

"Still
The Second
Best Thing
About Payday"

The NIH Record

'Enormously Pleased To Be Here'

Collins Takes Over Human Genome Project, Institute

By Rich McManus

Celebrated gene chaser Dr. Francis Collins, who in 1989 announced that he and colleagues found the long-sought cystic fibrosis gene and has since codiscovered genes for neurofibromatosis type 1 and Huntington's disease, joined NIH Apr. 4 as director of the National Center for Human Genome Research, which is seeking new status as the National Institute of Genomics and Medical Genetics.

Collins will launch a new intramural science program on campus and has obtained commitments from seven prominent senior investigators who will join NCHGR by fall.

"I am enormously pleased to be here today," said the 43-year-old scientist and physician, who was introduced to the media and NIH colleagues at a Stone House reception on Apr. 7. "I am enormously excited about the Human Genome Project. I can't stop talking about it. It is the single most important scientific endeavor ever mounted by humankind, and it will only happen once in human history.

"By the year 2005, we expect to have the complete sequence of the human genome, as well as genomes of some other organisms. That database will provide grist for the next few

Immunologist Sir Gustav Nossal To Give NIH Lecture

By Elia Ben-Ari

How does the immune system tell the difference between a person's own kidney, which is tolerated for a lifetime, versus a transplanted kidney, which is destroyed totally within 10 days unless immunosuppressive drugs are administered? Why is our body capable of attacking foreign molecules, organisms, cells, or tissues, while, in health, it does not attack our own molecules, cells, or tissues? The question of how this phenomenon of "self-tolerance" occurs remains the most fundamental question in immunology. For more than 35 years, Sir Gustav Nossal has been making critical contributions to understanding the cellular and molecular basis of immunologic tolerance. He will discuss some of his work in this area at the NIH Lecture, "Self-Recognition: Recent Insights into the Deepest Puzzle in Immunology," on May 12 in Masur Auditorium, Bldg. 10 at 3 p.m.

In 1957, as a young physician fresh from 2 years of hospital residency, Nossal entered Sir Macfarlane Burnet's laboratory at the Walter and Eliza Hall Institute of Medical Research in Melbourne, Australia, because he wanted to learn virology. However, Burnet's interests had

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Dr. Francis Collins answers questions at press conference Apr. 7 at Stone House.

centuries of biomedical research. The chance to stand at the helm of that project...is too impossibly wonderful to miss. It is a dream come true."

Collins, who comes to NIH from the Howard Hughes Medical Institute at the University of Michigan, said his whole life has serendipitously prepared him for the genome post. A native of Staunton, Va., he received his bachelor's degree from the University of Virginia, and M.S. and

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Jacobs Directs NIH's Office of Alternative Medicine

By Anne Barber

Dr. Joe Jacobs, recently chosen as director of NIH's Office of Alternative Medicine (OAM), acknowledges that his office is under constant barrage with unsolicited ideas that fall under the rubric of alternative medicine.

"We get up to 100 letters a day," he says. "Plus, our voice mail that holds between 20 to 30 calls continues to fill and cut itself off. As busy as we are, we try to keep up with the media demands as well as be responsive to projects and treatments that fall into our category."

Jacobs, whose office has a budget of \$2



Dr. Joe Jacobs

Klausner To Deliver NIH Lecture, Apr. 29 in Masur

By Birgit An Der Lan

The next NIH Lecture will be presented by Dr. Richard Klausner, chief of NICHD's Cell Biology and Metabolism Branch, on Apr. 29 at 3 p.m. in Masur Auditorium, Bldg. 10. Klausner, who has made pioneering contributions to several areas of cell and molecular biology, will lecture on the molecular basis of iron metabolism, a field that he has significantly advanced. His lecture is entitled "Iron, RNA, and Gene Expression: Solving the Dilemmas of a Toxic Nutrient."

Klausner's achievements in this field stem from more than a decade's investigation of how the body closely regulates iron levels. Cells are acutely sensitive to iron, a nutrient that is essential for survival—without iron we could not capture the oxygen we breathe, nor could we utilize the energy in our foodstuffs. But if, on the other hand, there is too much iron, as happens in the relatively common hereditary disease hemochromatosis, the nutrient becomes toxic, particularly to the liver. Maintaining iron in balance is therefore critically important.

Iron is transported in the circulation by a protein called transferrin; the complex of iron and transferrin is moved into cells by a shuttle

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million, says he is impressed with the significant amount of alternative medicine activity already going on here at NIH in several ICDs including NHLBI, NCI, NIDA, NIMH, and NCNR.

One of the primary functions of the office, he states, is to facilitate the evaluation of various alternative treatment modalities by the appropriate ICD within NIH. This role is essential for two reasons—one, OAM has a very limited budget and staff; and two, the institutes have the basic science and clinical expertise needed. "Therefore, it is important they be involved in these evaluations," he says.

OAM is sponsoring, along with DRG, grant-writing workshops around the country to acquaint the alternative medical community with the grant process at NIH, as well as grantsmanship techniques. The reason for the workshops is OAM's discovery that many individuals in the alternative medicine community have little or no experience with the grant-making process of NIH and/or may have limited experience in research methodology. The first workshop was held during March in Rockville and others are scheduled throughout 1993 in other locations including San Francisco, Los Angeles, St. Louis, and Atlanta.

"We have also begun site visits to potential

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KLAUSNER

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protein called TfR (for "transferrin receptor"). Once inside the cell, iron is used or held in reserve by another protein called ferritin, which has an enormous capacity for sponging up excess iron. Cells balance iron levels by regulating the production of these two proteins. Accordingly, if the level of usable iron in a cell falls and more needs to be taken in, TfR production is kept high and ferritin production low. Much of this picture has been clarified as a result of Klausner's work.

During the course of this research, Klausner and his colleagues discovered that the link between iron and the amount of TfR and ferritin present in the cell was to be found in a segment of their respective messenger RNAs, the molecules that transmit genetic information from the DNA to the protein-synthesizing machinery of the cell. This small segment, which is shaped like a hairpin (RNA is flexible, unlike DNA, which usually exists in a rigid double-stranded form), is responsible for making ferritin and TfR production sensitive to iron levels in the cell. Klausner dubbed these hairpin segments the "iron responsive elements" or IREs. This was the first time that such an element had been found in animal cells, allowing protein synthesis to be controlled at the level of messenger RNA, rather than by directly switching genes on or off.

As Klausner and his group have subsequently demonstrated, iron does not interact directly with the IREs, but rather with a protein in the cell called the IRE-BP, for IRE-binding protein. Work on this protein has offered some remarkable insights into how cells may control many biological processes. The IRE-BP has the ability to change its shape according to how much iron is available. As the iron level in the cell increases, the molecule is pulled into a compact shape. In its compact form, the IRE-BP can't bind to the IRE. Conversely, when iron levels fall the protein opens up, allowing it to drape itself around the hairpin element in the RNA.

When it sits on the messenger RNA of ferritin, the IRE-BP acts like a road block, preventing the protein-synthesizing machinery of the cell from scanning the RNA, causing less ferritin to be synthesized and less iron to be bound, thus making more free iron available to the cell. As iron levels rise, the IRE-BP is forced off the RNA, allowing more ferritin to be made.

The discovery of the IRE system solved the question of why iron has the opposite effect on TfR messenger RNA levels. Although the IREs of both TfR and ferritin have similar nucleotide sequences, they are located at the beginning of ferritin messenger RNA and near the end of TfR messenger RNA. When the ferritin IRE is occupied by the iron sensing-protein, translation of messenger RNA into ferritin is blocked. When the IRE of TfR messenger RNA is



Dr. Richard Klausner

occupied, RNA degrading enzymes cannot bind to the messenger RNA and cleave it, as they do normally, keeping this messenger RNA available to the cell for production of TfR and thus transport of iron into the cell.

The sequence of the IRE-BP, which Klausner and his colleagues determined, was found to have surprising similarity to that of a well-known mitochondrial enzyme called aconitase. The three-dimensional structure and mechanism of action of aconitase are thoroughly understood, and drawing on this information, Klausner has been able to show how the IRE-BP senses iron, even that the IRE-BP possesses aconitase activity when it is not bound to RNA.

