

# The NIH Record

U.S. Department  
of Health  
and  
Human Services

May 10  
1983  
Vol. XXXV  
No. 10

National  
Institutes  
of  
Health

## National Arthritis Month Proclaimed by President

At a White House ceremony Apr. 11, President Ronald Reagan signed a proclamation declaring May 1983 as National Arthritis Month.

Also present were Vice President George Bush, Senator Steven Symms of Idaho and his wife, Mrs. Fran S. Symms, a member of NIH's National Arthritis Advisory Board; John Wiswall of Delaware who has had



In recognition of National Arthritis Month, Dr. John Decker (above), chief of the Arthritis and Rheumatism Branch, NIADDK, will be the keynote speaker at a community forum on arthritis to be held in Masur Auditorium May 17 starting at 7 p.m.

arthritis for 18 of his 19 years, and Victoria Principal, the well-known actress and this year's general chairman for the Arthritis Foundation. Ms. Principal's mother has systemic lupus erythematosus, a potentially serious connective tissue disease.

Arthritis, the oldest known group of chronic diseases, is still the Nation's greatestcrippler. At least 35 million Americans—about one in seven—have some form of arthritis at a cost to the Nation of billions of dollars.

The forms of arthritis include such common disorders as osteoarthritis, rheumatoid arthritis, and gout; connective tissue diseases, such as lupus and scleroderma, which can afflict internal organs as well as the joints and skin; juvenile arthritis, which can afflict infants and children; and ankylosing spondylitis, or spinal arthritis.

The Presidential proclamation declared:  
"The total cost of arthritis must be

(See ARTHRITIS, Page 10)

## NCI and NIAID Award \$245,721 to Fund Four New Research Studies on AIDS

The National Cancer Institute and the National Institute of Allergy and Infectious Diseases recently awarded one-quarter of a million dollars in direct costs to fund four new studies on acquired immune deficiency syndrome (AIDS).

AIDS is a relatively new, often fatal condition that leads to a breakdown of the body's immune function.

The awards are the first made from research proposals submitted in response to a request for applications (RFA) issued by NCI to stimulate studies on possible causal factors for the condition and its treatment. NCI has allocated up to \$1.8 million and NIAID approximately \$1 million to support proposals received from investigators in response to the RFA. Additional awards for proposals submitted under the RFA are expected to be made this month. NIH estimated total funding for research on AIDS in FY 1983 will be \$9.6 million, including \$4.4 million through NCI; and \$4.0 million through NIAID.

AIDS disorders include Kaposi's sarcoma, a rare tumor that starts in cells of blood vessel walls; *Pneumocystis carinii* pneumonia;

and other opportunistic infections. Cases of AIDS have been reported primarily among homosexual men, intravenous drug abusers, recent Haitian entrants and hemophiliacs.

The research projects to be funded by NCI are:

- Dr. John H. Hughes, Children's Hospital Research Foundation, Columbus, Ohio, will conduct animal studies on the immunosuppressive potential of human seminal plasma and cytomegalovirus (CMV), cause of a type of infection seen in AIDS patients. Seminal plasma and CMV have been suggested by investigators as possible causal agents for AIDS.

He will study whether seminal plasma suppresses immune function and, in turn, may lower resistance to CMV infection. First-year funding is \$46,241 in direct costs for the 2-year study.

- Dr. Martin S. Hirsch, Massachusetts General Hospital, Boston, will investigate the possible role of viruses in the development of AIDS. Extensive virological and immunologic studies will be conducted on a group of AIDS patients.

(See AIDS STUDIES, Page 11)

## President's Revised 1984 Budget Maintains 5,000 New and Competing Grants

NIH officials have finished their participation in the Congressional hearings on the President's 1984 budget estimates. Testimony by government witnesses on the NIH budget was completed Apr. 26.

NIH Director Dr. James B. Wyngaarden and the Directors of NIH's Bureaus, Institutes and Divisions appeared before the Senate Appropriations Subcommittee on Labor, Health and Human Services, Education and Related Agencies Apr. 12 and 13, and before the House Subcommittee on Apr. 19, 20, 21, 25 and 26.

