Department, died Nov. 22.**

87, founder and first chief of the Clinical Center's Clinical Pathology Department in the early 1950's, died Nov. 22 at his home in Tiburon, Calif., after a short illness. He came to NIH in 1953 to plan and establish the research in the newly built CC. His goal was to put into place a lab with the highest accuracy, precision and sensitivity. He also initiated the development, control, and automation of laboratory technology. The lab set the national standards for computerization and automation in the lab setting. His personal research focused on cancer cytology. His lab developed and tested the first method of apheresis for separation of white blood cells for treating leukemia. After leaving NIH in 1969, Williams moved to San Francisco where he established a

new institute of health research in the Medical Research Institute of the Pacific Medical Center ... **Dr. Ralph W. G. Wyckoff**, 97, a research scientist who worked in electron microscopy and crystallography, died Nov. 3 of bone cancer at a nursing home in Tucson, Ariz. He came to NIH in 1945 as chief of the section of molecular biophysics. At the annual meeting of the American Association for the Advancement of Science in Cleveland in 1950, Wyckoff introduced a new world of living matter revealed for the first time by the electron microscope, displaying photographs of viruses and molecular particles two-tenths of a millionth of a centimeter. While at NIH, Wyckoff was primarily concerned with investigations of the whole structure of cells and intracellular organisms, and with the fine structure of material composing cells. His many research achievements included the development of methods for photographing the exact arrangement of molecular particles in cell crystals, thus confirming geometrical theories of structure. In 1959, he left NIH to become professor of bacteriology and physics at the University of Arizona ... **Dorothy Hays Woods**, 81, a management analyst who retired in 1976 after 18 years at NIH, died June 30 at Fairfax Hospital. She had Parkinson's disease ... **Dr. J. Franklin Yeager**, 95, who retired in 1966 as associate director of extramural programs at the National Heart Institute, died of a heart aneurysm Jan. 11 at his home in Houston. In 1948, Yeager began at the heart institute as executive secretary in the research branch of the hematology and physiology section. He was one of the key figures in the development of the institute's research and training grants programs.

The NIH Alumni Association recently received contributions in memory of Drs. Ralph Knutti, Brigid Leventhal, James A. Shannon and Sheldon M. Wolff.

## A Tribute to Mary Woodard Lasker

By Terry Lierman

*Editor's note: On Feb. 21, 1994, Mary Woodard Lasker died. She was a member and supporter of the NIH Alumni Association. Terry Lierman, a member of the NIHAA board of directors, gave the following tribute to Mrs. Lasker at the NEI's 25th anniversary celebration.*

Sen. Warren Magnuson, my first mentor, introduced me to Mary Lasker, and it was love at first sight. Mary was born in Watertown, Wisconsin, in 1900. I was born 30 miles from there but a little later. She went to the University of Wisconsin, my alma mater. She helped to launch the modern NIH, site of my first job. She worked the halls of Congress, and they are where I worked, too. Literally up to the day of her death.

Mary urged more effort and faster progress in medical research. She had a wonderful sense of urgency; she understood that people were dying and suffering.

Her last passion was the Harkin/Hatfield Research Fund for Medical Research. In her last telephone call to me, she spoke in a whisper, but urgency—like always—came through: How was it going? What were the chances? What could she do to help?

At NIH sits a beautiful building named the "Mary Woodard Lasker Center for Health Research and Education." When I first told her that Sen. Kennedy and Hatfield, Speaker O'Neill, and Chairman Pepper were naming this facility in her honor, she initially became angry. She said that she did not deserve the credit, that the Congress deserved the credit. Over her protest the Lasker Center was created, and she was very, very proud of it. She even purchased pictures for the inside and worried that the outside wouldn't have

enough flowers. Go there and walk through the interior gardens, and you will feel the inspiration of Mary, who loved the beauty of flowers as a manifestation of her love for life. To that end, she also has 10,000 azaleas planted in Washington, D.C.; 900 cherry trees around the Tidal Basin; and one million daffodils planted in Rock Creek Park. She also created many other gardens and, with Lady Bird Johnson, sponsored hundreds of planting projects along our nation's highways.



Mary Lasker influenced her husband Albert, who in the early 1940's controlled massive amounts of advertising on radio, to get CBS to say the taboo word "cancer" on a program called "Fibber McGee and Molly." This led to a flood of mail sent to a fledgling group called the American Cancer Society (ACS), and Mary hired people to open the mail and count the checks. So many arrived that the ACS was propelled to national prominence. She would later use a similar technique with Eppie Lederer/Ann Landers to get the National Cancer Act passed over the initial objections of President Nixon. Full page ads in major newspapers with four-inch bold type said simply: MR. NIXON YOU CAN CURE CANCER.