Klausner is an alumnus of Yale and Duke University Medical School. He trained in internal medicine at Massachusetts General Hospital and did postgraduate work with Morris Karnovsky at Harvard. He joined NIH in 1979 and was invited to head NICHD's newly formed Cell Biology and Metabolism Branch in 1984. His research has been widely recognized, and he is the recipient of numerous awards, including the Yale Alumni Association's "Outstanding Scientist" Award, the Public Health Service's Meritorious Service Medal, the American Federation of Clinical Research's Young Investigator Award, the American Society for Hematology's Dameshek Prize, and the Lederle Award. □

Ballet Tickets Available

Enjoy a relaxing evening at the Kennedy Center. R&W has reserved tickets for the Washington Ballet Spring Series. Tickets are available for Friday, May 14 at 7:30 p.m. (\$28 each) and Sunday, May 16 at 2 p.m. (\$26.25 each). The program features "World Premier" by award-winning choreographer Monica Levy, "Quartet 2" by Nils Christie, and "Summerset" by Ron Cunningham. For ticket information, call 66061. □

Crawley Gives Solowey Lecture

The 20th Mathilde Solowey Lecture Award in the Neurosciences will be presented by Dr. Jacqueline N. Crawley on Tuesday, May 4 at 3 p.m. in Lipsett Amphitheater, Bldg. 10, sponsored by the Foundation for Advanced Education in the Sciences.

Crawley will present the results of her research in a lecture titled, "Coexistence of Neuropeptides with 'Classical' Neurotransmitters: Functional Studies Relevant to Neuropsychiatric Disorders." She will explore a new principle in neuroscience, the phenomenon of coexistence, wherein two or more neurotransmitters are localized with the same neuron. She will discuss the coexistence of cholecystokinin with dopamine in the mesolimbic and rewarded behaviors, schizophrenia, and drug abuse and the coexistence of galanin with acetylcholine in the septohippocampal pathway as related to memory and Alzheimer's disease.

Crawley is chief of the unit on behavioral neuropharmacology within NIMH's Experimental Therapeutics Branch. She came to NIH in 1981 after studies at the University of Pennsylvania, the University of Maryland, and Yale University School of Medicine.

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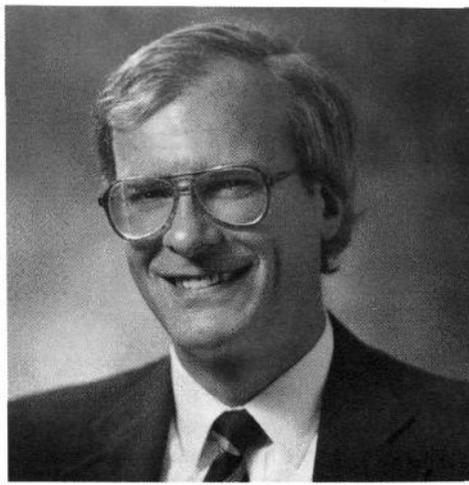
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Healy Reorganizes Top Staff in Office of Director



Dr. Jay Moskowitz has been named NIH deputy director for science policy and technology transfer, the second-ranking position in OD. He will address emerging social, legal, ethical and economic consequences of biomedical and behavioral research, and promote the NIH strategic planning process. He has served NIH since 1969 in positions of increasing responsibility, and was most recently NIH associate director for science policy and legislation.



John D. Mahoney has been named NIH deputy director for management. He will be the principal financial officer for OD, overseeing a budget of some \$10 billion per year. Mahoney joined NIH in 1986 and was most recently NIH associate director for administration. NIH director Dr. Bernadine Healy said these changes will address more efficiently and effectively the many issues facing future biomedical/behavioral research.

Workshop Explores Collaboration with Sub-Saharan African Nations

NIH has established a Sub-Saharan African Health Research Initiative to promote mutually beneficial biomedical and behavioral research collaboration between American and Sub-Saharan scientists and institutions.

To further this effort, scientists and health science administrators from 12 Sub-Saharan African nations and the NIH intramural and extramural communities met in a special 3-day workshop at NIH recently to explore collaborative biomedical and behavioral research opportunities.

Participants included representatives of Cameroon, the Congo, Ethiopia, Gambia, Ghana, Mali, Nigeria, Sudan, Senegal, Uganda, Zaire and Zimbabwe. NIH sponsors of the workshop included the Office of AIDS Research, Fogarty International Center, NCI, NIDR, NIAID, and NHLBI.

FIC director Dr. Philip E. Schambra reminded participants that while NIH has numerous linkages with African scientists, it recognizes the vast potential for further cooperation, and realizes that only through collaborative efforts will science be able to address the major health problems that plague the world.

"We've invited you here to identify priority health research areas, to assess the current capabilities of research institutions in Sub-Saharan Africa, and to discuss potential mechanisms for support," he said, adding, "Research is essential to learn how to reduce the human toll of such diseases as malaria, tubercu-

losis, and AIDS, as well as emerging chronic and noncommunicable diseases."

Dr. John Diggs, NIH deputy director for extramural research, spoke of the need for greater linkages between NIH scientists and their African counterparts. He highlighted some ongoing projects between NIH and Sub-Saharan countries, and pointed out that through these and future efforts NIH can contribute to the basic and clinical science base in Africa and enable Sub-Saharan scientists to become part of the global public health network.

"From the NIH point of view," Diggs said, "we hope that this workshop will help to identify the opportunities, challenges and resources required for greater biomedical and behavioral research cooperation between the developed world and Sub-Saharan Africa."

The meeting's chairman, Dr. Richard Krause, senior scientific advisor for FIC and former NIAID director, led the discussions, which began with presentations by the Sub-Saharan participants on opportunities for and constraints of conducting biomedical and behavioral research in the region.

The workshop participants were divided into three panels, each assigned to address one of the workshop goals.

Panel 1 focused on the identification of priority biomedical and behavioral research areas of interest to both the U.S. and Sub-Saharan Africa. Panel 2 sought to assess research capabilities of potentially involved Sub-Saharan research institutions, while panel 3

Four NIH'ers Elected to NAS

Four NIH scientists have been honored with membership in the National Academy of Sciences, joining 46 other new members and four new foreign associates.

The NIH'ers are: Dr. Samuel Broder, NCI director; Dr. Florence Haseltine, director of NICHD's Center for Population Research; Dr. Judith Rapoport, chief, Child Psychiatry Branch, NIMH; and Dr. John Bennett Robbins, chief of NICHD's Developmental and Molecular Immunity Branch.

Established by Congress in 1863, the NAS acts as an official advisor to the federal government on matters of science and technology. Election to membership is considered one of the highest honors accorded a United States scientist or engineer.

Research Festival Update

NIH intramural researchers take note: the final deadline to submit poster presentation topics for the 1993 Research Festival is fast approaching; all applications must be faxed by 5 p.m., Friday, May 21. Application forms have been distributed desk-to-desk. For more information call Gregory Roa, 61776. □

discussed mechanisms to support future cooperation.

On the final day, the panels reported their discussions. They recommended that three broad areas of mutual interest and benefit be given priority consideration: AIDS and infectious diseases; women's and children's health, including family planning and reproductive health; and emerging chronic and other noncommunicable diseases.

The participants also identified several crosscutting issues—such as nutrition and behavioral and cultural influences on disease transmission—as research areas affecting most disease categories. Also identified as potential areas for research collaboration were the areas of environmental health, parasitic diseases, traditional medicine, mental health, and oral health.

Workshop participants stressed that the most important element of any successful biomedical or behavioral collaboration is the relevance of a given research project to the prevailing local health problems. This, they said, is an essential factor for ensuring local commitment and sustainability.—Jim Bryant □

Sickle Cell Sufferers Needed

The NHLBI seeks people between the ages of 18 and 50 who have sickle cell disease for a pain relief study. The study will require three visits to the outpatient clinic, and individuals will receive payment for their time. For more information, call Linda between noon and 3 p.m., Tuesday through Thursday, 68033. □

NOSSAL*(Continued from Page 1)*

recently shifted from viruses themselves to the study of how the host's immune system defends against viruses. Burnet agreed to accept Nossal as a research fellow, but only on the condition that he do his research in immunology. This was Nossal's first step toward becoming a leading figure in the burgeoning field of modern immunologic research.

Virtually every cell in the body carries distinctive molecules that identify it as "self," allowing the immune system to recognize and tolerate it. When foreign (nonself) molecules or cells enter the body, they are recognized by two types of white blood cells, T lymphocytes and B lymphocytes, which carry out various aspects of the immune response. In autoimmune diseases such as systemic lupus erythematosus, rheumatoid arthritis, or multiple sclerosis, the self-recognition system goes awry, and the immune system attacks the body's own tissues.