In their testimony, the NIH witnesses presented the President's proposed 1984 budget for the agency. The total requested, \$4,077 billion, was the same as that submitted with the President's budget message Jan. 30, but the distribution of funds, particularly within the mechanisms of support as finally approved by the OMB, differed from the earlier draft submissions.

The revised proposal calls for the support of 5,000 new and competing grants, with offsetting reductions in support for centers, training, contracts and other programs. (See "Revised Budget Appropriation and Mechanism Tables," page 12.)

## Parklawn Classic Results

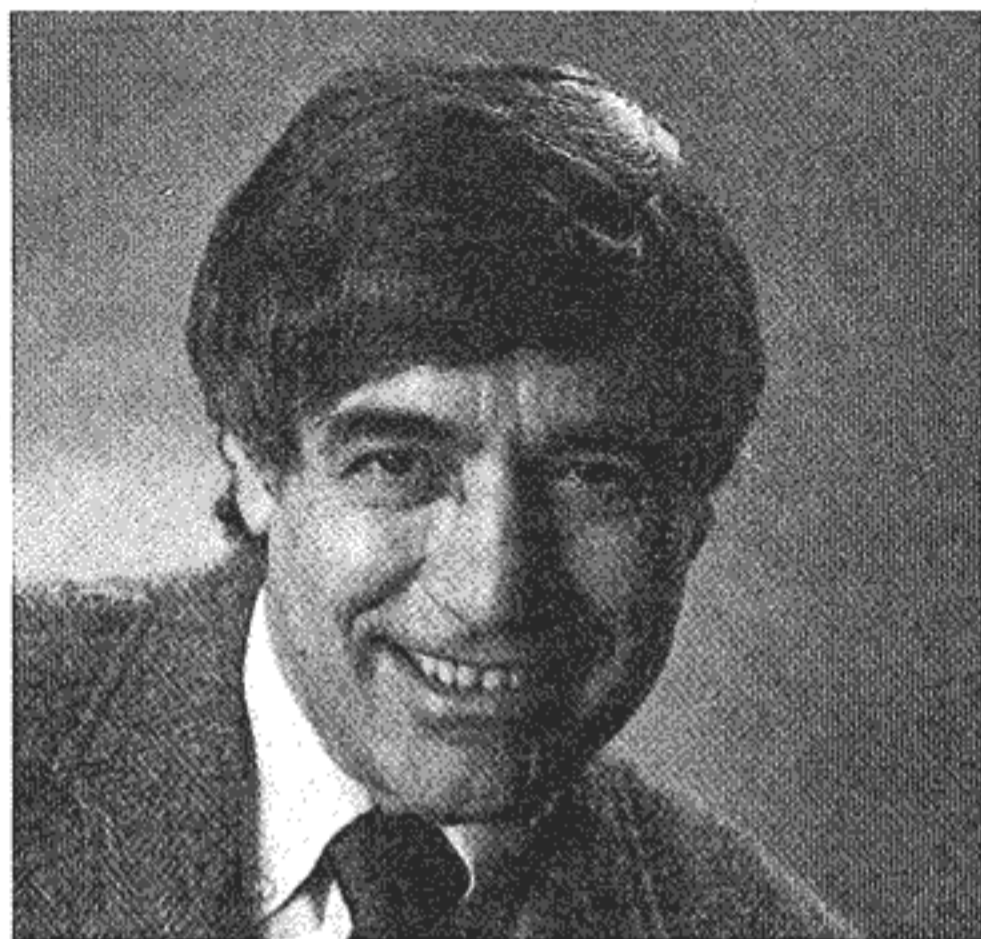
The April 29 Parklawn Classic turned out to be an NIH Classic. Jerry Moore of the Division of Management Policy, Office of Administration, OD, placed first in the 5-mile men's race, setting a new course record. Linda Bennett of the National Institute of Child Health and Human Development came in second in the women's race. Altogether, 8 NIH'ers received awards.

Complete details and photographs of the Classic will appear in the next issue of *The NIH Record*.

## Dr. Hector DeLuca Wins 3M Life Sciences Award

NIADDK grantee Dr. Hector F. DeLuca received the "3M Life Sciences Award," with a \$10,000 honorarium Apr. 11 at the annual meeting of the Federation of American Societies for Experimental Biology in Chicago, Ill.

