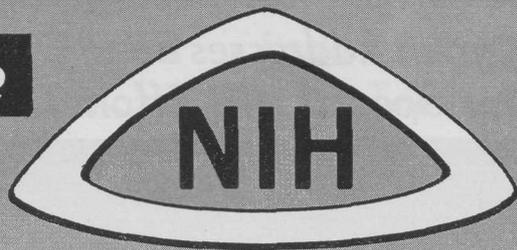


the



Record

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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NATIONAL INSTITUTES OF HEALTH

Studies Verify Chemical Substance AFP in Blood Linked to Liver Cancer

New studies confirming that a biochemical substance in the blood—alpha-fetoprotein—is associated with cancer of the liver were reported recently at the 64th Annual Meeting of the American Association for Cancer Research in Atlantic City, N.J.

Measurement of the substance in the blood of rats and monkeys fed cancer-causing chemicals to produce liver cancer was described in three papers by National Cancer Institute scientists.

Previous studies had detected it in 75-80 percent of humans with cancer of the liver.

The new studies provide evidence for the usefulness of the substance in investigating the causes and early development of liver cancer.

AFP normally occurs in the blood of embryos and infants. Its association with liver cancer was first discovered by the Russian

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Dr. Chignell Awarded John J. Abel Prize

Dr. Colin F. Chignell, National Heart and Lung Institute, was awarded the 1973 John J. Abel Prize by the American Society for Pharmacology and Experimental



Dr. Chignell

Therapeutics for his research on the mechanisms of drug-macromolecule interactions. Dr. Chignell is with the Laboratory of Chemical Pharmacology.

The prize, which was given on April 18, consists of a

bronze medal and a thousand dollar honorarium. It is presented annually to an ASPET member under 36 years of age "who has accomplished outstanding research in the field of pharmacology and/or therapeutics."

In his research to find out how drugs interact with biologically important macromolecules, Dr. Chignell has employed a number of spectroscopic techniques, such as ultraviolet and visible absorption spectroscopy, fluorescence

Contract to Operate Day Care Center to Be Signed By NIH and Organization

An agreement is being negotiated to license a Kensington, Md. organization—Child and Infant Learning Development, Inc.—to operate a day care center in Building 35 for 60 children of NIH employees. The organization will rent space from NIH charging fees to the parents.

No Federal money will be used, but parents at low income level will receive funds to defray part of the cost from state and county governments.

This center will serve parents of varying economic means and at the same time be self supporting.

Dr. Sabin Reports Some Types of Cancer Caused By Two Common Viruses

Dr. Albert Sabin, Fogarty Scholar-in-Residence, reported recently that studies which he has conducted at the National Cancer Institute's research center at Fort Detrick show evidence that two common viruses play an important role in causing some types of cancer.

The report was made at a meeting of the National Academy of Sciences.

Dr. Sabin said that "herpes simplex" viruses appear to be implicated in at least nine types of cancer, but he pointed out the need to carry on further studies with larger groups of patients.

Dr. John B. Moloney, an NCI associate scientific director, said the studies reported by Dr. Sabin provide additional evidence that herpes viruses may be implicated in a cause-and-effect way with certain cancers.

NCI plans to continue this research at Fort Detrick.

spectroscopy, circular dichroism and electron spin resonance.

With the aid of these techniques, he has studied the mechanisms of drug binding to plasma proteins, the inhibition of erythrocyte carbonic anhydrase by diuretic sulfonamides, the interaction of colchicine and its analogs with microtubule protein, the binding of biotin to avidin, and the effect of drugs on cell membranes.

Raymond Jackson Named EEO Officer for NIH

Raymond J. Jackson has been named Equal Employment Opportunity officer for NIH, replacing Dr. Colvin L. Gibson. Mr. Jackson will assume his duties on May 14.

He comes to NIH from the Federal Aviation Administration, where he has served as a civil rights specialist since 1970 processing discrimination cases involving both employees and officials.

Began as Skilled Laborer

Mr. Jackson began his Federal career as a skilled laborer in 1950 with the Government Printing Office.

From 1951 to 1955, he served in the United States Air Force as a non-commissioned officer. Upon discharge, he returned to GPO and attended Howard University in the evenings.

In 1957 Mr. Jackson became an offset stripper at the printing office. After 10 years in this position, he was named deputy EEO officer for GPO and in 1969 became the EEO officer.

He has been a consultant to the Blackman's Development Center and was a graphic arts/EEO consultant for the Lorton Reformatory Youth Center.