Mary Lasker was very much involved in a list of medical research accomplishments. In 1948 she established the Lasker Awards, which recognize basic and clinical research and public service. Fifty-two Lasker winners have gone on to win Nobel Prizes. She was very frustrated with scientists who did not want to involve themselves in politics and thought that medical research funding would happen automatically because it was the right thing

to do. Mary would say, "As a citizen, it's my money, so I have a right to help determine how it is spent." She was a model citizen. Like Alexis de Tocqueville, Mary understood that democracy does not work unless citizens make it work. Mary viewed advocacy for medical research as a right of the public, and she exercised it with a passion.

As can other rare people with vision, Mary could always look farther than she could see. She was often heard to say, "I am opposed to heart attacks, and cancer, and strokes the way I am opposed to sin." Her vision firmed her resolve in persuading others to find the cause of disease, not just to treat the symptoms. In the only speech I ever heard her give—because she shunned the limelight—she voiced hope that "the fruits of our labors throughout the years will alleviate pain where there is suffering and will provide the freedom to live in health so that we can fulfill our promise, pursue happiness, and provide hope where none existed before."

Her life will be judged not by her wealth or her love for beauty, but by the beauty and wealth that she instilled in every life she touched through medical research. Those of us who have met her, have seen her beauty and have been touched by her life will revel in her memory and be driven by her passion. The fruits of Mary Lasker's efforts and commitment to improve humankind are all around us. They live in each of us, so they truly will be timeless. Our efforts to cure disease and conquer disability will be judged by Mary's standards, which have been engraved in our minds and hearts. Our nation owes much gratitude to Mary Woodard Lasker—a woman whose mind rebelled against needless suffering and whose heart responded to a worthy cause. Her legacy is a living vibrant message of hope to millions afflicted with disease and disability.

## In Memoriam: James A. Shannon, 1904-1994

The following quotes are taken from the series of eulogies delivered by associates and family at a memorial service in honor of Dr. James A. Shannon held on Sept. 23, 1994, in Wilson Hall, Shannon Bldg.

"Although we never met, Jim Shannon had a powerful effect on my life. He created the intellectual environment in which I learned to be a scientist, and he stimulated the adolescent growth of the mature organization I am trying to run. Two months after I arrived here as a clinical associate in 1968, he retired as director of NIH, after thirteen years and one month of service. And a few months after I became director in November 1993, he died at the age of 89. Nevertheless, chance recently brought us together in an unusual way."

Varmus then quoted from an interview conducted with Shannon on Dec. 18, 1965, (Varmus's 26th birthday) by Daniel Greenberg, now editor of *Science and Government Report*.

**On the response of academic investigators to the growth of NIH in the mid-50's:**

"By this time you had a Heart Institute, you had a Mental Health Institute and a Dental Institute and Cancer Institute. And the specter of targeted programs of a high developmental nature scared the bejeebers out of the universities .... There was the concern that if federal funds were available by a political process, towards certain specified end objectives, that it would be impossible to develop a program that was truly in support of academic science ..."

**On the need for doing basic science in the name of disease-oriented research or technical applications:**

"We're very frank in discussing this with the Congress. And this is why I say I'm on very firm ground if I object to the development of an artificial

heart. The technical base isn't there. It's possible to quote chapter and verse as to the deficiencies ...there must be a very broad understanding of the life sciences out of which will come knowledge that warrants development..."

**Finally, after ten years as director, on the attitude of scientists towards their sources of funding:**

"Scientists in general are interested in what they do in their laboratories; as long as somebody supports them, they don't really care who, so long as support comes to them, in the terms and conditions to satisfy them. They take it as a right and privilege to be supported, and it's somebody else's problem."

**Dr. Harold Varmus**  
NIH director

"The Shannon era began in 1949 when he was recruited to create the intramural research program of the brand-new National Heart Institute. Within three years he was placed in charge of all intramural research at NIH. When he was elevated to director in 1955, one of his first tasks was to cope with a move to sever intramural from extramural NIH. As this threat was overcome he then found himself at the headwaters of a flood of federal funds and ambitions for health science generated mainly by the Congress. He wisely and skillfully directed the flow to create a system for conduct and support of biomedical science that became the envy of the world. Every American university and most nonprofit research institutions benefitted and many were structurally transformed during this

period. At the same time intramural NIH received the indelible mark of Shannon's craftsmanship in placing a government laboratory in the main stream of academic science, permitting unfettered intellectual endeavor to serve high public purposes."

**Dr. Donald S. Fredrickson**  
Former NIH director

"I have limited myself to Jim's contributions before coming to NIH. However, I cannot close without saying how much of a debt I owe to Jim for teaching me a great deal about how research should be done. Even more we all owe Jim a great debt for making American biomedical research what it is today in providing opportunities for so many to make what contributions their ability makes possible."

**Dr. Robert Berliner**  
First NIH deputy director for science and intramural scientist

"Dr. Shannon died just a little more than a quarter of a century after retiring as NIH director. Contrary to Shakespeare's insight, eloquently voiced in Mark Anthony's stirring eulogy of Julius Caesar, the good that Shannon did will not be interred with his bones but will be celebrated as long as historians explore and record the origins of modern biology and medicine. His unshakable faith in the power of science to transform medicine into an instrument of inexhaustible potential for improving human health and for

eliminating disease, disability and premature death, coupled with his acute insight that only the federal government had pockets deep enough to make his faith a reality led him to jettison a lucrative and exciting position in industry and to accept a modest offer of federal employment. Once ensconced, he set about the task of bending the federal government to his persuasion with extraordinary skill, dedication, single-mindedness and, above all else, success.”