The year that Nossal began his fellowship, Burnet, inspired by the prior work of others, developed the clonal selection theory, which became the central paradigm of modern immunology. This theory states that a given lymphocyte is able to react with one, and only one, particular antigen (a molecule capable of initiating an immune response). When this antigen binds to specific receptors on the lymphocyte's surface, it causes the lymphocyte to multiply, yielding a "clone" of identical cells. These cells all recognize the same antigen and are activated to defend the body against it, either by producing antibodies (as do B cells) or by other means.

The clonal selection theory also provided a basis for understanding tolerance. If immunity represented the selective activation of certain immune cells by a particular antigen, then tolerance could be seen as the opposite process. That is, tolerance was postulated to occur by selective deletion (elimination) of those lymphocytes with the potential to react with self antigens. Autoimmunity could be seen as a failure of this process, leading to activation and growth of self-reactive lymphocyte clones.

In Nossal's first foray into tolerance research, in 1957, he found that when rats were injected with foreign red blood cells (the antigen) from the day of birth, they readily became tolerant; that is, they were unable to generate an immune response upon subsequent exposure to the foreign cells. However, if the first dose of antigen was delayed even for 1 week, a substantial immune response (i.e., antibody formation) inevitably resulted.

These observations were explained in a 1959 article by Dr. Joshua Lederberg, who had worked with Nossal in 1957 as a Fulbright visiting professor in Burnet's laboratory. He postulated that lymphocytes develop from immature precursor cells, moving from a stage of being paralyzable by antigen to one of being inducible by antigen. Nossal and Lederberg,



Immunologist Sir Gustav Nossal will deliver the NIH Lecture on May 12 at 3 p.m. in Masur Auditorium, Bldg. 10.

using delicate micromanipulation techniques, proved that one cell always only made one antibody. This was the first tangible evidence in favor of the clonal selection theory, and helped to lay the framework for the later monoclonal antibody revolution.

In 1961, after 2 years as an assistant professor at Stanford University, Nossal became deputy director (immunology) of the Walter and Eliza Hall Institute. In 1965 he succeeded Burnet as director of the institute, a position he still holds today. Pursuing his interest in immunologic tolerance, Nossal and his colleagues found that repeated injection of a soluble antigen from *Salmonella* bacteria into rats from the day of birth could cause profound immunologic tolerance. This was the first time that a microbial molecule that normally stimulates an intense immune response was shown to be able to induce tolerance.

In the early 1970's, Nossal decided to move from the study of tolerance to microbial antigens to the study of more "self-like" antigens, to better understand the phenomenon of self-tolerance. Understanding the cellular and molecular mechanisms of tolerance, and how they can fail, may lead to improved diagnosis and treatment of autoimmune diseases.

Over the next decade, Nossal and his colleagues worked out many details of the tolerance process, particularly in B lymphocytes. Their most important conclusion was that there are at least two different means of generating B-cell tolerance, which Nossal termed "clonal abortion" and "clonal anergy." These two processes occur in response to high and low doses of antigen, respectively. Clonal abortion involves interruption of the B-cell development process, such that a clone of mature, antibody-producing B cells that recognize the tolerizing antigen is not produced. In the process of clonal anergy, B cells capable of binding the antigen are still present, but, for unknown reasons, are unable to respond.

Evidence has been obtained by Nossal's group and others that both clonal abortion and clonal anergy can cause B-cell tolerance in a variety of model systems. More recently, these two

processes have also been demonstrated to occur in T lymphocytes. Apparently, the body has more than one way to achieve self-tolerance. Nossal has suggested that this multiplicity of tolerance mechanisms may exist in order to provide safeguards that decrease the likelihood of developing autoimmunity.

Nossal's current interests relate to details of tolerance in the adult animal. His group is studying the process of "hypermutation" of B-cell receptors, which occurs in areas of the body known as germinal centers. After stimulation with antigen, genes coding for antigen receptors of B cells mutate at a very high rate. Occasionally, quite by accident, a new B-cell receptor capable of reacting with a self antigen may be generated by this process. Nossal and his colleagues are investigating what might happen in such a case. They believe that, in most cases, powerful censorship mechanisms exist to prevent such generation of autoimmune B cells.

Nossal has received many international honors and awards in recognition of his contributions to immunology research. To name just a few, he is a fellow of the Australian Academy of Science and of the Royal Australasian College of Physicians, a foreign associate of the U.S. National Academy of Sciences, a fellow of the Royal Society of London and of the Royal College of Physicians, and holds many honorary degrees from around the world. In 1977, Nossal was knighted by Queen Elizabeth II, and in 1989, he was made Companion of the Order of Australia, which is that country's highest distinction. Born in Austria, Nossal emigrated to Australia in 1939. He received his medical degree from the University of Sydney in 1954, and graduated from the University of Melbourne as a doctor of philosophy in 1960. □

'Human Frontier Science' Lecture

A presentation will be given on "The Human Frontier Science Program" on Friday, Apr. 30 at 1:30 p.m. in the Westwood Bldg., Rm. 428. The speaker is Dr. Jerome G. Green, director, Division of Research Grants, who is a member and vice chairman of the board of trustees of the international Human Frontier Science Program. For more information, call Barbara Williams, 47181. □

PEF Auction Welcomes All

The annual Patient Emergency Fund Auction will be held in the Clinical Center's Visitor Information Center on Friday, Apr. 30. Over the past 8 years, employees and volunteers have come together to raise thousands of dollars to assist needy patients. Come out and join the fun while raising money for a wonderful cause. If you would like to donate a service or merchandise, contact the R&W office, 66061. □

NIH Hosts Workshop on Chronic Wound Healing

A workshop on the "Pathogenesis of Chronic Wound Healing" was held recently at Lister Hill Auditorium. It focused on three prototypic chronic wounds (ulcers)—decubitus (pressure), venous (vascular), and diabetic. The workshop provided a forum for scientists from a broad range of disciplines to share current knowledge, develop new hypotheses, and identify needs for future research.

Chronic wounds are defined as those that do not heal in a predictable fashion. They are either resistant to healing or begin to heal and then break down. Treatment of chronic wounds is costly. The length of a hospital stay for treatment averages 20.8 days. The estimated cost (including lost productivity) of treating hospitalized patients with pressure ulcers alone ranges from \$1.3 billion to \$6.4 billion per year.

Normal Wound Healing

Normal wound healing begins with inflammation and clotting. When inflammation occurs, white blood cells remove tissue breakdown products and bacteria and release a chemical known as angiogenesis factor, which signals other cells to produce new blood vessels in the damaged area. In wounds that extend below the epidermis (outer layer of skin), the wound fills with granulation tissue. It then contracts and the cells involved in forming new skin (keratinocytes) move over the granulation tissue from the edges of the wound. A wound is considered healed when the skin has reformed.

Chronic wounds result when one or more stages of the wound healing process are disrupted and the outer layer of skin is not formed. The edges of the wound become thick and fibrous, increased enzyme activity breaks down collagen, and clot formation is poor.

Pressure wounds occur from direct pressure on the capillaries and lymphatics that cuts off oxygen supply to the tissue. Swelling retards wound healing by inhibiting wound contraction and increasing the distance oxygen must travel from the capillaries to the cells. Vascular ulcers occur when an inadequate blood supply flows through the small blood vessels to the wound site. Wounds in people with diabetes are complicated by a high infection rate influenced by high blood sugar (hyperglycemia), poor nutrition and poor hydration, insulin deficiency, anemia, and vascular and neurological impairment.

Traditional and New Treatments

Traditional treatments for chronic wounds have included cleaning the wound of dead tissue and debris, using systemic or topical antibiotics, applying dressings, exposing the patient to high-pressure oxygen, and ensuring a high protein diet. Other treatments are individualized for each type of wound. For example, for pressure ulcers treatment consists of relieving pressure (e.g., use of a special

mattress and regular turning of a bedridden patient) and attention to nutrition and contaminating elimination. For venous ulcers, treatments include reconstruction or dilation of the vessel to improve blood flow, vein stripping, and grafting. For diabetic ulcers, treatment includes control of glucose levels, elevation of the affected limb, nutrition enhancement, and vessel reconstruction.

Several experimental treatments for chronic wounds are currently being explored. Growth factors are natural substances that are known to stimulate wound healing by influencing the formation of blood vessels and skin. For example, transforming growth factor beta (TGF β), in the presence of oxygen, promotes formation of granulation tissue by stimulating production of proteins and suppressing enzymes that destroy proteins. When TGF β is injected into a wound, fibroblasts (cells that produce collagen protein) enter the site and blood vessels and healing scar tissue form. The ability of a wound to heal is related to its collagen content. Because growth factors influence fibroblasts and, thus, collagen formation, their activity may increase the healing capability of wounds. More information is needed concerning the appropriate growth factor for the type of wound, the quantity of the factor to use, and optimal timing for administering it.

