Bioethics Program Augments Genome Project

By Leslie Fink

If a medical test could tell you whether (or not) you will die young from an incurable, devastating genetic disease, would you take it? What if the same test could also tell you whether (or not) you will pass the disease along to your children? If a medical test could tell you that, because of your genes, working in a chemical plant will give you cancer, would you want to know? Would you want your boss and insurance company to know?

Ethical dilemmas such as these are one product of recent advances in medical technology that now allow doctors and researchers to analyze human genes. Scientists estimate that some 4,000 diseases afflicting humankind are rooted in malfunctioning genes, which are made of the chemical DNA. Genes are also likely to play a role in many other diseases such as heart disease, some cancers, and some neurologic diseases, where a "predisposition" is a key factor.

The new science initiative known as the human genome project seeks to locate all of the nearly 100,000 genes on the 24 different human chromosomes. Eventually, genome project scientists will decode the very language of heredity as they establish the precise order of the 3 billion chemical subunits of human DNA, known as nucleotides.

Understanding the molecular details of human heredity promises to give researchers astounding new opportunities to learn where on chromosomes genes are located, what they look like and how they work in both health and disease. But as scientific information about human DNA unfolds, so will new ethical dilemmas such as these.

'Search for NIH Director: Round Two

The second attempt to recruit a new NIH director is now under way, reported Dr. James O. Mason, HHS assistant secretary for health, at a meeting of the NIH Alumni Association on June 18 in the Cloister. Mason heads the search committee that was unsuccessful in its first attempt to find a replacement for Dr. James B. Wyngaarden, who resigned last summer.

Mason was also chair of a committee charged with examining the enhancements necessary to make the NIH director's job more enticing to qualified candidates. While some of its recommendations were adopted (easier access to the HHS secretary, power to disburse discretionary funds and authority to transfer funds among ICDs), others require legislation before they can be implemented.

What hampers the search most, Mason said, is that the best candidates identified thus far don't want the job. "Our first disappointment was when Tony Fauci turned the president and the secretary down," Mason said.

The second disappointment was when a low-level White House aide phoned a candidate, Dr. William H. Danforth, chancellor of Washington University in St. Louis, to inquire about his position on abortion.

The so-called "litmus test" issue was "a great embarrassment to Dr. Sullivan and myself," said Mason, who assured the audience that neither the president nor his top advisers authorized such an inquiry. According to Mason, his only instruction from Bush and White House chief of staff John Sununu is to find "the best qualified candidate to lead the agency."

"The problem isn't finding someone willing to be NIH director," Mason said. "The candidates are out there. They're all over the place. But I don't want them and you don't want them either."

Mason said the new NIH director must possess charisma and a sense of patriotic duty in addition to being a recognized leader in biomedical research. The director must also be able to work effectively with Congress and the public.

Minorities Missing in Fight

Ethnic Imbalance in AIDS War Addressed

By Carla Garnett

Declarations of war seem to be more rampant lately, at least in rhetoric, than they have been at any other time in history. In the war against drug abuse as in the war against illiteracy, the battle plan has been basically the same: acknowledge the enemy, galvanize the forces, attack. However, in another crucial war—the war on AIDS—some key soldiers may be either missing in action or just missing.

"AIDS is unique," declared Rev. Raymond O'Brien, Catholic priest, law professor and one of three panelists at "AIDS: Why the Ethnic Imbalance?" a seminar cosponsored by the Hispanic American advisory committee and the Division of Equal Opportunity.

"AIDS is not, as some have suggested to me, like the Black Plague of the 14th century," continued O'Brien, who with other panelists stressed that minorities—mainly blacks and Hispanics, who are disproportionately affected by AIDS, have not mobilized in large numbers against the disease. "In the plague, disease-carrying mosquitoes bit anyone, without discrimination. (As statistics have shown), AIDS affects minorities particularly."

Proof of the disproportionate spread of AIDS was provided by epidemiologist Dr. Kenneth Castro, assistant director for science in the Centers for Disease Control's Division of HIV/AIDS.

"Let me begin by telling you that I do not have the answer to your question 'AIDS: Why the ethnic imbalance,' " said Castro, a Puerto Rican native who gave AIDS incidence rates according to race as well as geographic location. "There is collective ignorance about the disproportionate spread of AIDS."

According to information presented by Castro, whites account for 80 percent of the United States population. Blacks account for about 12 percent; Hispanics, 7 percent.

The percentages are dramatically different, however, for the spread of the HIV disease. Of the 124,235 AIDS cases reported by March 1990 to CDC, whites comprise approximately 58 percent, far less than their percentage of the population.

In contrast, blacks account for about 29 percent of reported AIDS cases, more than double their percentage of the U.S. population; in addition, Hispanics comprise about 15 percent, almost twice the percentage of the U.S Hispanic population. (Note: Percentages are rounded up, exceeding 100 percent; percentages for other minorities, which account
NIH Science Writer’s Seminar Explores Alzheimer’s Disease

Alzheimer’s disease will be the subject of an NIH Science Writer’s Seminar on Monday, July 9 from 9:30 a.m. until noon in Conf. Rm. 10, Bldg. 31C, 6th floor. Dr. Trey Sunderland, chief of the unit on geriatric psychopharmacology, Laboratory of Clinical Science, NIMH, will be the moderator for this seminar. In addition to providing an overview of research on Alzheimer’s, he will discuss new strategies for treatment of the disease.