**Dr. Thomas J. Kennedy, Jr.**  
President, NIH Alumni  
Association

**Dr. Sidney Udenfriend** described how Shannon influenced his early career by dropping into his laboratory and suggesting research that set him on a lifelong pursuit. At the end of his

tribute, he read a letter from Dr. Julius Axelrod who was unable to attend the memorial service. Axelrod recalled that after a dinner in New York for the Weizmann Institute, Bernhard Witkop, Axelrod and Udenfriend were reminiscing about the early days at NIH and how it grew into such a great institution. “We agreed that it was the vision of Dr. Shannon that was mainly responsible for making NIH one of the great biomedical institutions in the world. We all owed him a debt of gratitude. We also thought that the memory of Dr. Shannon and what he accomplished was slipping away and something should be done about it. We agreed that a building on the NIH campus named for him would be a proper memorial. We then discussed this with Jim Wyngaarden, then NIH director, and he agreed that it was a good idea.

Soon after that Bldg. 1 was named ‘The James A. Shannon Building.’”

“Over the twenty years that I spent with him since he left NIH and he came out to the west coast to live near me, two things that he considered to be the most important in his life were the fact that (1) he met my mother and (2) that he had the opportunity to come to NIH at a time when he clearly needed it and it needed him. He had a great deal of appreciation for all the people who worked ‘with him’—I don’t think that he ever used the words ‘for him’—it was worked ‘with him,’ to bring what he wanted to happen to the medical environment of the United States.”

**Dr. Alice Shannon-Stolzberg**  
Daughter of Dr. Shannon



The NIH director's staff in March 1968—around the table are (from l) Dr. James A. Shannon, Dr. G. Burroughs Mider, Richard Seggel, Joseph Murtaugh, Dr. Eugene A. Confrey, Dr. Stuart Sessoms, Dr. Jack Masur, Dr. Robert Q. Marston and Dr. John Sherman.

*Call to Arms (continued from p. 5)*

(e.g., personnel management, procurement, etc.) is possible, the whole exercise seems otherwise to be the application of a drastic solution to an almost non-existent problem. As a result, an exceptionally fine research endeavor is in the process of being seriously compromised, apparently almost mindlessly, capriciously and incidentally, as a result of having become entrapped in an irresistible set of forces and dicta designed to correct problems that do not characterize intramural research or the scientific administration of extramural research.

In my view, the overarching concepts within which the problems raised for NIH by reinvention must be framed are that:

- A vast array of difficult to intractable problems, inimicable to human health—some known, others waiting in ambush—will, in the normal course of events, continue to take a tragic toll on existing populations and on future generations.

- The only way to ameliorate these fateful inevitabilities is research, a process that is difficult, intellectually demanding, often slow in achieving results, replete with enticing lures that end in blind alleys, and costly. Unfortunately, it is also the only imaginable and historically proven route to the improvement of human health.

The times and circumstances may argue that the rate of growth of research investments be slowed, but it should never be cut, as is happening now! Worse, the best is being cut first. My message, as you must surely have guessed by now, is to urge you not to sit idly by but to protest—to your congressional delegation, to the President and the Vice President, to the Secretary, DHHS, to the directors of the OMB (Dr. Alice Rivlin) and of the OSTP (Dr. John H. Gibbons). Encour-

age the leadership of your institutions and the officers of your scientific societies to join in protest to the wanton and senseless destruction of a magnificent biomedical research institution.

Wherever well informed people may stand on the political spectrum, whether they be true believers in the power of government to solve societal problems or confirmed skeptics committed to severe limitation on the role of government in human affairs, whether they be conservative Republicans or liberal Democrats, whether they base their views on scientific knowledge and experience or on the educated judgments of enlightened citizens, there is one conviction from which there is virtually no dissent: NIH, intramurally and extramurally, is one creation of government in which every American can take immense pride.

**Intramural NIH Science: A Quality Enterprise**

My assertion that intramural NIH is top notch is not just the chauvinism of a superannuated alumnus; it is a reality beyond cavil or dispute. Let me cite only two lines of evidence based on as objective measures of quality as are available: membership in the most prestigious and selective society that honors scientific achievement in the United States, the National Academy of Sciences (NAS); and bibliometric data, reflecting the acknowledgement that scientists accord predecessor scientists by citing earlier publications as the groundwork that facilitated discovery of the advances they themselves are currently reporting in new publications.