The award was established to honor researchers whose work has made a significant contribution to the health and welfare of mankind. Dr. DeLuca was recognized by



An NIADDK grantee, Dr. DeLuca received the 3M Award for his research on vitamin D metabolism.

3M for his "internationally distinguished work in vitamin D metabolism." He is presently chairman, and the Harry Steenbock research professor, department of biochemistry at the University of Wisconsin, Madison.

Dr. DeLuca was the first to demonstrate that vitamin D must be metabolically altered before it can function. He subsequently isolated the active metabolites of vitamin D in pure form and determined their chemical structures.

The structures were confirmed by means of chemical synthesis which also provided the pure forms of this compound for use in treating metabolic bone diseases such as vitamin D-resistant rickets, renal osteodystrophy, and osteoporosis. The active form of vitamin D has been shown to increase calcium balance and reduce bone fractures in postmenopausal women with osteoporosis.

Dr. DeLuca has identified the metabolically active form of vitamin D that stimulates intestinal calcium transport and bone calcium metabolism. This work led scientists to conclude that, since the final step in producing this metabolite occurs in the kidney and has its targets of action in intestine and bone, it must be considered a hormone.

According to his colleagues, Dr. DeLuca's discovery of vitamin D metabolites and his development of biochemical research techniques have facilitated the research of other scientists around the world.

He has published more than 600 research articles in the fields of vitamin D, vitamin A, parathyroid hormone, and calcitonin.

In 1968, he received the Meade Johnson Award of the American Institute of Nutrition, and in 1969, the Andre Lichwitz Prize from the French Institute National de la Sante et de la Recherche Medicale.

In 1971, he received the Nicholas Andry Award from the Association of Bone and Joint Surgeons, and in 1974 the Dixon Medal from the Irish Medical Council. He is a member of several scientific organizations, including the American Society of Biological Chemists and the American Institute of Nutrition. □

### Pamphlet on Osteoporosis Available from NIADDK

The Division of Arthritis, Musculoskeletal and Skin Diseases, NIADDK, has recently published a pamphlet entitled *Osteoporosis: Cause, Treatment, Prevention*.

Osteoporosis is a condition in which bone tissue decreases, causing the bones to be more susceptible to fracture. The disorder is the principal underlying cause of bone fractures in older people, especially women.

An estimated 2 to 5 million Americans seek medical help each year for some problem linked to osteoporosis, and upwards of 15 million have osteoporosis in some degree.

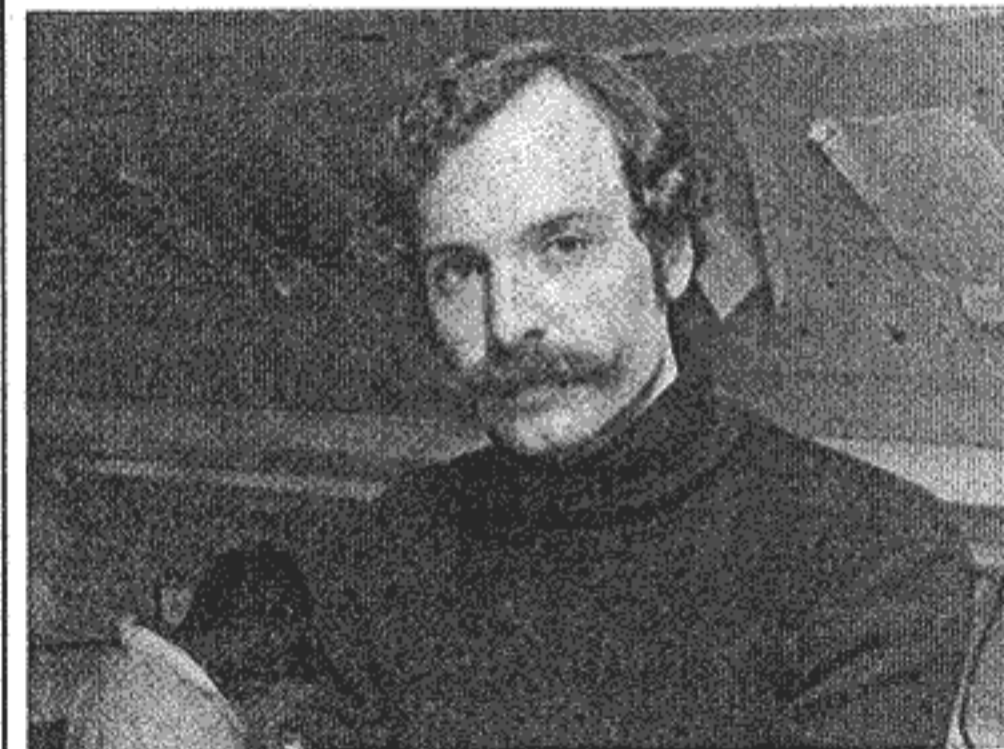
Free copies of the pamphlet may be obtained by writing to: Osteoporosis, NIADDK, Bldg. 31, Rm. 9A04, Bethesda, MD 20205. □