Researchers have been able to promote wound healing by culturing donor skin cells and placing them on the wound with gauze backing and a pressure bandage. These skin grafts are thought to produce growth factors and other substances that stimulate the skin cells to grow. The grafted cells are then replaced by the patient's own cells.

An investigation of the use of electrotherapy for chronic wound healing has revealed that electrical stimulation increased collagen production and blood flow and curtailed bacterial activity. Electrical stimulation may also increase access of TGF β to the wound.

In a study of diabetic ulcers, it was found that after the wound edges were trimmed, the

chronic wound was converted into an acute wound and healing was promoted.

Future Agenda

Workshop members reported that there are no ideal animal models for the study of chronic wounds and suggested that tissue resources, perhaps from chronic disease hospitals, might be made available for scientific use. Scientists need greater understanding of the role of oxygen depletion, molecules that influence inflammation and alter cell growth (neuropeptides), and factors that promote the migration of keratinocytes in wound healing. Future studies could focus on factors that impede the liberation of growth factors for healing and on determining the efficacy of electrical stimulation.

The meeting was chaired by Dr. Vincent Falanga, associate professor, department of dermatology and cutaneous surgery, University of Miami. Held under the auspices of the skin diseases interagency coordinating committee, led by NIAMS, it was also cosponsored by NIGMS, NCNR, NIDDK, and NIA.—Judith Wortman □



Margarite Curtis-Farrell has been named the EEO officer for the Division of Research Grants. Previously, she served as EEO specialist. Before joining the EEO office, she was a personnel management specialist for the division.



The NIH R&W Theatre Group reaches out to assist the Patient Emergency Fund. Profits from this year's theater events totaled more than \$3,800, all of which was donated to PEF. Shown are (from l) Randy Schools, Brenda Merson, Anne Brigham, Elliot Werner (who accepts check on behalf of the Clinical Center's social work department), Judith Williams, John Holmen and Patty Ditoto.

COLLINS

(Continued from Page 1)

Ph.D. degrees in physical chemistry from Yale University.

"That exposed me to some aspects of the technology involved in the genome project," he said. "I am also an internist (he earned his M.D. at the University of North Carolina and completed an internship and residency in internal medicine at its affiliated hospital) and molecular geneticist (he studied human genetics and pediatrics at Yale from 1981 to 1984). These skills will serve me well because they are all parts of this project."

"Not many people have his combination of skills," observed Dr. Michael Gottesman, an NCI molecular biologist who served as acting director of NCHGR for a year following the resignation of original director Dr. James Watson. Gottesman has agreed to serve as acting scientific director of the new NCHGR intramural science program.

"Mike could go a long way in the theater," quipped Collins, "because he's so good at acting."

Collins described his leadership style as a combination of building consensus, seeking advice and making decisions.

"One of the things I'm glad about is that I don't have to come in and fix (NCHGR)," he said. "The Human Genome Project is now in vigorous health. It is going remarkably well, and is ahead of schedule and under budget. That's a testimony to the talents of the people involved in it."

It was a day for unencumbered high spirits as NIH director Dr. Bernadine Healy welcomed one of her biggest personnel coups, a recruitment headed by NIGMS director Dr. Ruth Kirschstein and NCI's Dr. George Vande Woude that, as Gottesman related, "had its moments." Thanks abounded on a sunny spring day that Collins said he would happily trade for the gloom of Ann Arbor.

"This is a wonderful day and a wonderful week," said Healy, who noted that Collins, "in addition to being a superb scientist, brings a collaborative zeal, great compassion, and deep concern for the ethical, legal and social issues that touch on genome research."

Healy said the new genome intramural program, when up to full speed, will have a \$40 million budget and be part of "an intramural renaissance at NIH."

She said Collins has "at lightning speed" received commitments from seven senior scientists. "Virtually no one has turned Dr. Collins down. This reverses the so-called NIH brain drain. It is simply not the case that everybody leaves NIH."

Healy added that "a unique aspect of the Human Genome Project is that it is not an insular program. It relates in a very intimate sense to virtually all the other institutes. We've already seen increased ease of recruitment for other scientists (at NIH) and in applications for



Dr. Michael Gottesman of NCI served as interim director of NCHGR until Collins' appointment.

research from people who want to relate interdisciplinarily with Dr. Collins."

The director said she wanted to "thank profoundly Dr. Mike Gottesman, who took over the program very quickly after Dr. Watson left, and led it with great kindness, great strength, great devotion and great energy. He gained confidence quickly, and rallied us when we needed it. The genome program's momentum was not slowed but enhanced under his direction."

Gottesman said he found at NCHGR "a spectacular scientific program. Credit goes to the scientific community and administrative staff at NCHGR—they made my job very, very easy." He then paraphrased a news report

"...I don't think of the intramural program as being an insular, walled-in environment, but as a critical mass of scientists who can spin off partnerships and collaborations. We're not a separate jewel in the crown of the NIH, but rather a facet on the NIH jewel."

characterizing Collins: "No one in the universe is better qualified for this job than Francis."

Collins thanked Healy for her "consistent and articulate descriptions of the possibilities of (the genome project). She calmed my fears of jeopardizing my own scientific life to take on the administrative responsibilities at NCHGR."

Used to working 90-hour weeks already, Collins said he anticipates working even harder at NIH, where he hopes to devote about half his time to laboratory research; he will head the Laboratory of Human Gene Therapy at NCHGR—one of three laboratories in a nascent intramural program to be located in Bldgs. 10 and 49 (fourth floor and parts of

second and third)—until he can recruit his successor.

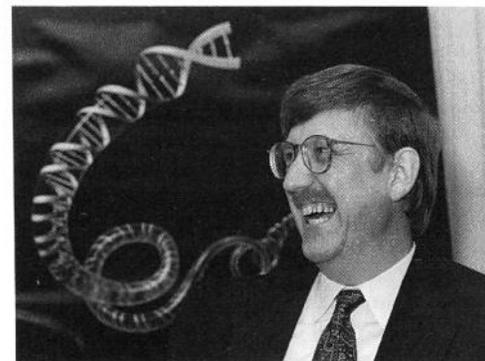
The newest institute director sketched a broad outline of his plans for NIGMG, whose institute status is currently being sought through HHS Secretary Donna Shalala. The new name reflects the two missions of the proposed institute: the ongoing Human Genome Project, which will remain in the extramural program, and the direct application in the intramural program of new technologies to medical genetics at NIH.

"Medical benefit—that is the prime reason for a Human Genome Project," he said. Acknowledging that there was a time when scientists sneered at the HGP as mind-numbing scutwork, Collins opined, "The best and the brightest are working on this project now. Once you understand it, it sells itself. It will help us understand the genetic basis of all diseases except trauma, and will have unprecedented consequences for the human race."

"The genome project offers a whole host of diagnostic benefits," he continued. "These will allow advances in preventive medicine, before the diseases are fully under way."

"The project also offers tools for therapy, not just diagnosis. For instance, we discovered the gene for cystic fibrosis in 1989. In 1993 we now have five gene therapy protocols for treating CF. The genome project will give us therapeutic options we haven't even dreamed of yet."

Collins assured that savings of health costs due to improved therapies "will pay for the



PHOTOS: BILL BRANSON

project many times over."

He also argued that the genome project is indeed "good basic science. This is what biology is all about. The importance of good basic science can't be overemphasized."

The NIGMG intramural program, which didn't exist until last February, "will focus on understanding and treating genetic diseases," he said. "We want to uncover the genetic basis of disease. We also want to create better molecular and cytogenetic diagnostics, and then proceed to gene therapy itself. The whole process should be quite catalytic. I don't think of the intramural program as being an insular, walled-in environment, but as a critical mass of

scientists who can spin off partnerships and collaborations. We're not a separate jewel in the crown of the NIH, but rather a facet on the NIH jewel."

Personally involved in the hunt for the human breast cancer gene, he observed that about 1 in 200 women have the genetic alteration predisposing for the illness, the cause of which "is likely to be found this year. When we find it, we will be able to offer the first presymptomatic DNA diagnosis available to these women, who can alter their risk of actually getting breast cancer by participating in an intense surveillance program. Many lives can be saved."

Of the 25 colleagues who worked with Collins at HHMI-UM in Ann Arbor, half are coming to NIH, starting in September; the rest had family or other commitments. By next spring, the full complement of former Michigan collaborators should be in Bethesda, he said. Two other Michigan scientists from other laboratories are also expected to bring their laboratories here.