First, the distribution of NAS memberships among universities, government agencies, industrial organizations and other entities:

- As of July 1, 1994, 1,702 of the academy's members were active, 82

were emeritus and 298 were foreign associates. Membership is overwhelmingly academic, with very modest representation from independent research institutes, government science agencies and industry. NIH, with 51 members, ranks 7th in the country, trailing only Harvard (142, if the Harvard-Smithsonian Center for Astrophysics is included), the University of California at Berkeley (110), Stanford (106), MIT (99), the California Institute of Technology (60) and Yale (56). NIH, of course, is a biomedical research institution; there are many fields of physical, mathematical, agricultural, social and political science that are almost entirely outside its ambit of concern, mission and responsibility, and which are not represented on its staff, except incidentally. Table 1<sup>1</sup> shows that in the subset of sciences central to NIH's mission, its rank order is considerably better than 7th. The edge enjoyed by NIH over most of the very distinguished academic institutions ranking below it in total membership—the University of California at San Diego and the University of Chicago (45), Princeton (43), Cornell (38), the University of Wisconsin (35), the University of Pennsylvania (33), the University of Washington (31), the University of Illinois (28), Columbia University and the University of California at Los Angeles (27), the Rockefeller University and the Bell Laboratories, (24), Johns Hopkins University (19), the University of Michigan (17), the University of Minnesota (16), Duke University and

<sup>1</sup>The distribution of members, by section, from the several institutions in this table was obtained by a tedious hand-sort, comparing two divisions of the NAS's Members Directory. In a few instances, the totals for an institution differ from the actual totals by 1 or 2. These tabulating errors, in my opinion, do not invalidate the conclusions.



the University of California at San Francisco (15), New York University and Washington University (14), and the University of Texas, Southwestern (11)—would be even more impressive were the comparison to be based solely on the number of members from the biological and medical sciences. The number of staff members elected to the NAS from NIH exceeds the total (20) from all other federal agencies<sup>2</sup>: the Dept. of Veterans Affairs, 3; the NIST,

2; the Naval Research Laboratory, 4; the USDA, 2; the U.S. Geological Survey, 4; U.S. Naval Postgraduate School, the NOAA, the DHHS, the Council of Economic Advisors and the

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<sup>2</sup>The 21 NAS members from FFRDCs (Federally Funded Research and Development Centers)—Argonne, Brookhaven, Fermilab, Jet Propulsion, Lawrence-Livermore, Lincoln, Oak Ridge, National Radio Astronomy and Sandia — have been excluded from this enumeration, since they are not federal employees.

U.S. Forest Service, 1 each. In fairness, it should be noted that there are 45 members of the National Academy of Engineering (NAE) from the federal agencies<sup>3</sup>: Agriculture, 3; Commerce, including NIST, 7; Defense, 1; Army, 5; Air Force, 2; Navy, 5; Educ., 1; Energy, 5; Interior, 2; EPA, 1; OSTP, 1;

*(Continued on p. 34)*

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<sup>3</sup> Again, the 30 members of the NAE from the FFRDCs have been excluded, for reasons I believe proper.

**Table I**  
**NATIONAL ACADEMY OF SCIENCES MEMBERSHIP**  
**BY SECTION AND INSTITUTION**

FIELDS OF SCIENCE	Harvard	U. C. Berkeley	Stanford	M. I. T.	Cal. Inst. Technol.	Yale	N. I. H.
Mathematical and Physical Sciences (Section 11-15)	47	49	33	40	38	18	2
Applied Physical and Engineering Sciences (Section 31-33)	12	12	20	18	8	2	0
Anthropology and Psychology (Section 51-52)	8	11	10	5	0	9	2
Social, Political, and Economic Sciences (Section 53-54)	16	7	9	5	1	4	1
Applied Biological and Agricultural Sciences (Section 61-62)	2	5	0	3	8	0	0
<b>SUBTOTAL: Non-Biological Sciences</b>	<b>79</b>	<b>64</b>	<b>72</b>	<b>71</b>	<b>47</b>	<b>33</b>	<b>5</b>
Biological Sciences (Section 21-27)	44	24	29	20	13	10	22
Medical Sciences (Section 41-43)	21	2	4	5	0	5	23
<b>SUBTOTAL: Biomedical Sciences</b>	<b>63</b>	<b>26</b>	<b>33</b>	<b>25</b>	<b>13</b>	<b>15</b>	<b>45</b>
<b>TOTAL</b>	<b>144</b>	<b>110</b>	<b>105</b>	<b>96</b>	<b>60</b>	<b>56</b>	<b>50</b>

(Continued from p. 33)

and NASA, 12.

• NIH has had, for the most part, to home-grow its NAS members. By the time outsiders have attained the distinction that warrants election to the academy, they are usually well beyond NIH's price range for salary, benefits and "perks". NIH has only infrequently been able to recruit mid-career and senior scientists of NAS calibre from the outside; notable recent examples are Francis Collins and Harold Varmus. On the other hand, many outstanding young, mid-career and senior NIH scientists, who either have been, or are about to be, elected to the academy, have been recruited to academic institutions or industry and are liberally represented in the latter's delegations of NAS members.

Over the last 30 years, the value of bibliometric evidence for measuring the quality of science has become well established, its limitations recognized and defined and the high degree of correlation between it and peer judgement demonstrated. What does it have to say about intramural NIH?