## Dr. Skolnick Awarded Neuroscience Prize

Dr. Phil Skolnick, senior investigator, Laboratory of Bioorganic Chemistry, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, is the 1983 recipient of the Mathilde Soloway Award in the Neurosciences.

Established in 1973 by the Foundation for Advanced Education in the Sciences (FAES), the award honors an outstanding scientist specializing in research in neurobiology or diseases of the central nervous system. It consists of a certificate, a lecture at NIH, a reception at the FAES academic and social center, and an honorarium.

Dr. Skolnick will present his lecture entitled, "Receptors for an Age of Anxiety," Tuesday, May 24, at 3 p.m., in the Clinical Center Masur Auditorium.



Dr. Phil Skolnick

His varied research interests include catecholamine receptor function and control of cyclic AMP formation in the central nervous system, neurochemical correlates of behavior, adrenergic control of neuroendocrine function, the role of adenosine in the central nervous system, and the mechanism of action of antianxiety drugs.

Benzodiazepines such as diazepam (Valium) and chlordiazepoxide (Librium) are the most widely prescribed drugs in current therapeutic use. Their actions are diverse, and enjoy extensive use as anticonvulsants, sedative-hypnotics, muscle relaxants, as well as anxiolytics (antianxiety agents).

Dr. Skolnick and collaborator Dr. Steven Paul, NIMH, recently patented a rapid and sensitive radioreceptor assay to measure benzodiazepine levels in blood, sputum, urine, and other body fluids. The technique is currently used in many teaching hospitals throughout the world.

At NIMH and the University of Wisconsin, Dr. Skolnick and collaborators have shown, by administering to monkeys the benzodiazepine antagonist, that B-carboline-3-carboxylic acid ethyl ester produces an acute syndrome characterized by dramatic elevations in heart rate, blood pressure, plasma cortisol, and catecholamines, accompanied by behavioral effects reminiscent of anxiety in humans.

This chemically induced model of anxiety in primates may have great utility in examining the role of anxiety or stress in ulcerative, cardiovascular, and neoplastic disorders, as well as better defining the chemical pathways of anxiety in the brain. □

## AIDS STUDIES

(Continued from Page 1)

The viruses to be studied include CMW, Epstein-Barr virus (EBV), and human T-cell leukemia-lymphoma virus (HTLV). EBV and HTLV have been associated with some rare cancers, but presently the association between these viruses and AIDS is uncertain. First-year funding is \$97,983 in direct costs for the 3-year study.

NIADDK is funding:

- Dr. Walter T. Hughes, St. Jude Children's Research Hospital, Memphis Tenn., will study potential drug treatments for *Pneumocystis carinii* pneumonia in an animal model.

Funding is \$62,332 in direct costs for the first year of this 3-year study.

- Dr. Pearl Ma, St. Vincent's Hospital and Medical Center, New York City, will study *cryptosporidiosis*, a recently identified parasitic disease that can cause severe and potentially fatal diarrhea in the immunosuppressed AIDS patients.

She will investigate the prevalence and transmission of the parasite in high risk groups as well as the disease process and possible treatments. Support for the first year of this 3-year project is approximately \$39,165 in direct costs.

Although the deadline for receipt of applications under this RFA is closed, applications for support for research on AIDS may be made through the standard grant application procedures for the National Institutes of Health.

Investigators may obtain grant application kits from their institutions' application control office, or by writing to the Division of Research Grants, NIH, Bethesda, MD 20205. □