Dr. Stanley Rapoport, chief of NIA’s Laboratory of Neurosciences, will discuss brain imaging in Alzheimer’s disease. Positron emission tomography (PET) is providing information on why certain areas of the brain are vulnerable to the changes characteristic of Alzheimer’s and on the nature of the dementia caused by the disease.

Linda Nee, social science analyst in the Clinical Neuroscience Branch, NINDS, will describe her extensive studies on Alzheimer’s disease in twins and what her data suggest in terms of the role of genetics in Alzheimer’s.

Science Writers Seminars, sponsored by the intramural scientists of NIH and the Division of Public Information, OD, are designed to provide reporters with background information on the various areas of research conducted at NIH. For more information, call Bobbi Bennett, 496-8855.

The NIH Record

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Earl and Thressa Stadtman Honored by Colleagues in New Orleans

By J. Michael Poston

Two members of the Laboratory of Biochemistry, NHLB, were honored at a symposium in New Orleans on June 3. Dr. Thressa C. Stadtman and her husband, Dr. Earl R. Stadtman, each turned 70 during the last few months and the alumni of their laboratory took the opportunity of celebrating their milestones by organizing a symposium entitled "Cellular Regulation" as part of the annual meeting of the American Society for Biochemistry and Molecular Biology and the American Association of Immunologists.

Following an introduction by Edward D. Korn, scientific director, NHLB, eight speakers, including each of the Stadtmans, presented current work relating to cellular regulation.

In a morning session chaired by Alton Meister, Cornell University Medical School, Bennett M. Shapiro, department of biochemistry at the University of Washington in Seattle and a member of the Stadtmans' laboratory in the 1960's spoke about the events occurring immediately following the fertilization of the sea urchin egg. Michael S. Brown, department of molecular genetics, University of Texas Southwestern Medical School, Dallas, and a member of the Stadtmans' laboratory in the early 1970's, discussed the genetics of the regulation of the LDL receptor. Peter Reichard, department of biochemistry, Medical Nobel Institute, Karolinska Institutet, Stockholm, told of the current work from his laboratory on anaerobic ribonucleotide reductase. Thressa C. Stadtman described the latest findings concerning seleno-enzymes and seleno-tRNAs.

In an afternoon session chaired by Minor J. Coon, department of biological chemistry, University of Michigan, Ann Arbor, Anthony Fauci, director, NIAID, discussed immunopathogenic mechanisms of HIV infection. Osamu Hayaishi, director of the Osaka Bioscience Institute, discussed the regulation of sleep and waking through the agency of the D2 and E2 prostaglandins. Arthur Kornberg, director, the National Heart, Lung and Blood Institute, discussed the regulation of the first basic research laboratories in the institute.

In his research at NIH, Earl has made important findings in coenzyme A metabolism, one-carbon metabolism, vitamin B12 metabolism, control of enzyme activity through covalent modification, and lately he has been studying how oxidation of proteins and enzymes affects their activities and turnover in cells. Terry has studied cholesterol oxidation, amino acid metabolism — especially that involved in the Stickland reactions in clostridia — and, in recent years, the involvement of selenium in the metabolism of the amino acids. Terry's laboratory has found 5 of the 11 or 12 known reactions in which cobalamin takes part and she has demonstrated the first clear-cut instances of the obligate incorporation of selenium into proteins and into ribonucleic acids.

During their first 40 years at NIH, the Stadtmans have been associated with nearly 300 colleagues. Most of these scientists were at NIH as postdoctoral fellows or staff fellows and the alumni of their laboratory are now found in influential positions in almost every corner of the globe. They have been the recipients of numerous accolades ranging from honorary degrees and medals to special symposia, to awards, to election to the National Academy of Sciences of the USA and the American Academy of Arts and Sciences. Each of the Stadtmans continues to maintain a vigorous research program and to serve as editors and communicators of scientific thought.

Support for the symposium was provided by generous grants from the National Heart, Lung, and Blood Institute, the Hyland Division of the Baxter Healthcare Corporation, and Merck and Co.

Automated NIH Stationery Offered

Official NIH and ICD letterhead for letters and memoranda can now be produced instantly almost anywhere on campus. The way this "automated stationery" works, both the body of the correspondence and letterhead print simultaneously on a regular sheet of bond paper. A word processing macro for inserting the "date," "from," "to," and "subject" captions is available for producing interoffice memos.

This technology was developed by the NIH electronic forms management committee, a subcommittee of the NIH Office Technology Coordinators, as part of their effort to automate frequently used forms. The automated stationery files are being distributed as a joint effort of the Records Management Branch, DMP, and the Personal Computing Branch, DCRT.

The files are set up to work with popular word processing software packages. High resolution print quality is necessary for the stationery to look its best, so only printers capable of printing at 300 dots per inch should be used.

Through this automated process, letters and memos will be printed on white paper using black ink. Therefore, correspondence should be mailed in matching, black ink envelopes. The Self Service Stores should be stocking these envelopes soon.

