Researchers to Present Views on Man And Environment at Biological Congress

Symposiums, workshops, exhibits and panel discussions focusing on man and the environment will be featured at the Second National Biological Congress, to be held Oct. 23 to 26, at the Fontainebleau Hotel in Miami Beach.

The meeting, under the auspices of the American Institute of Biological Sciences, will bring together biologists from 34 societies.

NIH researchers taking part in the programs are Dr. John L. Sever, chief, Section on Infectious Diseases, National Institute of Neurological Diseases and Stroke; Dr. Philip A. Corfman, Director for Population Research, National Institute of Child Health and Human Development; and Arthur A. Campbell, deputy director of the NICHD Population Center.

Dr. Sever is chairman of the Oct. 24th afternoon session on "Influences of Viruses, Nutrition and Drugs on Human Development." He will deliver the opening remarks.

Dr. Corfman will head the Oct. 25th morning session on "Population Problems; Search for Solutions." At this session Mr. Campbell will discuss "Definition of Problems."

Organizations conducting sym-

posiums, workshops, exhibits and panel discussions focusing on

NIH Investigators Speak At National Academy Of Sciences Meeting

Several NIH scientists will speak at the autumn meeting of the National Academy of Sciences, to be held Oct. 25 to 27, in the Academy Auditorium, 2101 Constitution Ave., N.W., Washington, D.C.

The second day agenda (Tuesday, Oct. 26) will include a presentation on "New Evidence as the Bases for Increased Efforts in Cancer Research." Dr. Robert J. Huebner, National Cancer Institute, is chairman for the session.

Speakers at this assembly include Drs. Frank J. Rauscher and George J. Todaro, NCI, and Dr. Wallace P. Rowe, National Institute of Allergy and Infectious Diseases.

Dr. Gordon C. Zubrod, NCI, will be among the speakers continuing the topic at the afternoon session.

At another Tuesday afternoon session, Dr. C. B. Anfinsen, National Institute of Arthritis and Metabolic Diseases, will be one of the investigators discussing "Models for Enzymatic Reactions."

The public is invited to attend.

For further information call the NAS information office, 961-1511.
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Toastmasters Hall of Fame Award Given to John Belin

John F. Belin, grants management specialist in the Division of Nursing, BHME, recently received the Hall of Fame award of the Toastmasters International. It was presented to him for his activities at the local and community level. Mr. Belin will have his accomplishments, name, and picture enshrined at organization headquarters, Santa Ana, Calif.

The NIH Toastmasters Club meets every Thursday at 12 noon in dining room 2, CC cafeteria.

FAES Chamber Music Series To Hold First Concert Oct. 24; Young Italian Pianist Featured

The first concert in the 1971-72 Chamber Music Series given by the Foundation for Advanced Education in the Sciences, Inc., will be held in the CC Jack Masur Auditorium, Sunday, Oct. 24, at 4 p.m.

The young Italian pianist, Maurizio Pollini, will make his Washington area debut with a program of sonatas by Schubert and Beethoven and Chopin's second symphony of Etudes.

Admission is by ticket only.

Davis Plan Is 12 Years Old; Celebrate! Contribute to Patient Emergency Fund

The Davis Plan campaign is entering its 12th season this year.

To celebrate, Plan originator, James B. Davis, Director of the Office of Administrative Services, opened this year's drive by introducing a new recruit, Mr. Scrooge.

That Dickens character urges all NIH employees not to send Christmas cards to co-workers this year. Instead, Scrooge suggests contributing that money to the Patient Emergency Fund.

The Davis Plan for the Fund began in 1960. Mr. Davis decided the best way to say "Seasons Greetings" to his fellow employees was to make a donation to the CC patients. His co-workers liked the idea and also contributed.

The Plan is now a tradition and has even spread to surrounding neighborhoods. Each year it is heralded in local newspapers as a unique Christmas-giving idea. Several local community groups contribute regularly.

The Patient Emergency Fund, administered by the Clinical Center Social Work Department, assists patients with financial aid that cannot be met with Federal appropriations.

Although Clinical Center patients receive cost-free medical care, the high cost of living in this area may create a financial strain for a family member.

Dr. John Roatch, chief of the Social Work Department, explained that the Fund may be used for something as small as a package of razor blades, a phone call home, or for help in meeting the cost of room and board in the area for a patient's relative.

He stated that rising costs and increasing requests for emergency funds—there was a 30 percent increase this past year—are beginning to deplete resources.

This year, Davis Plan contributions are especially welcome—it's the gift that truly lasts throughout the year.

Sending a letter home is an important event in the life of a young patient whose pennies don't quite meet the postage. NIH employees—through the Davis Plan—help to make up deficit.

Report Shows Youngest, Oldest Drivers Safest

Who's the safest driver of them all? The most unsafe?

Last year D.C. moving traffic violations showed that the youngest and oldest drivers were safest.

Drivers aged 16 and 17 accounted for .7 percent of total drivers but .1 percent of violations, and 18- to 19-year-olds accounted for 2.5 percent of the total, 5.2 percent of violations.

Those drivers aged 20-24 accounted for 13.1 percent of total, 23.7 percent of violations; 25-34, 28.5 percent of total, 32.5 percent of violations, and 35-64, 48.4 percent of drivers, 36.8 percent of violations:

Drivers who were 65 and older accounted for 6.8 percent of drivers, 1.7 percent of violations.