A staunch advocate of equal opportunity
(See MR. JACKSON, Page 4)



Mr. Jackson's office provides counseling for any aggrieved employee or qualified applicant for employment who believes that he or she has been discriminated against because of race, color, religion, sex, or national origin.

Chanock and Fredrickson Elected NAS Members; Ceremony in April 1974



Dr. Chanock



Dr. Fredrickson

Dr. Robert M. Chanock, National Institute of Allergy and Infectious Diseases, and Dr. Donald S. Fredrickson, National Heart and Lung Institute, were elected last month to the National Academy of Sciences.

Dr. Chanock is chief of the Laboratory of Infectious Diseases, NIAID, and Dr. Fredrickson is director of NHLI's Intramural Research and chief of its Molecular Disease Branch.

To Attend Next Meeting

At the next annual meeting of NAS, which will take place in April 1974, both NIH scientists and other new members will officially sign the academy's membership book at the awards ceremony.

Dr. Chanock came to NIH in 1957 from the Johns Hopkins University School of Public Health where he was assistant professor of epidemiology. He is noted for his studies of respiratory diseases.

Last year, Dr. Chanock and other NIAID researchers produced a new kind of influenza vaccine which holds future promise for the eventual control of the disease.

Awards Listed

Dr. Chanock has twice been the recipient of USPHS awards. He received the USPHS Meritorious Service Medal in 1965 and the USPHS Distinguished Service Medal in 1971.

His other honors include the Squibb Award for his contributions to the study of viral respiratory diseases, and the Kimble Methodology Award for outstanding contributions to the development of

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the NIH Record

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Service to Help NIH'ers File Health Benefits Claims Set Up by ERRB; Plan Representatives to Visit Here

The Employee Relations and Recognition Branch, OPM, will set up a health benefits claims service desk to help those employees who are covered under the Federal Employees Health Benefits Program file claims.

Representatives from two major plans will be at NIH on Friday, May 18, from 9 a.m. to noon. The companies are Group Hospitalization, Inc., for the Service Benefits Plan administered by Blue Cross-Blue Shield, and Aetna Life and

Casualty for the Indemnity Benefits Plan.

At the present time, representatives will visit the campus on a bi-monthly schedule. If warranted, additional visits will be arranged.

Employees requiring assistance may call ERRB for an appointment—Ext. 64973. The deadline for appointments is Wednesday, May 16.

Claim forms are available from B/I/D personnel offices. Plan representatives will also have them.

FAES Presents Concert Schedule for 1973-74

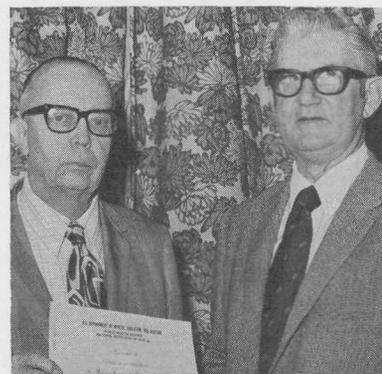
The Foundation for Advanced Education in the Sciences will present six concerts for its 1973-74 Chamber Music Series. Performances will be given on Sundays at 4 p.m. in the Jack Masur Auditorium.

Last season the Chamber Music Series was sold out, because of this, NIH employees are asked to subscribe as soon as possible. Tickets are sold by subscription only—\$24 for the season; children under 17 half price.

Contact FAES

For further information contact FAES, Bldg. 10, Room B1L-101, Ext. 65273. The concert dates are:

- Oct. 28 — PIERRE FOURNIER, cello and piano sonata recital.
- Nov. 18 — TOKYO STRING QUARTET.
- Dec. 9 — TRIO DI MILANO.
- Feb. 10 — RADU LAPU, pian-



George H. Brockelbank (l), assistant to the director, Planning and Review, receives a Special Achievement Award—a certificate and check—in recognition of his "sustained high quality work performance" from James W. Schriver, Director, Office of Management Survey and Review, OD.

ist, sonata recital.

- March 3 — MIRIAM FRIED, violinist.
- March 31 — MAUREEN FORRESTER, mezzo soprano.

Dr. Sherman Addresses Bond Canvassers; Calls for Special NIH Effort This Year



Martin T. Walsh (l), HEW coordinator for the Bond Drive, Dr. Sherman, Mr. Watkins, and Dr. Arnold W. Pratt, NIH vice chairman, discussed the importance of the Payroll Savings Plan with the canvassers.

To launch the 1973 Savings Bond Drive, Dr. John Sherman recently addressed more than 200 B/I/D canvassers in the Jack Masur Auditorium.