The NIH and ICD files for the automated stationery can be accessed through WYLBUR or the Personal Computing Branch's bulletin board system as well as from the User Resource Center or the ICD Office Technology Coordinator.

Although use of automated stationery is voluntary, its efficient application can contribute to the high-quality, standardized appearance of NIH correspondence and can reduce the necessity of preprinted stationery. For more information on its use or availability, call the Personal Computing Branch, 496-2282. ~ Anne P. Enright
for a significantly smaller number of AIDS cases, were not presented in detail at this seminar.

Primary means of HIV transmission are also divided differently among minorities. The majority of the 58 percent of whites with the disease are homosexual men; in minority populations, intravenous drug use plays as large a role as homosexual contact.

"There is a much larger proportion of blacks and Hispanics who contract AIDS through intravenous drug use," Castro explained. Indeed, according to CDC reports, the number of blacks and Hispanics who contracted AIDS through L.V. drug use is nearly equal to the number of blacks and Hispanics who contracted the disease through homosexual contact.

In addition, perinatal transmission of AIDS is more prevalent in minorities. Ninety-two percent of black children with AIDS were infected by mothers at high risk; likewise, 86 percent of Hispanic children with AIDS were infected perinatally.

Noted Castro, "The perinatal factor plays a much more important role in transmission of AIDS in Hispanics and blacks."

Dr. Mark Smith, associate director of AIDS Services at Johns Hopkins School of Medicine, highlighted and sought to correct common misconceptions about AIDS in the minority population.

"I'd like to talk briefly today about sex, drugs, and—not rock 'n' roll," teased Smith, who is also a member of the NIAID AIDS research review committee, "but childbirth.

"We make the mistake of thinking that the gay population is homogeneous," he said. "It is not. Minority populations have gay populations as well."

"Gay populations are a hidden segment of our community," continued Smith, who is black. "The AIDS epidemic has tragically brought to light the gay segment that is within the minority community . . . and there is homophobia within the minority community as well."

He criticized those who hesitate to fight AIDS now, waiting instead until the disease reaches what they call "the mainstream," or heterosexual population. "It is already in the heterosexual population," he said, "particularly in minorities."

Smith also issued a special warning about complacency among minority women of inner cities. "If you are an inner-city, minority woman in one of the cities identified as a high-risk area for AIDS, then you are at risk," he said.

About illegal drug use Smith noted, "It is an ironic twist of fate that this disease (affects) not all people who use drugs or even abuse drugs, but people who use drugs in a certain way.

"I suspect that had AIDS been able to be contracted through smoking or ingesting, the epidemiology would be very different . . . and the societal response to it would have been very different."

"There is a tendency to moralize the question of drug abuse," he continued, acknowledging that the U.S. is "the most drug-using society of humankind."

Of particular interest among Smith's comments on perinatal transmission was a study he cited involving pregnant women in Scotland. The study apparently examined decisions by pregnant Scottish women to have their babies or to terminate their pregnancies after learning that they themselves had tested seropositive for the IV virus.

Approximately one-third of babies born to AIDS-infected mothers will also be infected with the AIDS virus. Most infected babies will eventually develop the disease and die.

"Before people impose stereotypic views about values," Smith said, "we need to point out that (the study found) Scottish women to have exactly the same views (as other women)." The results showed that decisions to bear children were equal among all races of women—seropositive as well as seronegative.

"People have children for lots of reasons," he pointed out, denouncing "substantial demagoguery and substantial stereotyping" that seropositive women have been subject to for deciding to have their children. "Why people choose to have children is complex. "Sex, drugs and childbirth all carry heavy taboos in virtually every group," noted Smith, who acknowledged that in certain powerful minority groups such as the church, the topic of AIDS is rarely even mentioned much less taught. He indicated that such minority sectors with considerable influence must mobilize against AIDS.

"Five years ago, people protested about preventing AIDS," Smith continued, emphasizing the need for continued prevention education and referring to recent demonstrations on NIH's campus. "Today, (people are protesting) for more treatment and wider access to treatment. I agree that additional treatment is important and there does need to be wider access to treatment. However, I don't want the call for treatment to overshadow the call for prevention."

"Prevention tasks may have been achieved in some communities, but not by far in all communities, especially minority communities."

O'Brien, associate professor of law at Catholic University, asked a pointed question: "What will happen with lobbying efforts when people with money are no longer mobilizing against this disease?"

"I don't want AIDS to be a minority disease, but I do," he continued, jesting that he realized he was then speaking like the lawyer he is.

According to O'Brien, only when a certain community feels singularly threatened by something do its members get organized to fight the threat.

Perhaps the take-home message of the seminar can be summarized: The stigma associated with AIDS is still preventing the army against the disease from being as strong as it could be and minorities have been particularly slow to arm themselves.

Concluded Smith, "As bad as cancer is, and it's bad, as bad as congestive heart failure is, and it too is bad, as bad as these diseases are, I've never heard of anyone being thrown out of his apartment because they had a heart attack. "Not only is treatment of AIDS medically expensive, but there are also social tragedies that do not exist in any other disease."
Grantee Develops Technique To Identify Potential AIDS Treatments

NIGMS grantee Dr. Irwin Kuntz Jr. and colleagues at the University of California-San Francisco have developed a new technique for identifying compounds that may help treat AIDS.