• The most recent sophisticated study, commissioned—and substantially incorporated into its final report—by the Institute of Medicine committee to study strategies to strengthen the scientific excellence of the National Institutes of Health Intramural Research Program, chaired by Harold Shapiro, the president of Princeton University, was prepared by Dr. Helen H. Gee in 1988. The Gee study included papers published from 1973 to 1984 in a set of basic and clinical science journals, recognized to be central to biomedical research by the Science Citation Index, the NLM, NIH and the NSF and authored either by the sector of intramural scientists or by the sector of authors who indicated a university or a medical school as their base of opera-

tions. Her analysis compared trends, over the epoch, in measures such as the total number of publications, the "presence" of each sector of authors in the arena under consideration, the number of citations per paper, the average influence per paper—a weighting adjustment reflecting citation patterns and practices in specific fields—and the percentage of papers from the sector that appeared in the decile of most frequently cited papers. Comparisons were made for: two large aggregate fields, clinical medicine and biomedical research; 44 subfields; and a broad class, "general biomedical research,"

defined as papers of the ilk traditionally published in journals such as *Science*, *Nature*, *PNAS*, etc. Gee outlines the patterns of change—growth or stability or decline in publications, citations or influence, by field—that have occurred over the epoch. Despite the ups and downs described in the Gee analysis, the IOM committee—relying mostly on this data—concluded that "the intramural program, overall, demonstrated a high level of performance when compared to the general academic community."

But to me, the startling observation was that, in the three periods of time

Table II

**NIH INTRAMURAL PROGRAMS  
& U. S. COLLEGES AND UNIVERSITIES  
PUBLICATION RECORDS 1973-1984**

Research Area	No. Papers	% U. S. Papers in Subj.	Citations Per Paper	C.P.P. Intra Extra	% Papers Among Top 10%	Avg. Influence
<b>CLINICAL MEDICINE</b>						
<b>Intramural NIH</b>						
1973-76	4258	3.2	33.4	1.9	24.1	32.2
1977-80	5396	3.2	21.8	1.9	23.4	30.2
1981-84	5770	3.0	10.6	2.0	24.9	30.2
<b>Univ/Med Schools</b>						
1973-76	86958	64.8	17.5		10.3	20.3
1977-80	112174	66.4	11.7		10.2	19.3
1981-84	129893	68.4	5.3		10.2	18.1
<b>BIOMEDICAL RESEARCH</b>						
<b>Intramural NIH</b>						
1973-76	2729	4.4	39.4	1.5	19.1	63.5
1977-80	3637	4.7	29.6	1.6	18.9	62.5
1981-84	3822	4.4	16.1	1.8	21.6	62.1
<b>Univ/Med Schools</b>						
1973-76	50379	77.0	26.0		10.0	47.7
1977-80	59420	77.5	18.6		9.7	47.5
1981-84	66473	77.4	8.8		10.0	45.7

studied, for the broad fields and for almost every subfield, the comparisons of the average influence of intramural vs. academic papers, and/or of the number of citations per intramural vs. per academic paper, and/or of the percentage of intramural vs. academic papers in the top decile indicated that the intramural sector consistently exceeded academic by a 40 - 90 percent margin (Table II).

Can it be argued that NIH superiority in this data set is due to the fact that the universe to which it is compared is so large and heterogeneous as to obscure the stature of distinguished academic institutions? I think not. For research to be conducted and published it must first be funded. Most academic biomedical research is funded—after rigorous peer review in a ferally competitive atmosphere—by NIH extramural programs; and most NIH money ends up in a relatively small number of research-intensive universities and medical schools. Thus, the Gee study has compared intramural research principally with the best of academic research and shown that intramural generally stood head and shoulders over its competitors through 1984. As of that date, intramural NIH was not just good. It was, arguably, the best.

• What has the record been since 1984? Nothing as elegant as the Gee study has been published but occasional reports out of the Institute for Scientific Information's *Science Watch* have appeared. The March 1994 issue reported that:

•• From 1981 to 1993, the 5-year average ratio of actual to expected citations for NIH papers, for all institutes in the aggregate, fluctuated from 29.69 percent above world average for the period 1981-85, to 31.05 percent (1984-88), 30.99 percent (1985-89), 30.12 percent (1986-90),

29.83 percent (1987-91), 25.89 percent (1988-92), and 26.09 (1989-93);

•• Over the same epoch, the citation impact of NIH papers, relative to the U.S. biomedicine baseline, rose from 85.22 percent above the baseline to 88.05 percent above in 1985-89, and then fell to 75.00 percent above in 1989-93;

•• Intramural papers, though they make up only 2-3 percent of the total, constituted about 15 percent of the 300 most frequently cited papers, worldwide, each year from 1983-87 and about 10 percent from 1988-93 (in a much larger pool);

•• Of the 30 papers most frequently cited each year from 1981 to 1993 from the world literature, an average of 5 (range: 2-10) were from intramural research;

•• Of the 10 most frequently cited, an average of 1.6 (range: 0-3) were from intramural research.