Dr. Sherman, NIH Acting Director and chairman of the drive, pointed out that the emphasis at NIH has always been directed toward building a strong scientific institution.

If NIH employees will apply that same kind of effort to the Bond Drive, "we cannot help but increase participation which has traditionally been low."

Dr. Sherman said that it would be in the best interests of NIH to make such a special effort this year. He stated that everyone present should consider himself part of the NIH leadership for the purposes of the drive.

Personal contact and clear explanations of the advantages of savings bonds would benefit all NIH employees who are certainly "no less thrifty and prudent than other Federal employees."

Sylvestre Watkins from the Treasury Department also spoke to the canvassers and answered many questions. Much interest was centered on using bonds for retirement plans.

Mr. Watkins suggested that the most prudent way of financing retirement is to hold the bonds until maturity or beyond without reporting the interest each year.

Interest income need only be reported at age 65 when the bonds are cashed. But, at age 65, one also has a double exemption on income tax. This can place the bond holder in a lower bracket and he may find that he is paying very little or no tax on his interest income.

Clinic Needs Volunteer Doctors

The Free Clinic in Rockville, Md., needs volunteer physicians on week-nights. For information call Dr. John N. Sheagren, 424-2844, or Ray Bullman, 424-3928.

Register for Federal After-Hours Program On Thursday, May 10

The summer session of the Federal After-Hours Program will offer more than 60 college-level courses in 23 downtown District of Columbia Federal buildings.

The College of General Studies, George Washington University, presents an opportunity for students to enroll in undergraduate and graduate courses leading to bachelor of science and master of science degrees.

Those seeking self-improvement courses designed to broaden their career may enroll as non-degree students.

Classes Begin Soon

Registration for the summer session will be held in Conference Rooms A, B, and D—just off the lobby—Department of Commerce Building, 14th Street and Constitution Avenue, N.W., on Thursday, May 10, from 10 a.m. to 3 p.m.

Classes will begin the week of May 21 and continue through Aug. 29.

Tuition is \$63 per semester hour; all courses are 3 semester hours. This compares with a cost of \$86 per hour for courses taken on the GWU campus.

The Government Employees Training Act of 1958 gives Federal agencies authority to pay tuition costs and other fees if courses to be taken are related to present or anticipated job requirements.

For further information, contact Robert W. Stewart, Jr., GWU, at 676-7018.

NAS MEMBERS

(Continued from Page 1)

new and better procedures in the field of public health.

This past December, Dr. Chanock received the 1972 Gorgas Medal at the annual meeting of the Association of Military Surgeons of the U.S. He was cited for his accomplishments and leadership "... in research efforts to identify new respiratory diseases of importance in military and civilian life."

Dr. Chanock holds membership in a number of scientific organizations, including the American Epidemiological Society; this past month he was elected vice-president at the annual meeting.

Dr. Fredrickson has been with NHLI since 1953. He was named to his present post in 1969. He is internationally known for his research on fat transport in the circulation and plasma lipoproteins, and for his studies on diseases of lipid metabolism.

Discoveries Noted

He and his co-workers are the discoverers of Tangier disease, cholesteryl ester storage disease, and several hyperlipoproteinemic syndromes.

Dr. Fredrickson has taught at the medical schools of both George Washington and Georgetown universities.

For 2 years—from 1966 to 1968—Dr. Fredrickson served as National Heart Institute Director. He left that post in order to devote more time to research.

His honors and awards include the Gold Medal Award from the American College of Cardiology, the DHEW Superior Service Award, and the Distinguished Achievement Award from *Modern Medicine*.

In 1971, Dr. Fredrickson also received the DHEW Distinguished Service Award for "... his unusual achievements in the field of lipoprotein disorders leading to heart disease."

That same year, Dr. Fredrickson was given the McCollum Award from the American Society for Clinical Nutrition, and he was among the leaders in health-related sciences who were named to the NAS Institute of Medicine.

Dr. Fredrickson recently returned from the U.S.S.R. where he headed the delegation to discuss with their Soviet counterparts a collaborative study of hyperlipidemia. More than 30 thousand subjects in both Nations will take part in this research.

Dr. Fredrickson is a member of many scientific societies, including three foreign organizations.

He is an editor of the book, *Metabolic Basis of Inherited Disease*, and author of many articles relating to research in lipid metabolism and arteriosclerosis.

Leda Cosmides Has 'Dreams to Fulfill'; Asks Toastmasters to Give Her Pointers

Leda Cosmides, in a speech advocating women's liberation, told the NIH Toastmasters Club, "I, too, have dreams to fulfill." Her present dream is to continue to advance in the Optimists International Oratorical Contest.