The researchers found that haloperidol, a common antipsychotic drug sold as Haldol, blocks the action of a protein essential to replication of HIV, the virus that causes AIDS. Unfortunately, haloperidol is not effective against HIV unless the drug is used in doses that greatly exceed the lethal limits for human beings. For this reason, haloperidol is only a starting point for Kuntz and other UCSF researchers who are working under an NIGMS grant awarded to Dr. George L. Kenyon that serves the desired activity while lessening toxicity. Already, they are investigating some altered compounds that are more effective than haloperidol.

Discovery of haloperidol's anti-HIV activity was unexpected because it would not have been predicted by the drug's chemistry alone. Even if a satisfactory drug against AIDS does not result from experiments with haloperidol, the new approach to drug design may yield additional compounds with which to treat AIDS and other disorders.

Using a computer program they call "DOCK," Kuntz and his research team examined the structure (recently determined by other researchers) of a key HIV protein known as a protease. If the action of the protease is blocked, the virus cannot replicate and its infectious activity stops.

Computers are frequently used in modern laboratories to help design new drugs, but Kuntz employs them in a significantly different way. DOCK enables him to search the structure of a particular molecule, without preconceptions based on chemistry alone, for a shape or shapes that will fit into grooves in the molecular surface. Such grooves are usually the site of a molecule's chemical activity and, if another molecular structure can be fitted into it (rather as a key fits a lock), the activity can be blocked.

The UCSF team first used DOCK to define the shape of the protease grooves. Then they searched for compounds with that shape by using the Cambridge Crystallographic Database, a British database containing the structures of about 60,000 molecules. When the database identified haloperidol as a possible "fit" for the protease groove, the researchers were especially pleased because the drug is readily available and much is already known about it. Because of this, progress toward making an improved haloperidol derivative is occurring relatively rapidly.

The work of Kuntz and his team is a dramatic demonstration that structure-based, or "rational," drug design can work. Their success points to a bright future for drug searches that begin with shape. —Doris Brody

Applications Due July 24 for GA/HSA Seminar Series

Each year, the Health Scientist Administrator Development Programs (HSADP) Office, in the Office of Extramural Programs, organizes a series of seminars to complement the working assignments of the GAs and HSA Trainees and the working experiences of HSAs. The HSADP Office is accepting applications for its 1991 GA/HSA Seminar Series, scheduled to begin on Friday, Sept. 14. These weekly seminars of 10 months duration are held on Fridays in Bldg. 31, generally in the mornings. However, approximately 10 Fridays during this series will be full days.

The Seminar Series is designed to address a broad spectrum of philosophical, political and policy issues relevant to the administration of federal programs in the support of biomedical and behavioral research. The series is not designed as an orientation or introduction to extramural programs. Topics to be covered include: the roles and interactions of DHHS, NIH, other PHS and non-PHS agencies; policy and ethical considerations in biomedical and behavioral research; factors affecting extramural programs and their administration; program planning and evaluation; and the legislative/budget process.

HSAs with 1 to 3 years' experience are expected to profit most from and contribute to the series. This does not imply that non-HSAs, including intramural scientists, would not benefit. Those nominees with less than 1 year's NIH extramural experience must have taken the "Fundamentals of NIH Extramural Activities" course to be considered.

Interested individuals should forward a memo stating their interest, as it relates to their current duties, through their immediate supervisor to their ICD director, together with a current CV, with emphasis on their present responsibilities. Please be sure to include your current title, ICD organizational component and current room, building, and phone number. Each ICD director is being asked to forward no more than three nominations with the above noted information and any other supporting documents, to A. Robert Polcari, director, HSA Development Programs, Bldg. 31, Rm. 5B35.

These three nominees are in addition to nominees who are in or have recently completed either the Newly Hired HSA Training Program or the HSA Trainee Program. Such trainees are given priority for selection and do not count against the limit of three nominees per ICD, but must be nominated in the same way.

Only a limited number of participants can be accommodated. Selections will be made by Dr. George J. Galasso, associate director for extramural affairs, OEP. All nominees whose documents reach the HSADP office by July 24 will be notified of final action approximately in late August.

Participants will receive training credit hours in their official personnel files after completing the series. However, a request to participate in the series carries a commitment on the part of the applicant and an endorsement by the supervisor to full attendance throughout the 10-month long series. Those missing more than 10 seminars will not receive any credit.

For further information, call 496-1736.

The NIAAA seeks normal male controls between the ages of 30-60 to participate in biomedical studies. Participants need to be in good health, on no medication, not alcoholic and have no alcoholism in their family. Participants will be remunerated for their time. For further information, call Dr. Ted George, 496-0983.

The Record
June 26, 1990
NIH Honor Awards Ceremony To Be Held June 27

Dr. William F. Raub, acting director, NIH, will recognize the outstanding accomplishments of various staff members at the 1990 annual NIH Honor Awards Ceremony. The ceremony will be held on Wednesday, June 27 in Masur Auditorium, Clinical Center and is scheduled to begin at 1:30 p.m. All NIH employees are invited to attend.