Why *Science Watch* emphasizes that intramural NIH is "slipping" is puzzling, in the face of the fact that the changes in the degree of dominance over the epoch examined are not consistently unidirectional and the sheer increase in the denominator of research establishments, industrial and foreign, tend inevitably to reduce the relative dominance of the intramural effort. It still looks like "The Champ" to me.

On these two lines of evidence alone—NAS membership and bibliometrics—and without recourse to scads of additional supporting data—on Nobel, Lasker and other awards, on leadership positions held and discharged with distinction in hundreds of scientific societies, on the outstanding contributions made by NIH-trained post-doctoral students as well as by for-

mer NIH-employed scientists to the intellectual life of the nation's scientific community through service on faculties of top notch academic institutions and on staffs of leading industrial organizations—I rest my assertion that NIH is the finest biomedical research organization the world has ever seen. If some think this be hyperbole, let them present the data to support their assertion.

### **Creative Management: the Hallmark of NIH**

Perhaps the most extraordinary achievement—managerial, not scientific—of intramural NIH is to have been able, for almost half a century, to systematically and continuously overcome barriers to the attainment of excellence, barriers that are virtually nonexistent in private, non-government organizations and institutions but inescapably associated with in-house government operations. Government salaries and fringes are as a rule significantly below those in academic settings for comparable positions; the highest possible annual salary NIH can pay—and that to only a very, very few, with many years of service—is under \$150,000. Government personnel systems were designed to serve traditional government functions and to prevent politicization of public sector employment, not for recruiting, promoting, and retaining scientists. For example, permanent civil service status, embodying extraordinary assurances against dismissal, comes automatically and early, usually after one year of satisfactory service; postponing it, to permit more confident assessments of the creativity of candidate scientists, does violence to the most sacred canons of civil service personnel policy. The authority possessed by NIH for many years to designate selected young scientists as in "tenure tracks" and to

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*(Continued from p. 35)*

defer tenure status long enough to allow thorough appraisal, exists, to the best of my knowledge, nowhere else in all government and stands as tangible proof of herculean and successful efforts to adapt government personnel policies to serve the ruthless insistence that the culture of science places upon professional excellence. In government, "disposal" mechanisms for scientists deserted by their muse are few and winnowing "dead wood" is probably much more difficult than is the case in academe. Government procurement regulations, designed to minimize favoritism in the expenditure of public funds, can complicate and delay purchases of scientific instruments, supplies and equipment. At one time or another, mostly in the past, NIH employees have encountered problems with: the receipt of outside income of the sorts regularly earned by academicians; with participation in the morally obligatory duties that attend membership in scientific and professional societies, e.g., holding office, editing scientific journals, etc.; and with travel, particularly abroad, to scientific meetings. Retirement benefits are non-portable. A mid-career NIH scientist cannot take accrued retirement benefits to an academic or industrial position without serious financial penalty and, therefore, tends to be frozen in situ even when a move might be beneficial to the individual, to NIH, to the organization recruiting the employee, to science, and to the public good. Similarly, the necessity for a mid-career academic or industrial scientist to switch to a new retirement system upon entering government service has until very recently been a severe deterrent to hiring scientists from the outside; the Senior Biomedical Research Service, authorized for NIH in 1991, and recently implemented should provide some relief for this

problem.

For NIH to have reached its present level of excellence and to have maintained it for at least four decades in the face of obstacles such as those cited is both an astonishing feat and an enormous tribute to the institution's enduring capacity for creative management.

### **A "Call to Arms" for All Who Value Biomedical Research**

In issuing this "call to arms," I recognize that the response of the extramural community is not likely, at least initially, to be instant or enthusiastic. Sympathy for the plight of NIH intramural research is not, in my experience, a sentiment universally prevalent "out there." This seems to me to be regrettable, misguided, and potentially dangerous to the nation's biomedical research enterprise. What the two sectors share in common is far greater and more important than the differences between them and both are likely to prosper more if mutual respect, understanding and support characterize their relationships. Among the misperceptions of intramural NIH that I have encountered in the extramural community, several warrant mention.

One concept is that the only really suitable site for basic research is academe. The logical consequences of this persuasion are detectable in every one of the many external examinations of the intramural research program that has ever been undertaken, usually articulated as a recommendation that intramural NIH focus its energies on some mission or expand into some empty niche (e.g., "long-range research" or "high-risk research") that is different from that traditionally conducted in academic institutions but peculiarly appropriate to its unique institutional form as a government research labora-

tory. The fact is that, in general, intramural NIH conducts—with notable success—precisely the same types of research performed in academe, in other non-government non-academic institutions, and, to some extent, in industry. Given the workplace environment that inevitably keeps their employer's categorical missions "front and center," intramural scientists may be more keenly aware of, and more responsive to, the health goals of the agency. But basically, the nature of most of the science pursued is identical, whether conducted in academe or in Bethesda. Many world class scientists simply prefer to devote themselves to full-time research in a government laboratory, free of routine undergraduate and graduate student teaching responsibilities and of the need to apply periodically and competitively for research grant support, even if the trade-off for this life-style requires putting up with certain inconveniences and sacrifices inherent in federal government employment.