The Richard Montgomery High School sophomore delivered her speech to the Toastmasters in hopes that their constructive evaluation would help her realize her goal.

One of the services of the R & W-sponsored club is to provide "speechcraft" lessons. Through this, the club works with students and teaches them the fundamentals of speechmaking and public speaking.

Dr. George J. Cosmides, a program coordinator in NIGMS's Pharmacology/Toxicology Program and president of the NIH Toastmasters, said, "The club offers a course in self-improvement. Our main goal is to facilitate communication between people."

Toastmasters International, the parent organization, provides a course of 15 speeches—each speech, step by step, encompasses a specific goal. Using gestures to enhance a speech or changing voice levels to illustrate emphasis are examples.

When the 15-speech program and other requirements are fulfilled



Leda praised the "efforts (of the Optimists) to bridge the gap of inequality" by allowing her to compete in a previously all male oratorical contest.

filled the graduate becomes an able toastmaster.

The complete course employs the principle "learn by doing." Each

time a member delivers a speech his remarks, gestures, and mannerisms are evaluated to make him a complete speaker.

For this reason, Leda requested to speak before the club on April 26. At that time, Leda was the female winner of the Rockville and Zone 1 (Montgomery and Prince George's Counties) oratorical contests sponsored by Optimists International.

Eligible for the Maryland state finals held in Ocean City, Md., May 5-6, Leda was seeking advice on how to improve her speech in an effort to advance to the national contest to be held in San Antonio, Tex., this year.

Dr. Cosmides will not accept any credit for his daughter's speaking ability. He said, "Some people have a natural ability for speaking in public, and she is probably one of them. In fact, Leda's a better speaker than I am."

According to Dr. Cosmides, the Toastmasters also provides an educational experience for its members. How to conduct a meeting, how to listen, and leadership are stressed by the club.

For further information about Toastmasters, contact Dr. Cosmides, Ext. 67707, or Estella Barry, administrative vice president, Ext. 63695.

AFP IN BLOOD IS LINKED TO LIVER CANCER

(Continued from Page 1)

scientist G. I. Abelev in 1963.

In tropical Africa, aflatoxins, potent cancer-causing chemicals produced by certain molds, are suspect in the high rate of liver cancer.

AFP has not previously been found in the blood of animals with liver cancer caused by aflatoxin. At the meeting, Dr. James M. Sontag, NCI, described experiments done in collaboration with Dr. Robert Kroes, Rijks Instituut, Netherlands, in which a sensitive new radioimmunoassay was used to measure AFP in rats fed aflatoxin B₁ to produce liver cancer.

The new technique showed that the animals had AFP in their blood.

Dr. Richard H. Adamson, NCI, described experiments in which monkeys were fed chemicals known to cause cancer in rodents to determine if these substances were equally hazardous in primates.

The experiments were done in collaboration with NCI researchers Dr. Pelayo Correa, Clara F. Smith, and Sidney T. Yancey, Jr., and Dr. Dan Dalgard of Hazleton Labs.

They found that the chemicals DENA, 1-nitrosopiperidine, cycasin and aflatoxin B₁ were all capable of causing liver cancer in the monkeys, and the monkeys with cancer had AFP in their blood.

Dr. Adamson reported that 6 to 8 months before any signs of cancer could be detected, large quantities of AFP were found in the

blood of monkeys fed DENA, a potent cancer-causing chemical.

The scientists are now exploring methods of reversing the early changes leading to cancer in these monkeys.

Using drug treatment, or stimulating the immune system with BCG, they hope to be able to prevent the development of cancer.

Other NCI scientists, Dr. K. Robert McIntire, Gerald L. Princler and Dr. Richard H. Adamson, used the radioimmunoassay to measure AFP in the monkeys from the above experiments.

They found that the amount of AFP in the blood increased as liver cancer progressed, but eventually leveled off at some constant value.

Final AFP levels appeared to be influenced by the chemical that caused the cancer.

That the cancer itself produces AFP was demonstrated by an experiment in which pieces of the cancer tissue, surgically removed from the animal, were grown in the test tube.

The cancer cells continued to secrete AFP at a steady rate for 4-6 days in the laboratory.

According to the scientists, measurements of AFP in the blood should provide a useful way of assisting in diagnosis and monitoring treatment of liver cancer.

When the cancer was removed surgically or successfully treated with drugs, the amount of AFP in the blood fell dramatically.



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Concert to Be Given May 13; Pianist, H.S. Choir Featured

A concert by the NIH Orchestra will be given this coming Sunday, May 13, at 3 p.m. in the Jack Masur Auditorium. Robert Webb is the conductor.