NIH DIRECTOR'S AWARD

Clinical Center
Charles Patterson
Chief, Material Management Department
“In recognition of revitalizing the Clinical Center Material Management Department and re-establishing its commitment to support patient care.”

Division of Computer Research and Technology
John L. Powell
Electronics Engineer
Computer Systems Laboratory
“For your leadership and technical contributions in developing the Laboratory Analysis Package.”

Division of Research Grants
Diane D. Christensen
Supervisory Grants Technical Assistant
Referral and Review Branch
“For sustained exemplary performance in accomplishing the goals of the Review Branch and exceptional leadership in establishing the new Document Preparation Center in Frederick, Maryland.”

Dr. Bruce A. Maurer
Assistant Chief, Referral and Review Branch
“For effective leadership in furthering the NIH interests in scientific integrity and for sustained high quality performance as Executive Secretary and Referral Officer.”

Nancy Spainhour
Supervisory Grants Technical Assistant
Referral and Review Branch
“For sustained high quality performance in meeting the demanding workloads of Project Control and ensuring that PHS grant applications are processed in a timely manner.”

Division of Research Resources
Dr. Cirilaco Q. Gonzales
Program Director
Minority Biomedical Research Support Program Branch (currently with NIGMS)
“In recognition of 14 years of dedicated leadership of the Minority Biomedical Research Support Program, and service to the minority biomedical research community.”

Dr. Sidney A. McNairy, Jr.
Director, Research Centers in Minority Institutions Program
“For prominent leadership in the development and management of the Research Centers in Minority Institutions Program to expand the Nation’s capacity for research in the health sciences.”

Division of Research Services
Thomas R. Clem, Sr.
Electronic Engineer
Biomedical Engineering and Instrumentation Branch
“For sustained excellence in applying the power of modern electronic technology to the needs of biomedical research, particularly in the area of computer-based instrumentation systems.”

June S. Thornton
Equal Opportunity Officer
Office of the Director
“For contributing to high quality research support for the intramural programs through your endeavors promoting excellent management/employee relations within the Division of Research Services.”

National Cancer Institute
Dr. William J. Blot
Chief, Biostatistics Branch
“For innovative research to identify environmental and best determinants of oral, esophageal, stomach and respiratory cancers in the United States and abroad.”

Donald P. Christoferson
Deputy Associate Director for Administrative Management
Office of the Director
“For superb leadership, innovation and resourcefulness to the business management of the NCI and for your contributions to NIH to assist in agency-wide goals.”

Barbara A. Davis
Laboratory Worker
Division of Cancer Biology and Diagnosis
“In recognition of your outstanding performance and assistance to research in the Developmental Biochemistry Section of the Laboratory of Biochemistry, NCI.”

Dr. Paulette S. Gray
Chief, Review Logistics Branch
“For development and management of the procedures by which NCI’s Outstanding Investigator Grant is peer reviewed resulting in a significant long-term commitment of exceptional investigators to the NCI’s extramural program.”

Stella T. Hu
Chemist
Division of Cancer Biology and Diagnosis
“In recognition of your development and perfection of new methods to study gene structure and regulation.”

Dr. Jeffrey A. Norton
Medical Officer
Division of Cancer Treatment
“For your commitment to excellence both as an accomplished and innovative laboratory researcher and as a highly skilled and competent surgical oncologist.”

National Heart, Lung, and Blood Institute
Dr. Sydney R. Parker
Chief, Prevention, Education, and Research Training Branch
“In recognition of your exceptional contributions in pulmonary health education and prevention research programs.”

Mary Frances Spears
Equal Employment Manager
Office of Administrative Management
“For your outstanding contributions and leadership in the management of the NHLBI’s Equal Employment and Affirmative Action Programs.”

National Institute on Aging
Dr. Ronald P. Abeles
Deputy Associate Director, Behavioral and Social Research
“For significant contributions to the development of health-related behavioral research as Executive Secretary for the NIH Working Group on Health and Behavior.”

Dr. Richard L. Sprott
Associate Director, Biomedical Research and Clinical Medicine Program
“For exceptional leadership and performance in planning and developing a Biomarkers of Aging research initiative of major scientific importance.”
National Institute of Allergy and Infectious Diseases
Dr. Christine A. Kozak
Microbiologist
Laboratory of Molecular Microbiology
"In recognition of seminal work in the development of somatic cell hybrid systems for use in mouse genetics, and for contributions to the mouse linkage map."

Toni A. Sutherland
Chief, AIDS Pre-Clinical Contract Section
Contract Management Branch
"In recognition of your exceptional leadership, initiative and judgment in the management of the solicitation, competition and administration of the Division of AIDS research contract portfolio."

Dr. C. David Wise
Chief, Information Technology Branch
"For continuing outstanding contributions to the advancement and practical uses of information technology and microcomputer networks at the NIH."

National Institute of Arthritis and Musculoskeletal and Skin Diseases
Dr. Alan N. Mosbell
Chief, Skin Diseases Branch
"For exceptional leadership, diligence and creativity in directing the Skin Diseases Program of the National Institute of Arthritis and Musculoskeletal and Skin Diseases."