Collins said Healy used part of her director's discretionary fund to create the new intramural program, and helped reshuffle space commitments in the Conte Bldg. to accommodate the genome project. He said Healy has protected him from having too many administrative duties so that he can remain a working scientist. Declared Collins, "I am absolutely determined not to lose my edge at the bench."

Former acting director Gottesman said he was able to devote a little more than half his time to his own lab while serving NCHGR and commented, "I'm optimistic that Francis will be able to do both."

Gottesman said he viewed his acting tenure as "kind of like having a sabbatical in-house. It's been a nice challenge and enormous fun. I learned a lot about genome science." He also joked that the new institute initials are oddly appropriate, given his name: "I'm delighted because it will be called MG, and so is Mark Guyer (NCHGR assistant director for program coordination)."

Collins envisions an institute with some 20 or 21 senior investigators by 1995. Intramural NIGMG would consist of three laboratories, three branches, and a variety of sections.

Of his own scientific work, Collins said he will "continue to chase the breast cancer gene, then find out how it works once we find it. I plan to continue working on the neurofibromatosis gene and to pursue gene therapy for cystic fibrosis. We'll also be chasing genes for common diseases such as adult onset diabetes."

He also confirmed the basic goals of the Human Genome Project: "We have to have genetic and physical maps and sequences of the human genome. We can't be derailed from that."

Collins is to meet in late April with members of the scientific community to discuss the HGP's goals for the next 5 years. The new goals for mapping and sequencing will take into

account the technological achievements made thus far.

Taking questions from reporters, Collins said he will work closely with Department of Energy cosponsors of the HGP. "I am very committed to continuing and strengthening our relationship with DoE. Our advisory councils will meet together twice a year."

A member of the 16-person executive council of the international Human Genome Organization, or HUGO, Collins said he'll do what he can to keep it viable, adding that the group helps keep international lines of communication open so that research groups don't end up duplicating one another's efforts.

Collins directed the NCHGR-supported human genome center at Michigan, where he focussed on developing large-scale technologies

ALTERNATIVE MEDICINE OFFICE TAKES ON FIRST PERMANENT DIRECTOR (Continued from Page 1)

grantees with controversial therapies," he adds. The purpose of the site visits will be to seek out and evaluate new opportunities for medical therapy. Members of the site visit team will be chosen in collaboration with the ICDs. This activity will focus on cancer and AIDS therapies as well as other promising treatments. "We will hold workshops with institutes such as NCI and NIAID and also with FDA and other PHS agencies as they apply," Jacobs continues. "As for the grants, we do not expect to give any grants out until the end of FY 1993." The RFA (request for applications) was released on Mar. 26 soliciting applications for grant funds up to \$50,000 for studies of alternative medical practices.

Before joining NIH, Jacobs had interactions with various NIH components on matters ranging from steering young people into scientific careers to serving as a member of the Office of Minority Health's fact-finding team.

"I feel that the image of NIH changed with the establishment of this office," says Jacobs. "The twist is different. A little bit offbeat. But," he adds, "the overall NIH community has been very supportive."

Other OAM staff members include Dr. Stephen Groft, who served as interim acting director of OAM; deputy director Dr. Daniel Eskinazi, previously of NIDR; Dr. John Spencer, program analyst, previously from NIMH; and secretary Nora Richardson.

Jacobs, a native of New York, received his B.S. from Columbia University and his M.D. from Yale University School of Medicine. After completing 2 years of pediatric residency at the Dartmouth-Hitchcock Medical Center in Hanover, N.H., and a senior residency at Yale's department of pediatrics, he entered the Indian Health Service (IHS) where he served as a pediatrician at the Gallup Indian Medical Center in New Mexico. Upon completion of his assignment at Gallup, he became a Robert Wood Johnson clinical scholar at the University of Pennsylvania School of Medicine. After

to identify genes responsible for human illness. He also pioneered the development of a gene-locating strategy called "positional cloning," which, according to NCHGR, uses the inheritance pattern of the disease within families to pinpoint a gene's location.

Collins spends a portion of each year doing clinical work in Nigeria, an experience that helps him keep his perspective.

He and his institute officials will occupy space in Bldg. 31. The new institute can be reached at 20911. □

Day Care Center Has Openings

The infant/toddler center run in Bldg. T-46 by ChildKind Inc. has spaces available for 18-month to 2 year olds. A subsidy program is available. For information call Lee, 68357. □

receiving his M.B.A. in 1985 from Wharton, he returned to PHS, working in the Health Resources and Services Administration (HRSA) and again for IHS. In 1989, he left IHS to work for the Aetna Life Insurance Co. as a medical director in its research and development program. He returned to PHS in January 1992 to work as director of policy, program analysis and coordination in the National AIDS Program Office under the auspices of DHHS's Office of the Assistant Secretary for Health.

Jacobs is a member of the St. Regis Mohawk Tribe in upstate New York and has been active over the years with the Association of American Indian Physicians; he is currently their past president. He also serves on the national advisory committee of the Robert Wood Johnson Foundation's three national programs—Improving the Health of Native Americans, Minority Medical Education Program, and chairman of Healthy Nations: Reducing Substance Abuse Among Native Americans.

The Office of Alternative Medicine is located in Bldg. 31, Rm. B1C35, phone 24335. □

Ready for a Trip?

Is it time to get away from the rainy weather and traffic? R&W is planning some wonderful vacation packages at bargain rates. Choose between an all-inclusive trip to Paradise Island Fun Club in the Bahamas (Oct. 15-18) or take the kids to Disney World over Labor Day weekend. Start planning today. Watch the R&W newsletter for more information. □

Preschool Marks 20th Anniversary

The NIH Preschool (POPI) invites all alumni and their families to its 20th birthday party on Thursday, May 13, from 4:30 to 6 p.m. at the school. The school invites guests to celebrate its past and future at a potluck cookout. For information call Joanna Roberts, 65144. □

The NIH Life Sciences Education Connection

While many students were enjoying spring break and recovering from the Easter holiday, approximately 700 Fairfax, Va., students were being "turned on" to science. Laurel Ridge Elementary School students participated in a science fair that brought five local scientists, including two from NIGMS, to their school for a day of "show and tell" demonstrations. Dr. Jim Anderson directed a game that used jelly beans to demonstrate how rapidly infections can spread; Dr. Irene Eckstrand used flexible straws to turn geometry into a game. The Apr. 13 event was organized by George Washington University graduate students including Mark Weber from the Office of the Assistant Secretary for Health, who wanted to encourage students to think of science as a positive career option.

And for those scientists who have



preregistered to attend the Apr. 28 "Scientists and the Schools: Partnerships and Possibilities" workshop, the Office of Science Education Policy (OSEP) would like to remind you that the event will be hosted in the Mary Woodard Lasker Center for Health Research and Education (The Cloister, Bldg. 60). Dr. Bruce Alberts, American Cancer Society research professor of biochemistry, University of California, San Francisco, and president-elect, National Academy of Sciences, will give the keynote

address "Science Education in the United States: How Scientists Can Help." Dr. Jay Moskowitz, NIH deputy director for science policy and technology transfer, will welcome participants and make the introductory remarks at 9 a.m. The keynote talk is open to the public, but the 10:30 a.m. to 5 p.m. workshop is by registration only. Call OSEP, 22469, for more information.

NIH Fire Fighters Receive Awards for Life-Saving Performance

In mid-March an NIH employee suffered a cardiac arrest at an on-campus building. Another worker saw the unconscious man and called the NIH emergency number, 116, to summon help. The fire and emergency response section of NIH's Fire Department quickly arrived on the scene, evaluated the individual and immediately began administering cardiopulmonary resuscitation (CPR). NIH fire fighters Paul Donaldson, Brian Padgett and Christopher Pyles continued CPR until a weak pulse was restored. A Montgomery County medic ambulance was called for additional assistance. The patient was defibrillated, stabilized and transported to Suburban Hospital. The patient is now convalescing at home and has contacted the NIH fire fighters to thank them for saving his life.

Recently, Dr. Robert McKinney, director of NIH's Division of Safety, presented the three fire fighters awards recognizing their life-saving efforts. Although the fire fighters modestly characterized their rescue effort as "just part of their job," McKinney noted that, "The victim is alive today only because of the prompt, effective and professional prehospital emergency treatment provided by the NIH fire fighters. The large and diverse NIH community requires fire and emergency services similar to a small city. The professional fire fighters at NIH are cross-trained in fire fighting, emergency medicine and hazardous materials incident response."

