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.

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

Raymond Jackson Named EEO Officer for NIH

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.

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

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 Therapeutics for his research on the mechanisms of drug-macromolecule interactions. Dr. Chignell is with the Laboratory of Pharmaceutical 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 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 sulfonylureas, the interaction of colchicine and its analogs with microtubule protein, the binding of biotin to avidin, and the effect of drugs on cell membranes.

Chanock and Fredrickson Elected NAS Members; Ceremony in April 1974

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. 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.

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 Listened

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...
Service to Help NIH’ers File Health Benefits Claims

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, and United, 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. 64974. The deadline for appointments is Wednesday, May 16.

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

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.
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 NIH since 1955. 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.

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 hyperlipidemias. 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.

Take stock in America.

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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 Web 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.

AFP IN BLOOD IS LINKED TO LIVER CANCER

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AFP in Blood Is Linked to Liver Cancer

AFP is normally found in the blood of animals with liver cancer caused by aflatoxin. At the meeting, Dr. James M. Sonntag, NCI, described experiments done in collaboration with Dr. Robert Kroes, Rijks Institut, 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. Paylor Correa, Clara F. Smith, and Sidney T. Yancey, Jr., and Dr. Dan Dalgard of Hazleton Labs. They found that the chemicals DENA, 1-nitrosopiperidine, cyscian 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. Princen and Howard H. Arons, used the radioimmunoassay to measure AFP in the monkeys from the above experiments. They had found that the amount of AFP in the blood increased as liver cancer progressed, but eventually leveled off at some constant value.

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

That the hormone 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 tubes.

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 tool for 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.

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 Club, 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, 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 healthy, 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 her daughter's speaking ability. He said, "Some people have a natural ability for speaking in public, and I was 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. He said, "People learn how to listen, how to lead, and leadership are stressed by the club."

For further information about Toastmasters, contact Dr. Cosmides, Exst. 67707, or Exst. 67695, administrative vice president.
Friends and Co-workers Say Goodbye to Dr. Marston

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.

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 Acupuncture, 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 Technique 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.

Dr. A. P. LeRoy, Biomedical Engineering and Instrumentation Branch, DRS, will present a paper on Computer Analysis of Hemodynamic Data: Construction of Force-Velocity Curves and Comparison Indexes of Contractility.

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.

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

(Continued from Page 1)

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