National Institute of Child Health and Human Development
Dr. Antonia Novello
Deputy Director
National Institute of Child Health and Human Development
(Presently the Surgeon General)
"In recognition of your sustained outstanding contribution to the NIH Mission."

Agnes E. Schroeder
Secretary
Office of Science Policy and Analysis
"For extraordinary achievement in providing support to PHS and NIH Expert Panels and Committees and thus contributing to the expansion of knowledge."

National Institute on Deafness and Other Communication Disorders
Helen M. Simon
Program Analyst
Program Planning and Health Reports Branch
"For excellent service and contributions to the new NIDCD at Program Planning Coordinator and Acting Executive Director of the National Advisory Board."

National Institute of Diabetes and Digestive and Kidney Diseases
Dr. Robert E. Silverman
Chief, Diabetes Programs Branch
"In recognition of exceptional vision and leadership in addressing scientific needs and opportunities for interdisciplinary research related to the etiology and pathogenesis of diabetes mellitus."

National Institute of Dental Research
Dr. Helen C. Gift
Chief, Health Promotion Section
"For exceptional leadership and scientific excellence in the planning, development and evaluation of NIH science transfer programs in disease prevention and health promotion."

Dr. A. Hari Reddi
Chief, Bone Cell Biology Section
"For sustained and solid scientific contribution to our knowledge of cell biology of bone induction and for isolation of osteogenin, a bone differentiation factor."

National Institute of Environmental Health Sciences
Dr. John M. Dement
Director, Office of Occupational Health and Technical Services
"For extraordinary accomplishments in and contributions to the fields of environmental and occupational health."

Dr. James R. Fouts
Senior Scientific Advisor to the Director
Office of the Director
"For your scientific contributions in the administration of the programs of the NIEHS and the NTP."

National Institute of General Medical Sciences
Dr. James C. Cassatt
Acting Director, Biophysics and Physiological Sciences Program
"For your exceptional contributions to the success of GenBank, an internationally important research resource for investigators in genetics."

Dr. Yvonne T. Maddox
Health Scientist Administrator
Biophysics and Physiological Sciences Program
"For your exceptional commitment, dedication, and infectious enthusiasm which have had a substantial impact in furthering the goals of NIGMS, NIH, and PHS."

National Institute of Neurological Disorders and Stroke
Dr. William J. Heederks
Medical Officer
Division of Fundamental Neurosciences
"For sustained superior performance in assisting the neural prosthesis development efforts of the Division of Fundamental Neurosciences, NINDS."

Dr. Mary Ellen Michel
Health Scientist Administrator
Division of Stroke and Trauma
"For originality, insight, and imagination in problem-solving on behalf of the Division of Stroke and Trauma."

Dr. Novera Herbert Spector
Health Scientist Administrator
Division of Fundamental Neurosciences
"For highly effective performance in fostering research in the field of nervous system-immune system interactions."

National Library of Medicine
Betsy L. Humphreys
Deputy Associate Director, Library Operations
"For your clear vision of the benefits of innovative systems and your outstanding management of projects resulting in improved information services."

Office of the Director
Shirley P. Hopkins
Staffing Assistant
Division of Personnel Management
"In recognition of your performance and dedication to the NIH Stay-In-School Program."

H. Richard Miller
Assistant Director for Budget
Division of Financial Management
"In recognition of exemplary dedication, leadership, expertise and overall excellence in administering the budget activities of the National Institutes of Health."

Dr. Alan L. Sandler
Chief, Compliance Oversight Staff
"For outstanding contributions to the rights of human research volunteers and the welfare of laboratory animals."

OUTSTANDING SERVICE MEDAL
Division of Research Resources
Dr. Michael A. Oxman
Chief, Office of Review
(currently with NIA)
"In recognition of sustained high-quality performance in the scientific and technical review of research resource grants and contracts."

(Continued on Page 8)
Division of Research Services

Capt. Martin L. Morin
Deputy Director, Office of Animal Care and Use
"For sustained leadership in the development of a responsive, efficient and accountable animal care and use program in support of the NIH intramural research program."

National Cancer Institute

Dr. Ilan R. Kirsch
Head, Acquired Gene Rearrangements Section
"For your studies of the causes and consequences of chromosomal aberration and the discovery of a gene relevant to hematopoietic cell growth and development."

Dr. James L. Mulshine
Head, Biotherapy Section
"For the development and implementation of innovative approaches for early lung cancer detection and rational treatments aimed at novel biological properties of the lung cancer cell."

Dr. Charles E. Myers
Chief, Medicine Branch
"For development of new cancer drugs directed against novel therapeutic targets and providing an atmosphere for an effective and smooth fusion between lab and clinic."

Dr. Jerry M. Rice
Chief, Laboratory of Comparative Carcinogenesis
"For outstanding scientific leadership in directing the research of the Laboratory of Comparative Carcinogenesis."

National Heart, Lung, and Blood Institute

Dr. James L. Cleeman
Coordinator
National Cholesterol Education Program
"For exceptional service in providing outstanding leadership in the development and implementation of the National Cholesterol Education Program."