The orchestra, sponsored by the Recreation and Welfare Association, will play selections from Dukas, Mozart, Faure, and Beethoven.

Richard Remine, pianist, will be the soloist in Mozart's piano concerto No. 24 in C minor, and the Falls Church high school concert choir will join the orchestra in Faure's *Cantique de Racine*.

The concert is open to NIH patients, employees, and their families and friends.

Friends and Co-workers Say Goodbye to Dr. Marston

Photos by Ed Hubbard and Tom Joy



Dr. and Mrs. Robert Q. Marston stand with their son, Wesley, and daughter, Ann, next to Dr. Marston's portrait with the artist Bjorn Egeli. After being exhibited in the Clinical Center and Bldg. 31 lobbies, the portrait will hang



in Bldg. 1 with paintings of other Directors of NIH. On Friday, April 27, in Masur Auditorium, NIH employees gave a standing ovation to Dr. Marston who had served as their Director from September 1968 to January 1973.



Dr. John F. Sherman, Acting Director of NIH, presented to Dr. Marston the flag which was flying on the flagstaff in front of Bldg. 1 on Jan. 20. In opening the farewell ceremony, Dr. Sherman cited Dr. Marston's contributions to NIH as well as "his enthusiasm, insight, and courage in dealing with issues." Dr. Robert W. Berliner, NIH Deputy Director for Science, also praised Dr. Marston and his "faith in the ability of science to provide eventual answers



to the problems of medicine." Storm Whaley (right in center photo), NIH Associate Director for Communications, presented a set of Jefferson cups to Dr. Marston, particularly appropriate since Dr. Marston is returning to Jefferson's University of Virginia. At a reception in the CC cafeteria after the ceremony, Dr. Derek Denny-Brown, a Fogarty scholar, joined NIH employees in extending best wishes to Dr. and Mrs. Marston.

PHS Clinical Society, C.O. Association Hold Joint Meeting in Phoenix May 9-12

The U.S. Public Health Service Clinical Society and the Commissioned Officers Association of the PHS will hold their 8th Joint Annual Meeting in Phoenix, Ariz., May 9-12. The Indian Health Service, HSMHA, will host this year's meeting.

More than 300 scientific papers, including many by NIH investigators, will be presented at both general and specialty sessions.

Among the NIH scientists participating will be Drs. Peter Wiernik, Nicholas Bachur, and Robert Benjamin, of the Baltimore Cancer Research Center.

They will make presentations on Adriamycin (AMN) Chemotherapy—Clinical and Pharmacologic Correlation.

In the opening General Session on computerized medicine, Dr. James Y.P. Chen, member of the National Committee on Acupunc-

ture, NIH, will discuss the Current Status of Acupuncture: Research and Practice.

Dr. A. P. LeRoy, Biomedical Engineering and Instrumentation Branch, DRS, will present a paper on Biological Effects of Some Platinum Metal Complexes—New Agents for Control of Tumors.

Drs. Wiernik and M. J. O'Connell, NCI, will discuss MK-486 and Streptozotocin in the Management of Metastatic Carcinoid Tumor.

The Role of Anesthetic Tech-

nique on Immune Suppression During Surgery will be the topic of Drs. J. H. Lecky of the CC Anesthesiology Department, and P. B. Chretien of the Surgery Branch, NCI.

In a session on cardiology, Dr. G. S. Kopf, Dr. D. M. Mirvis, and G. Dold of the Laboratory of Perinatal Physiology, NINDS, will speak on Computer Analysis of Hemodynamic Data: Construction of Force-Velocity Curves and Comparison Indexes of Contractility.

Drs. I. T. Lott, D. Alexander, and J. Rapoport, and A. Abramson, all of NICHD, will discuss L-Lactic Acid Metabolism and Urinary Catecholamines in Hyperactive Boys With Anxiety at a session on pediatrics.

Other NIH participants include Dr. E. A. Graykowski, NIDR, J.

MR. JACKSON

(Continued from Page 1)

portunity, he is the author of the 1969 GPO Office Action Plan for promotion and implementation of an affirmative EEO program in accordance with CSC guidelines.

In that same year, Mr. Jackson also wrote the Federal Women's Program Action Plan designed to implement a positive, continuing program to promote equality of job opportunities for women.

He is an active member of a number of organizations including the Washington Chapter of the NAACP, and the D.C. Skyhawks Flying Club.

Paul Davignon, head, Clinical Drug Distribution Section, NCI, and Dr. N. Dumas, BHME.