NIH Fire Chief William Magers noted, "The NIH fire fighters are highly trained and skilled in all aspects of emergency response and manage emergencies such as this on a regular basis. Our fire fighters are on call daily round-the-clock to protect the health and safety of the NIH community."

In the event of an emergency, hazardous materials accident or fire on campus, call 116 (off campus, call 9-911).



Dr. Robert McKinney (c), director, NIH Division of Safety, and NIH fire fighters (from l) Paul Donaldson, Brian Padgett and Christopher Pyles after the awards ceremony

Program Explores Breast Cancer

The Staff Training in Extramural Programs (STEP) committee will present a Science for All program entitled "Medical Progress in Breast Cancer" on May 11 from 1 to 3:15 p.m. in Masur Auditorium, Bldg. 10. The Science for All series, open to all NIH personnel, is designed for staff with or without scientific backgrounds who wish to increase their knowledge about timely scientific topics.

Breast cancer will affect approximately one woman in nine over the course of her lifetime. It is considered the most serious malignancy of women, and has a death rate that has not substantially changed in 40 years. However, progress has been made in many areas of breast cancer, especially in the detection and treatment of localized disease. Promising advances in research, diagnosis, and treatment of this disease will be discussed in the Science for All presentation.

Questions to be addressed include: Who is at risk? What are the causes of breast cancer and how does the disease progress? What are the different types of breast cancer and how do they progress? When and how often should mammography be done? Are there effective protections against breast cancer? What are the indications for and the risks of tamoxifen chemotherapy?

Speakers include: Dr. Louise Brinton, chief, environmental studies section, NCI; Dr. Marc E. Lippman, director, Lombardi Cancer Research Center, Georgetown University; and Dr. Ruth Sager, chief, division of cancer genetics, Dana-Farber Cancer Institute.

No advance registration is required. Continuing education credit is not available. Sign language interpretation will be provided. For more information call 61493. □

DCRT Computer Training Classes

Classes	Dates
GCG Sequence Analysis on the Convex Distributed Database Processing Using Client-Server Technology	5/4-5/6 5/7
Recurrent Problems in Data Analysis	5/10-5/12
Analysis of Ligand Binding Data Using the LIGAND Program	5/11
Intermediate PC-DOS	5/12, 5/14
Introduction to Molecular Modeling	5/13
Software Engineering and CASE Concepts	5/14
DB2 Application Programming	5/17-5/21
ENTER MAIL	5/18
Modeling Protein Folding	5/18
Relational DBMS Architectures: Why Client-Server?	5/19
BITNET	5/20
DCRT Support for Unix Workstations at NIH	5/26

Classes are offered by the DCRT Training Program without charge. Call 62339 for more information. □

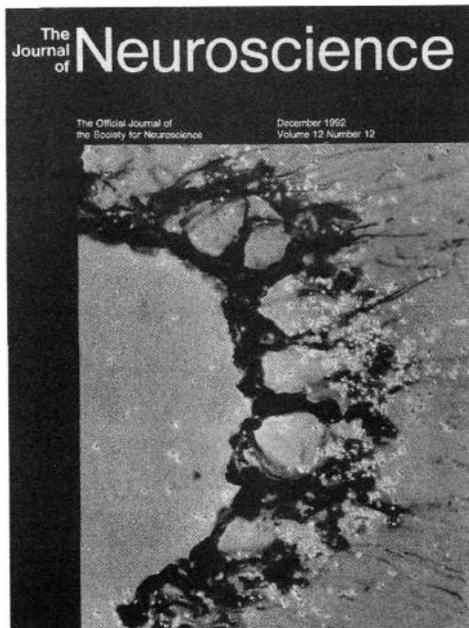
NCRR's Medical Arts and Photography Branch Honored

Examples of fine graphic design from NCRR were selected for exhibition and publication in the 1993 American Institute of Graphic Arts AIGA50 design competition. Two publications—"Seventy Acres of Science," art directed by Linda Brown, chief of the design section of NCRR's Medical Arts and Photography Branch (MAPB), and "Decade of the Brain," art directed by R.B. Winterrowd, chief of MAPB—were among the 50 entries chosen by AIGA for exhibition in Washington, D.C.

Also selected were "A Dozen Good Reasons to Build Your Nest Egg with U.S. Savings Bonds" and "Have You Ever Had Measles?," two posters illustrated by Margaret Georgiann and codesigned with Richard Barnes of the design section. "A Dozen Good Reasons" also won a first place award in the Department of the Treasury's 1992 U.S. Savings Bonds Communicators Competition and was included in the fifth Annual Show of the Illustrators Club of Washington, D.C., Maryland, and Virginia.

"Have You Ever Had Measles?" received a silver medal from the Art Directors Club of Washington, D.C., and was included in USA12, the annual book of the AIGA in 1992.

Scientific/technical photographer Ricardo V. Dreyfuss of MAPB's photomicrography camera unit was honored twice during 1992. His photographs were published as covers of *Science* and the *Journal of Neuroscience*. The latter cover shows a double-labeled retinal nerve fiber layer of a rat eye, depicting ganglion cells expressing mRNA for insulin-like growth factor.

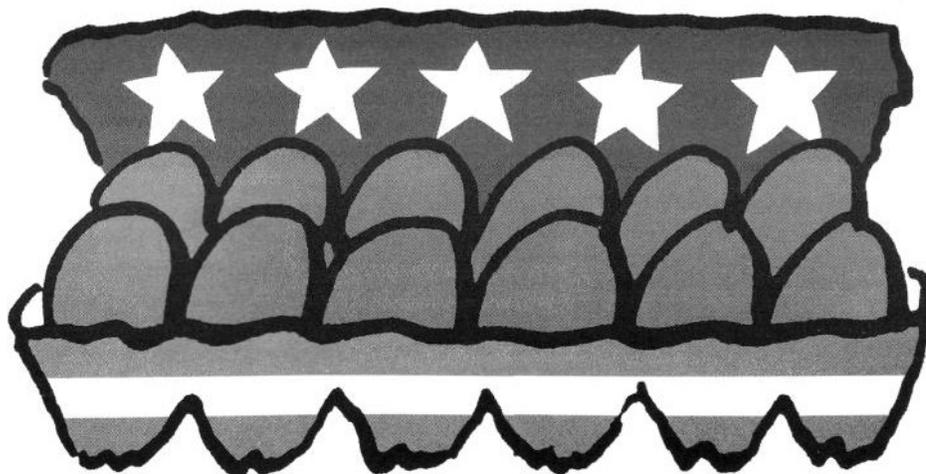


This is a photo of Ricardo Dreyfuss' *Journal of Neuroscience* magazine cover.

MAPB's video unit also produced award-winning work. Joy Jackson received the National Association of Government Communicators' Blue Pencil-Gold Screen Award in the video/film (internal/employee communications) category for her work on "Radiation Safety Refresher Training-1992." This video is part of a series that Jackson produced and directed for the Radiation Safety Branch.

A Dozen Good Reasons to Build Your Nest Egg With U.S. Savings Bonds

- | | | |
|---|--------------------------------|--|
| 1. Guaranteed Minimum Return | 5. Peace of Mind in Retirement | 9. Strengthening America |
| 2. Competitive Interest Rates | 6. Cash on Demand | 10. Guaranteed Safe |
| 3. Tax Exemptions | 7. College Costs Made Easier | 11. Unsurpassed Reliability |
| 4. Deferred Reporting of Interest for Federal Taxes | 8. Easy to Buy | 12. No Commissions or Maintenance Fees |



The guaranteed minimum return on U.S. Savings Bonds is 6 percent when Bonds are held 5 years or longer.

This is a photo of Margaret Georgiann's and Richard Barnes' Savings Bonds poster.

NIH Institute Relay Set, May 19

On Wednesday, May 19 at noon, the NIH Health's Angels Running Club will hold the 16th Annual NIH Institute Relay, in front of Bldg. 1. A traditional rite of spring at NIH, the relay is a competition between 5-member teams; each member runs a 1/2-mile loop around Bldg. 1.

Teams are divided into five divisions: open (runners 39 years old and under), master (runners over 40 years old), all male, all female and mixed (teams with at least two female runners). All runners, volunteers, and their friends and families are invited to attend a post-race party at the FAES house.

Each team will pay a \$5 entry fee to help defray costs. Entry forms are available at the NIH R&W Activities Desk in Bldg. 31, Rm. B1W30, and at the R&W in Parklawn Bldg., Rm. 509; forms are due to the NIH R&W Activities Desk by 4 p.m., Friday, May 14. Packets for each team will be available for pick-up on May 18.