Another idea I've heard articulated by academicians is that, were intramural NIH to be abolished, the money expended for Bethesda activities would wind up in the extramural community. This is probably illusory. Firstly, there can be no assurance, at least in these politically turbulent times, that the savings accruing from downsizing or even abolishing intramural NIH would remain in research (vis-a-vis being dedicated to debt reduction, middle class tax relief, Medicaid, crime prevention, etc.). But whether or not the total resources available for research were to shrink, abolition of intramural NIH would indubitably drive many of its first class investigators to academia, where they would almost certainly compete successfully for funds appropriated for extramural research; in fact,

they might be competitive enough to take funds away from established academic grantees. The mid-level and senior scientists of my acquaintance that have left NIH in the last decade are not only surviving but thriving in academe and industry. The proposition that the research resources available to the current denizens of the academic community would be improved by the dissolution or constriction of intramural NIH strikes me as an extremely tenuous proposition.

A not infrequently heard recommendation that intramural research expenditures be capped at their current share, 11.3 percent, of the total NIH appropriation is also problematic. Perhaps it makes sense to cap the Bethesda effort, for the simple reason that the Bethesda site cannot comfortably accommodate many more people. But the validity of the proposition that intramural research, *qua* intramural research, should be "capped," relative to extramural, is not a priori compelling, nor are the criteria that should determine the distribution of appropriated funds between the two sectors. One assumption from which any discussion of this issue admittedly cannot prescind is that federal funds should be expended only on the highest possible quality research. Currently, most federally conducted and sponsored research is of high quality, wherever performed; and all would be, were not fallible human judgment the only possible basis for allocating resources. But that having been stated, the day may come when the question arises of whether the return on federal research investments is greater in the public (intramural) or the private (extramural) sector. The answer to that question, admittedly complex and a formidable measurement challenge, is also not immediately or intuitively obvious. In-house government research is demonstrably of very high quality; it

must also, on the whole, be less costly since personnel costs—which represent about 70 percent of the expenses of research projects in the biomedical sciences—are held down in government-laboratories to levels considerably below those prevailing for comparable talent in academic institutions. Exactly what a sophisticated and well designed study of the comparative return on investments made on intra- vs extramural research would conclude is not, to my mind, predictable. But should it turn out—as it well might—that the government realized a "bigger bang for its buck" intramurally, policy makers would have to give serious consideration to expansion of intramural research, possibly with funds derived from extramural, preferably at some other site removed from an already overcrowded Bethesda campus.

The excellence of NIH-supported extramural scientific research programs—be they project and center grants, or training, fellowship, and career development awards, or contract programs—is also victim of "reinvention," as currently applied. The decimation, three times over, of the "study sections" that have played so crucial a role in the impartial evaluation of research proposals will almost certainly compromise the quality of that process and probably force radical changes in the review and approval mechanisms for grant applications and contract proposals. The more than decimation of the extramural scientific and professional staffs of the DRG and the institutes will: further reduce the capability of the review and approval machinery to select the most promising applicants for funding, thereby destroying the process that, above all else, has made American science peerless for half a century; and will cripple the capability of NIH to manage awards with the rigor that the public expects as well as

with the empathy and intellectual sensitivity that the dynamics of the scientific research process necessitate.

I therefore appeal to those of you in the extramural community to rethink the reservations that some of you may harbor about intramural research and recognize that unless the two major segments of the U.S. biomedical research community hang together—as logic and reason commend—they are likely to hang apart. The processes presently entrained at NIH will inexorably cripple the institution. The effect of position cuts that impact most severely on the intellectual and creative leadership of the organization will almost inevitably cause the current extraordinary excellence to deteriorate. The "brightest and best," with the most attractive options will leave and their "draw" that, in the past, attracted promising youngsters will no longer be around. It is not only the absolute extent of personnel cuts that is destructive; the devastation they will wreak is potentiated by their prescribed distribution by grade level. We are now silent witnesses to what I can only call a catastrophe: not the dismemberment of just another government agency but the ruination of a national treasure.

In my opinion, it would be irresponsible for the biomedical scientists of this country, and their entourage of associates, supporters, advocates, and admirers, to permit this tragedy to continue to unravel without vigorous protest. As this process proceeds, the biggest loser will be the American public and all humanity, whose deliverance from disease, disability and premature death is critically dependent on the persistent and sophisticated efforts to unravel nature's secrets by world class scientists.

**Aux armes!**

## NIH Retrospectives



### Spring 1955

Dr. Lewis R. Thompson, NIH director from 1937 to 1942, died in Baltimore on Nov. 14, 1954 at the age of 71. A career officer of 36 years service, Thomas was chief of the PHS Bureau of State Services when he retired in 1946 ... New official names were recently given to all NIH roadways to help visitors and postmen locate buildings on the reservation. As a general principle, all roads were given names based either on their function or geographical location on the NIH site plan. The original entrance road to NIH was designated Wilson Drive, in honor of Mr. and Mrs. Luke I.