Capt. Robert J. Garrison
Chief, Field Studies and Biometry Branch
"For extraordinary leadership in administering epidemiologic studies and for statistical contributions to research on cardiovascular disease."

Dr. Charles L. McIntosh
Senior Surgeon
Surgery Branch
"In recognition of outstanding patient care and leadership."

National Institute of Allergy and Infectious Diseases

Capt. James C. Cradock
Senior Scientist
Drug Development Section
"For sustained superior work performance and outstanding scientific and administrative contributions to further the development of therapies for AIDS and cancer."

Dr. Simeon I. Taylor
Chief, Diabetes Branch
"For identifying mutations in the insulin receptor gene that cause genetic forms of insulin resistant diabetes mellitus."

National Institute of Dental Research

Dr. Reuben P. Siraganian
Chief, Clinical Immunology Section
"In recognition of outstanding and sustained contributions to an understanding of the mechanisms involved in the release of inflammatory mediators from basophils and mast cells."

National Institute of Environmental Health Sciences

Dr. Allen J. Wilcox
Head, Reproductive Epidemiology Section
"For his conception, development and implementation of innovative research methods in the study of human reproductive epidemiology."

National Institute of Neurological Disorders and Stroke

Dr. Daniel L. Alkon
Chief, Neural Systems Section
"For administrative leadership as an Acting Laboratory Chief and for highly meritorious research on learning, memory, information processing, sensory physiology, and neural development."

Gill D. Gladding
Assistant Chief, Epilepsy Branch
"For sustained outstanding administrative and scientific efforts while serving the intramural and extramural components of the National Institutes of Health over the last nineteen years."
Dr. Richard T. Yanagihara
Senior Investigator
Laboratory of Central Nervous System Studies
"For scientific excellence in elucidating the pathogenesis of hemorrhagic fever with renal syndrome and other high incidence but geographically delimited diseases."

OUTSTANDING UNIT CITATION
"For outstanding skill and leadership in interagency development of critically important animal welfare regulations resulting in standardized rules that foster compliance, benefit animals and enhance research."

Dr. Nelson L. Garnett
Dr. John G. Miller
Dr. Alan L. Sandler

NIH EQUAL EMPLOYMENT OPPORTUNITY AWARD OF THE YEAR
Shirley P. Bagley
National Institute on Aging
She was selected from among all NIH employees who had received ICD EEO Special Achievement Awards during 1989 and who were recognized for their on-the-job equal employment opportunity contributions, or outside activities, and the scope of the impact of the EEO contribution(s) in the ICD and the NIH.

HARVEY J. BULLOCK JR. AWARD FOR EQUAL OPPORTUNITY ACHIEVEMENT
Cynthia B. Gaines
National Library of Medicine
This award is made for significant contributions that result from an employee's particular effort(s) in furthering equal opportunity for all NIH employees.

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National Heart, Lung, and Blood Institute
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National Institute of Environmental Health Sciences
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National Heart, Lung, and Blood Institute
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Eleanor B. Schron
BIOTECHNOLOGY

BIOETHICS

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opportunities to test people for an ever-increasing number of inherited conditions that may affect their lifespan, their ability to perform certain jobs, or how they handle alcohol or prescription drugs. In fact, tests to detect genetic diseases are likely to be developed faster than are treatments or cures.

So how will the new availability of detailed and sensitive genetic information affect our personal and family privacy, our medical treatment and insurance coverage, our livelihoods and even social attitudes toward us? The National Center for Human Genome Research, the organization charged with administering NIH’s role in the human genome project, has established a funding program aimed at examining the ethical, legal and social questions that may arise as genome project technology makes it increasingly possible for us, and others, to know the secrets locked away in our genes.

NCHGR Bioethics Program

Doctors have used biochemical and genetics methods to test for inherited diseases for decades. Although the ability to obtain health information from human DNA is not a direct outcome of the human genome project, technology developed as part of the project will increase the amount and kind of information obtainable from DNA. These tests can determine if a person is a healthy carrier of a genetic disease or if he or she will become ill with a disease. DNA of carriers contains one of the two defective gene copies needed to cause a disease. Although carriers are healthy, they can pass the gene on to their children, who may develop the disease if the other parent is also a carrier.

Human genetics research has made great strides during the past several decades in obtaining valuable information about the causes and treatments of genetic diseases. Unfortunately, however, these successes followed a dark period in the early part of this century when the so-called “eugenics” movement took hold in the United States and in some parts of Europe. Eugenics proponents sought to use genetic information to “improve” the human race by discouraging individuals with certain genetic qualities from reproducing. Because the misguided and ill-founded eugenics policies impinged on human rights and resulted in social stigmatization and discrimination, these past mistakes must be guarded against in the new quest for information about the human genome.

To help ensure that the fruits of the human genome project are used for human good, the NCHGR bioethics research program will strive to anticipate and resolve conflicts between technological advances and personal freedoms. With approximately 3 percent of NCHGR’s annual budget earmarked for this research, the center has become the largest federal source of research dollars for bioethics studies. Directed by philosopher Dr. Eric Juengst (see sidebar), the NCHGR program will provide financial support to researchers in bioethics, philosophy, law, economics, sociology, health policy and other disciplines that bear on the impact of genetics research.