For more information, or to volunteer to help, call Jerry Moore, 64606, or Dr. Peter Pentchev, 63285. □

Chinese American Association Holds Scientific Conference

The NIH Chinese American Association held a Conference on Current Topics in Biomedical Sciences recently. The 1-day meeting featured 14 speakers addressing topics in basic science, clinical science, and epidemiology. Opening remarks were presented by Dr. Philip Chen, NIH associate director for intramural affairs.

The NIH Chinese American Association has more than 500 members, including employees at NIH, FDA and USUHS. The association holds an annual scientific conference in addition to many other social events. Interested individuals should contact the association president, Timothy Chen, 64836, or the scientific officer, Kuan-Teh Jeang, 66680. □

Amateur Photo Contest, May 18

The NIH R&W Camera Club will hold its annual amateur competition, which is open to all employees, on May 18 at 7:30 p.m. in Lipsett Amphitheater, Bldg. 10. This is an opportunity to enter your favorite photographs in either color or black and white prints, or color slides. Entries will be received from 11 a.m. to 1 p.m., and from 5:30 to 7 p.m. Judging begins promptly at 7:30. Competition rules will be posted around the campus and at all R&W stores. For more information, contact Maureen O'Connell, 61296. □

Normal Volunteers Wanted

The Experimental Therapeutics Branch, NINDS, is seeking volunteers, ages 50 to 80, for psychological testing. Volunteers must be available for up to 1 hour, and will be compensated for their time. If interested, call Michael, 67996. □

Take Stock in America—Buy Bonds

“Take Stock in America” is the theme of this year’s U.S. Savings Bonds campaign. In today’s market, Savings Bonds are a competitive investment choice. Savings Bonds currently are guaranteed an interest rate of 4 percent. When market-based interest rates go higher, interest on bonds increases, but it never falls below the guaranteed 4 percent.

Spring marks a time of new growth. This includes taking stock of your own savings plan. Unlike other finicky investments that require constant watching, bonds can be started with a minimum of hassle. Just see your area canvasser, select the amount of money you want set aside every 2 weeks, and watch your savings grow.

If need arises, you can cash in the bonds to cover other expenses, but you won’t get a tax break on the interest. But if you spend them on tuition, you can call them “smart” bonds. And they are “smart” bonds, smart for you and for



1993 U.S. Savings Bonds coordinators

the U.S.A., helping to reduce the national debt.

So whatever you need for saving—your child’s tuition, or even your own, building your dream house or retirement, bonds can help you realize

your financial goals.

Sign up today and buy bonds. Safe and secure, there’s no better investment than Savings Bonds for today’s spring shopper. □

1993 U.S. Savings Bonds Coordinators

Org.	Name	Bldg./Rm.	Phone	Org.	Name	Bldg./Rm.	Phone
NIDCD	Anne Sumner	31/3C02	22220	NICHHD	Joseph Keleghan	6100 Exec. Blvd./8B07	64924
CC	Dr. Ray Fitzgerald Doris Clark	10/14S231	63407	NIDR	Dorothy Costinett	31/2C27	67744
DCRT	Marlyn Strickland	12A/3021	64647	NIGMS	Sally Lee	WW/9A09	47767
DRG	David Dwyer	WW/454	47013	NINDS	Carol Smith	10/5N220	62294
FIC	Frances Anderson	31/B2C29	64625	NLM	Valerie Syed	38A/B1N17	66546
NCRR	Ernie Beile	13/3W24 or 3E15	64426 65196	ORS	Sandra Miller	31/B3B12	66893
NCI	James Prather	31/10A50	69606	ORS/DS	William Magers	12/103	62372
NCI/OD	Mark Hodor	EPS/234	67800	ORS/DSS	Louise Ryman	31/3B54	66121
NCI/DEA	Susan Feinman	EPN/601B	20944	ORS/DSO	Sandra Miller	31/3B54	66121
NCI/DCE	Katie Finn	EPN/539	61282	ORS/DES	Christie Marrow	13/2E47	66391
NCI/ DCBDC	Denise Stoneman	6010 Exec. Blvd./224	63381	ORS/DSFM	Patricia Lacey	EPS/216	60248
NCI/DCPC	Mary Lou Carter	EPN/239	60279	NIAMS	Andi Riche Marsha Hennings	6/408	21375
NCI/DCT	Mitzi Langeman Denise Simmonds	31/3A44	65964	NCNR	Traci Lafferty	31/5B25	60472
NEI	Dr. Ralph Helmsen	31/6A49	65983	OD/NIH	Marilyn Berman	1/344	65787
NHLBI	Karen Sheahan Pat Barton	10/7N214 10/7N220	62117 21985	NCHGR	Don Bordine	38A/609	21094
NIA	Michael Lockard Cheryl Caponiti	31/2C02	65347	NIEHS	Vivian Salvo	PO #12233 8/919/541-4509 or -3317 Research Triangle Pk. 27709 Mail Stop EC-02, 79 T.W. Alexander Dr., Rm. 141	
NIAID	Josephine Morris	31/7A19	69592	NIMH	Stephen Koslow	Pkln/11-103	443-3563
NIDDK	Debbie Whittington	31/9A47	61202	NIAAA	Tim Crilley	Pkln/14C06	443-1191
				NIDA	Katherine Davenny	Pkln/11A33	443-1801

Theatre Group Presents Play

The NIH R&W Theatre Group will present *Social Security* by Andrew Bergman on May 7, 8, 14, 15, 21 and 22 at 8 p.m. and May 9 and 16 at 3 p.m. in Masur Auditorium, Bldg. 10.

The play is a lighthearted comedy about a mother and her two daughters and sons-in-law and the trials and tribulations of deciding which daughter the mother gets to live with. The fun starts when mother unexpectedly meets the man of her dreams and wants to marry him, which throws everyone else off balance. Jim Robertson is directing the talented cast of actors in this humorous production. Ticket prices are \$8 for adults, \$5 for seniors, and \$3 for children 12 and under.

The NIH R&W Theatre Group is an ensemble of NIH employees and other community members who each year present a musical revue and a dramatic production for the benefit of the NIH Patient Emergency Fund. The group also presents traveling productions of its shows. For information and tickets call Brenda Merson, (301) 253-3511. □

Career Development Seminar Set

A career development seminar entitled “Succeeding—Not Just Surviving: Success Strategies for the Nineties” will be held on Wednesday, May 12, from 1:30 to 3 p.m. in Wilson Hall, Bldg. 1.

The seminar, sponsored by the NIH advisory committee for women and the Office of Equal Opportunity, is open to all NIH employees. Cassandra Isom, assistant director for development and training, will conduct the seminar. Among the topics she will discuss are behaviors in the workplace, traits of successful people, and tools for achieving success. No advance registration is required. Sign language interpretation will be provided. For more information or reasonable accommodation, call 66301. □



TRAINING TIPS

The NIH Training Center, Division of Personnel Management, offers the following hands-on IBM and Macintosh computer courses:

<i>Personal Computing Training</i>	66211
<i>Course Titles</i>	<i>Starting Dates</i>
Welcome to Macintosh	5/11, 5/27, 6/7, 6/24
Advanced Macintosh Techniques	5/18
MacWrite	5/3
Intro to WordPerfect 2.0 (Mac)	5/12, 6/21
Advanced WordPerfect 2.0 (Mac)	5/24
Advanced Microsoft Word 5.0	5/17
Excel - 4.0 Level 1	5/13, 6/22
Excel - 4.0 Level 2	6/8
Excel - 4.0 Level 3	5/20
Lotus for Mac - Levels 1 and 2	Upon Request
FoxBASE 2.01-Levels 1 and 2	Upon Request
Kaleidagraph	5/25
MORE III	Upon Request
HyperCard	5/4
3Com PC Network-Level 1	5/10
3Com PC Network Management	Upon Request
Intro to Personal Computing for New Users	5/21, 6/16
Disaster Recovery and Data Security for the PC	5/19, 6/18
Introduction to DOS	5/17, 6/4, 6/21
Introduction to Windows 3.1	5/21, 6/7, 6/29
WordPerfect for Windows	5/11, 6/21
Lotus for Windows (NEW)	5/24
Excel for Windows (NEW)	5/19
Project for Windows (NEW)	5/17
Introduction to WordPerfect 5.1	5/24, 6/22, 7/13
WordPerfect 5.1 - Advanced Topics	5/4, 6/8
Desktop Publishing w/WP 5.1 (NEW)	5/27
Intermed. Harvard Graphics, Rel. 3.0	5/25
Intro to Paradox	5/10, 6/14
Advanced Paradox	5/28, 6/23
Advanced dBASE IV	5/11
Introduction to dBASE III+	Upon Request
Intermediate dBASE III+	Upon Request
Intro to Lotus 1-2-3, Rel. 2.4	5/3
Intro to Symphony	5/18
Intermediate Symphony	Upon Request
Advanced Symphony	5/25
Introduction to CRISP	5/28, 6/25
Advanced CRISP	5/28
IMPACT for MSCs	Upon Request

CFC Awards Made to Outstanding Participants



"All we need is you"—CFC raffle winner Shirley Bagley (l) of NIA won the TV/VCR combo courtesy of the NIH Federal Credit Union (NIHFCU). With her are (from l) Lindsay Alexander, NIHFCU president and CEO; Dr. Philip Schambra, FIC director and NIH CFC vice chair; John Mahoney, NIH deputy director for management and NIH 1992 CFC chair; Randy Schools, R&W general manager; and Sandeep Singh, NIHFCU director of quality and marketing.