Wilson who gave tracts of land on which NIH was built. The road running from the original research buildings to the Clinical Center is called Memorial Road, since it services the Memorial Laboratory (Bldg. 7), which was named in honor of the 27 PHS workers who died in line of duty ... NIH plans to add 500 parking spaces in six areas on the reservation. A recent survey showed that over 1,860 cars now park daily at NIH



### Spring 1965

According to a recent report the most common accidents at NIH are ordinary slips and falls. NIH personnel took 200 tumbles and spills during 1964 ...

Medical and health-related research will account for seven cents for each dollar the federal government will provide for research and development in FY 1965, according to a recent Public Health Service publication ... Mary J. Craig is the first woman architect to join the Division of Research Facilities and Resources staff.



### Spring 1975

Dr. Frank J. Rauscher, Jr., NCI director, announced the establishment of the Division of Cancer Control and Rehabilitation with Dr. Diane J. Fink named as director ... The Ad Hoc Committee met to discuss plans for the NIH First Alumni Reunion to be held on campus, Apr. 19-20, 1975. Former NIH researchers from many parts of the world are expected to attend the meeting.

## The NIH Record

U.S. Department of Health, Education, and Welfare | Department 18 | National Institutes of Health

### Spring 1985

Nobel Prize winner Dr. Julius Axelrod of NIMH is the first NIH scientist to be honored on a Swedish postage stamp. He shares the honor with two other scientists, Prof. Ulf von Euler of Sweden and Sir Bernard Katz of England. In 1970, the three men were awarded the Nobel Prize in Medicine or Physiology for their independent research into the chemistry of nerve transmission ... Dr. Mortimer Lipsett was named director of the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases.



During the 1950's, on Wednesday nights during the winter, NIH bowling teams would take over the bowling alley (long gone) that was located on the corner of Old Georgetown Road and Woodmont Avenue. This picture was taken not later than 1957. Seated are (l to r): Emma Shelton (who sent *Update* this photo), Walter C. Schneider, A. J. "Jack" Dalton, Edward L. Kuff, George H. Hogeboom. If you recognize anyone standing in the back row, please send information to *Update*.

# BALLOT

## National Institutes of Health Alumni Association

PLEASE TEAR OUT AND RETURN WITH YOUR VOTE

In accordance with the bylaws of the NIHAA, alumni members of the association are to elect one-third of the board of the association. The nominating committee, appointed by President Thomas J. Kennedy, Jr., has nominated the alumni members listed below, each of whom has agreed to serve on the board of directors if elected. Each alumnus(a) member may vote for four (4) of the nominees. Please note that associate members (current NIH employees) are not eligible to vote in this election.

### NOMINEES FOR NIHAA BOARD OF DIRECTORS

Please vote for up to four (4) and return your ballot to the NIHAA office, 9101 Old Georgetown Rd. Bethesda, MD 20814 by May 5, 1995.

- Dr. Peter Condliffe**—Chief of Scholars-in-Residence Branch, Fogarty International Center, now scientist emeritus, Laboratory of Cellular and Developmental Biology, NIDDK, current board member.
- Dr. Marguerite W. Coomes**—Staff fellow, Laboratory of Pharmacology, NIEHS, now professor of biochemistry and molecular biology, Howard University College of Medicine, current board member.
- Dr. John Diggs**—NIH deputy director for extramural research, now vice president for biomedical research, American Association of Medical Colleges.
- Dr. William Goldwater**—Director, Extramural Programs Management Office, now a consultant.
- Mr. Joseph Keyes, Jr.**—Legislative Analyst, Office of Program Planning and Evaluation, OD, NIH, now vice president for institutional planning and development & general counsel, American Association of Medical Colleges, current board member.
- Ms. Jane Leitch**—Executive Officer, NCRR, now retired.
- Ms. Marjorie Melton**—Parasitologist, Laboratory of Parasitic Diseases, NIAID, now retired.
- Dr. Bayard Morrison**—NCI Assistant Director, now retired.
- Dr. Paul Parkman**—Deputy Director, Division of Virology, DBS; Director, Center for Biologics Evaluation and Research, FDA, now a consultant, current board member.
- Dr. Joseph Perpich**—Associate Director for Program Planning & Evaluation, NIH, now vice president, grants & special programs, Howard Hughes Medical Institute, current board member.
- Dr. Harry Saroff**—Scientist, Laboratory of Biochemical Pharmacology, NIDDK, now retired.
- Dr. Marvin Schneiderman**—Associate Director for Science Policy, NCI, now on the staff of the National Research Council, current board member.
- Dr. Elwood Titus**—Head, Section on Molecular Pharmacology, NHLBI, now a senior scientific consultant at FASEB.
- Dr. Eugene Weinbach**—Head, Section on Physiology and Biochemistry (Research Chemist), Laboratory of Parasitic Diseases, NIAID, now retired.