Research funds will be dispersed in the form of research grants, training grants, contracts and for supporting workshops, symposia and commissioned papers.

NCHGR-DoE Joint Bioethics Working Group

To help guide its bioethics research program, NCHGR, along with the Department of Energy’s Office of Health and Environmental Research, has established the genome project’s joint working group on ethical, legal, and social issues (ELSI) related to mapping and sequencing the human genome. Composed of experts in law, ethics, psychology, genetics, clinical medicine and other fields, the aim of the working group is:

• anticipate and address the implications of mapping and sequencing the human genome for individuals and society;
• examine the ethical, legal, and social consequences of mapping and sequencing the human genome;
• stimulate public discussion of these issues; and
• develop policy options to assure that genetic information is used for the benefit of individuals and society.

The ELSI working group will meet several times a year to help focus and refine research priorities of NCHGR and DoE bioethics programs. The group also plans to develop public education and outreach programs designed to raise public understanding of the promises and pitfalls of medical genetics and new genetics technologies.

Expertise of the working group members spans the range of issues that may arise as genome project technology proceeds. The group is chaired by Dr. Nancy S. Wexler, president of the Hereditary Disease Foundation and clinical psychologist in the department of neurology and psychiatry at the Columbia Col-

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lege of Physicians and Surgeons. A former member of the Huntington's Disease Commission, Wexler has worked for many years on Huntington's disease, focusing on genetic analysis of large families affected by the disease and more recently on responses to newly available HD tests.

Dr. Jonathan R. Beckwith is a bacterial geneticist at Harvard University medical school. Interested in genetic screening for more than a decade, he has raised concerns over research proposals to mount behavioral studies of boys and men with the XYY chromosome makeup and has continued to participate in public discussions about behavioral genetics.

Attorney Patricia King has worked in civil rights law and reproductive law and is interested in the impact of genetic studies on minority groups. She has been a member of two prominent federal bioethics commissions—the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, which operated from 1974 to 1978, and the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, which was active from 1980 to 1983. She also served on the NIH recombinant DNA advisory committee, is a fellow of the Hastings Center and codirects the program in health, law, and ethics at Georgetown University law school.

Dr. Victor A. McKusick has been involved in the study of human genetics for more than 40 years. An internationally respected clinician and scientist, McKusick has compiled the largest compendium of data on human genetic diseases, entitled *Mendelian Inheritance in Man*, which is maintained at Johns Hopkins University.

Dr. Robert Murray, a clinician and researcher at the Howard University College of Medicine, has been closely involved in genetic testing and screening programs and their social impacts for well over a decade. He has worked on sickle anemia and thalassemia testing programs and continues to offer genetic counseling to patients.

Social psychologist Dr. Thomas Murray is director of the Center for Biomedical Ethics at Case Western Reserve University. He has written extensively about the ethical impact of genetic testing and screening in the workplace. He was recently elected a fellow of the Hastings Center, where he worked for several years in the 1970's.

Vanpoolers Wanted

Drivers/riders needed. Vanpool leaves Oxon Hill/Central Avenue, Maryland area. Working hours 8 a.m. to 4:45 p.m. For more information, call Rosa Snell, 496-6477.
Congressional Breakfast Marks NIDDK’s 40th Anniversary

On May 23, the Coalition of Voluntary and Professional Organizations in support of NIDDK sponsored a breakfast on Capitol Hill as part of the recognition of the 40th anniversary of the institute. The purpose of the breakfast was to show the human face of science to members of Congress and their staffs.

Dr. J. Edward Rall (r), NIH deputy director for intramural research, was presented the NIDDK Distinguished Scientist Award by Dr. Herbert Tabor, chief of the Laboratory of Biochemical Pharmacology, NIDDK, in recognition of his long service to NIH and NIDDK, as its director of intramural research from 1962 to 1983.

Sen. Tom Harkin (l), chairman of the subcommittee on labor, health and human services, education and related agencies, committee of appropriations, discusses his concerns for the biomedical research effort in the U.S. with Dr. Phillip Garden, NIDDK director, at the congressional breakfast marking the 40th anniversary of NIDDK.

Dr. James B. Wyngaarden, associate director for the life sciences in the White House Office of Science and Technology Policy and an NIDDK alumnus, was honored with the presentation of the NIDDK Distinguished Scientist Award for his contributions as director of NIH from 1982 to 1989.

Dr. Philip Garden, NIDDK director, presents the NIDDK Young Scientist Award to Dr. Griffin P. Rodgers (r), senior investigator, Laboratory of Chemical Biology, NIDDK, as fellow awardee Dr. Jeffrey I. Gordon, Washington University School of Medicine, St. Louis, Mo., waits to receive his award. Rodgers and Gordon were honored for substantial scientific accomplishments early in their careers.

The NIDDK is celebrating its 40th anniversary this year. An institute picnic planned for June 28 at the Bethesda Naval Hospital picnic grounds will include such events as volleyball, softball, tennis and other games. Many employees have purchased T-shirts designed with the NIDDK logo to wear at the picnic. Dr. Phillip Garden, NIDDK director, is shown receiving a T-shirt from Dr. Nancy B. Cummings, cochair of the institute’s EEO committee.