Dr. Richard Adamson (l, with plaque), director, Division of Cancer Etiology (DCE), holds his division's 100 percent goal award. This is the seventh year in a row that DCE has exceeded its CFC goal. With him are Maria Klebanoff (c), who won a special service award, and Mark Kochevar, DCE administrative officer, who received a leadership award. At rear are (from l) Franklin Marks, PHS CFC coordinator; Dick Miller, FIC executive officer and ICD CFC coordinator; Phil Amoroso, NCI associate director for administrative management; Schambra; Mahoney; and Paul Johnson, HHS CFC coordinator.

Training Center Gets Automated Voice Mail System; Starts May 7

Starting May 7, calls to the NIH Training Center will be answered by an automated voice mail system.

Callers will be able to choose from a menu offering basic information about topics such as the Training Center catalog, class registration procedures, enrollment deadlines, classroom locations and shuttle schedules. An automated message delivery system will also be available to those calling the Training Center.

Installation of the automated system came in response to both the rapidly increasing volume of telephone inquiries and a renewed emphasis on better customer service. Training Center officials are confident that the system will allow the center to provide more efficient and timely service to all employees at NIH. For more information call 66211. □

Legislative Update Offered

The NIH Executive Speakers Series Seminar will present a federal legislative update on key issues impacting NIH scientists and the executive community that have emerged in the newly elected first session of the 103rd Congress.

Speaker for the occasion will be Nicholas Noland, executive director, Federal Government Task Force, and will be held on May 3, from 2 to 3:30 p.m. in Lipsett Amphitheater, Bldg. 10.

The Federal Government Task Force is a nonprofit Capitol Hill service organization, and provides legislative analysis for congressional members and their staffs.

Among issues Noland will address are: effects of budget on workers and retirees; honoraria ban lift; congressional and locality pay; and the Hatch Act. The series is sponsored by the NIH Training Center. For more information call Dr. James C. Moone, 62497. □

Children's Health Writer To Speak

"Why Do I Have a Bellybutton? Writing About Health for Children" is the topic of an NIH Public Affairs Forum to be held on Monday, May 10, in Lipsett Amphitheater, Bldg. 10, from 1:30 to 3 p.m. The speaker will be Catherine O'Neill, who writes a column for children entitled "How and Why" for the weekly *Washington Post* health section. NIH Public Affairs Forums focus on the many facets of NIH information and education programs and are open to all NIH employees. For reasonable accommodation needs or further information, contact Connie Raab, 68188. □

May Is Blood Pressure Screening Month

High blood pressure is a silent killer that can lead to heart attacks, strokes or kidney failure. "Many people have high blood pressure and don't know it. A person can look and feel fine at the same time he or she has dangerously high blood pressure," said Dr. James Schmitt, director, NIH Occupational Medical Service (OMS), Division of Safety. "One in four adult Americans and one in three African Americans has high blood pressure. The good news is that high blood pressure can be controlled if it is discovered and treated."

For 19 years, May has been National High Blood Pressure Month. During May, community organizations across the United States work together to increase awareness about the risks of high blood pressure (hypertension). One part of this effort is providing the community free, quick and painless blood pressure screening. Many people do not know if they have high blood pressure or don't have their blood pressure checked regularly.

Noted Schmitt, "Blood pressure screening is simple. Your blood pressure level is checked and you are advised based on the results." In May, OMS will come to NIH worksites to screen employees for high blood pressure. A listing below identifies the day, time and place for OMS blood pressure screening. Stop by at a time convenient for you. If you have questions, call OMS, 64411.

Another way to check your blood pressure regularly is to use one of the automatic blood pressure computers installed in NIH buildings such as 31, 38A, Westwood and EPN. You can take a few minutes anytime to check your blood pressure following the simple directions.

At the OMS blood pressure screening sites, the nurse can provide information on ways to control high blood pressure, risk factors and the complications related to hypertension. Schmitt encourages blood pressure screening because, "High blood pressure can be controlled in several ways: lifestyle changes, reduction of dietary salt or medication. The screening sessions are an opportunity to learn if you have high blood pressure and help you have a longer, healthier life."

Blood Pressure Screening Sites

Location	Day	Date	Time
Bldg. 10, Rm. 6C306	Mon.	May 3, 10	7:30 a.m.-9 p.m.
	Thurs.	May 6, 13	7:30 a.m.-9 p.m.
Housekeeping, Bldg. 10, Rm. B1D25	Mon.	May 10	2-4 p.m.
Bldg. 13, Rm. G904	Tues.	May 4	8 a.m.-2 p.m.
	Fri.	May 7	8 a.m.-3:30 p.m.
	Tues.	May 11	8 a.m.-2 p.m.
Bldg. 31, Rm. B2B57	Wed.	May 5	8 a.m.-noon 1-3:30 p.m.
Bldg. 36, Rm. 1B07	Mon.	May 10	8 a.m.-3:30 p.m.
Bldg. 38A, Screening Rm.	Fri.	May 14	8 a.m.-noon
EPN, Rm. 103	Wed.	May 12	8:30 a.m.-3:30 p.m.
Fed. Bldg., Rm. 10B08	Thurs.	May 6, 13	1-3 p.m.

Blobel Gives Ehrlich Lecture

The sixth Paul Ehrlich Lecture will be given by Gunter Blobel on Wednesday, May 5 at 2:30 p.m. in Lipsett Amphitheater, Bldg. 10, sponsored by the Foundation for Advanced Education in the Life Sciences. A reception will follow the talk.

As in years past, the Ehrlich lecture has succeeded in enlisting the cooperation of one of the world's leading molecular biologists. Blobel continues a series of distinguished lecturers that started with Edgar Lederer then featured Avram Goldstein, George Hitchings, Isabella Karl and Manfred Eigen. Blobel will address the problem of movement of proteins across intracellular membranes. His remarks will culminate in a description of a "protein conducting channel," his latest discovery. For more information call 67975.

AAAC Lecture Examines NIH's Early Contributions to Women's Health

A lecture entitled "Some of NIH's Early Contributions to Women's Medical Problems: Choriocarcinoma, the Pill and Menopause," sponsored by the Asian/Pacific Islander American advisory committee of the Office of Equal Opportunity, will be delivered by Dr. Roy Hertz, NIH scientist emeritus, on Friday, May 7 from 11:30 a.m. to 1 p.m. in Wilson Hall, Bldg. 1. The lecture will cover Hertz's collaboration with and contributions to Asian scientists at NIH and overseas.

Hertz, a pioneer physician/scientist for women's health at NIH, admitted the first patient with prostate cancer and first woman with advanced breast cancer to the Clinical Center. He has made many important contributions to the diagnosis and treatment of trophoblastic diseases, to the hormonal basis for oral contraceptive pill development, and to resolving issues related to the use of estrogen in menopausal women. He was inducted into the National Academy of Sciences and received the Albert and Mary Lasker Foundation Medical Research Award in 1972. He also has received numerous other distinguished honors and awards.

The lecture will be open to the public and sign language interpretation will be provided. For more information, call Joan Brogan, 62906, or Dr. Hao-Chia Chen, 62861. □

Healthy African Americans Sought

The NHLBI seeks healthy African-American individuals between the ages of 18 and 50 for a pain relief study. The study will require three visits to the outpatient clinic, and individuals will receive payment for their time. For more information, call Linda between noon and 3 p.m., Tuesday through Thursday, 68033. □



Carla Oriuwa of NIA has her blood pressure checked by OMS Nurse Ann Crawford.