NIH Television, Radio Program Schedule

Radio

DISCUSSION: NIH
WGMS, AM-570—FM Stereo 103.5—Friday, about 9:15 p.m.
October 15
Dr. Harold M. Schoolman, special assistant to the Director, NLM
Subject: Regional Medical Libraries
October 22
Dr. Lois K. Cohen, DDH
Subject: Social Sciences in Dentistry
Interview takes place at intermission, Library of Congress concerts.
Edith A. Jones Receives Nutrition Award From American Dietetic Ass’n

Edith A. Jones, chief of the Clinical Center Nutrition Department, has received the Marjorie Hulsizer Copher Award—the highest honor given by the American Dietetic Association.

The award was presented to Miss Jones at the organization’s annual banquet held in Philadelphia Oct. 7.

Established by the late Dr. Glover Copher in memory of his wife, the prize consists of a plaque and one year’s income from a $30,000 fund.

Miss Jones received the award “In recognition of her inspiring leadership in the dietetic profession . . . her administrative skill, management ability, and therapeutic knowledge, exemplified as chief, Nutrition Department, National Institutes of Health . . . and her sincerity warmth of personality, good humor, and continuous deep concern for others.”

She received her B.S. degree from the University of Alabama, her M.S. degree in Nutrition from the University of Tennessee, and interned at the Johns Hopkins Hospital School of Dietetics.

During World War II, Miss Jones worked in Army hospitals and later became dietitian in charge of a 1500-bed institution in England.

She returned to Johns Hopkins after the war as dietitian in charge of the Pediatric Section and later of the School of Dietetics.

Miss Jones joined the Public Health Service as a nutritionist in the Bureau of State Services. Later she became a Dietitian Consultant with the Bureau of Medical Service. She has been chief of the CC Nutrition Department since it opened in 1953.

Miss Jones has received a Founder’s Fellowship and Award of Achievement from Alpha Chi Omega, a Distinguished Service Award from the School of Home Economics, University of Alabama, and the McLester Award for outstanding achievement in the field of applied nutrition and dietetics from the U.S. Association of Military Surgeons.

Most recently she received the PHS Meritorious Service Medal in June 1971.

Miss Jones has been listed in Who’s Who in America, Who’s Who of American Women, and Personalities of the South.

Dr. Charles Lowe Wins Clifford G. Grulee Award

Dr. Charles Upton Lowe, NICHD scientific director, has been named the 1971 recipient of the Clifford G. Grulee Award presented annually by the American Academy of Pediatrics for outstanding service to the organization.

Dr. Lowe will receive the gold medal award during the Academy’s annual meeting in Chicago, Oct. 16-21.

He will also be honored for his 14 years of service with the AAP Committee on Nutrition, particularly for his contributions as committee chairman from 1963 to 1969.

Helped Establish Committee

Dr. Lowe helped establish the committee as a nationally accepted authority.

He is especially recognized for his work on three statements published in 1967. These were:

**Proposed Changes in Food and Drug Administration Regulations Concerning Formula Foods and Vitamin-Mineral Dietary Supplements for Infants; Compulsory Testing of Newborn Infants for Hereditary Metabolic Disorders, and Nutritional Management in Hereditary Metabolic Disease.**

**Quotas for CFC Announced; Employees Urged to Give To Put NIH ‘Over the Top’**

As the Combined Federal Campaign goes into its third week, volunteers are still soliciting contributions. Each NIH employee is urged to push his unit “over the top” this year.

Goals for all NIH components have been announced.

**Unit** | **Goal**
---|---
BHME | $19,260
CC | 26,045
DBS | 7,437
DCRT | 8,534
DRG | 13,342
DRR | 2,696
DRS | 12,919
FIC | 1,630
NCI | 46,017
NEI | 6,448
NHL | 18,223
NIAID | 13,512
NIAMD | 19,438
NICHD | 10,904
NIDDK | 9,807
NIEHS | 1,119
NIGMS | 5,482
NINDS | 17,571
NLM | 13,512
OD | 5,341
ODA | 40,831

**Associations to Develop Systems For Evaluating Manpower Needs**

Three associations of health professionals will attempt to devise better systems for determining manpower supply and needs under contracts awarded by the Division of Manpower Intelligence, BHME.

Each contractor will develop a data system to provide statistics in its particular field.

The contracts were awarded to the American Association of the Colleges of Pharmacy, the American Podiatry Association, and the American Optometric Association.

**Dr. Anderson, Statistician Par Excellence, Retires; Served 27 Years in Government**

Dr. Paul H. Anderson, head of the Section on Blindness Statistics, National Eye Institute’s Office of Biometry and Epidemiology, will retire this month after 27 years of service in the Federal Government.

Dr. Anderson’s section compiles, codes, and analyzes data on legal blindness provided by 16 states which now comprise the Model Reporting Area for Blindness Statistics.

Each year the section publishes a report on this information—the most accurate and detailed statistics available on blindness in the United States.

**Reports Develop Programs**

The MRA reports are used for developing state and Federal programs related to blindness and visual disability.

Dr. Anderson has worked in the Federal Government since 1943 when he became a statistician with the War Production Board in Cleveland.

He came to Washington the next year as a statistical analyst with the Department of Commerce. Then he took a year off to be professor of Marketing at Loyola University of the South in New Orleans.

Dr. Anderson returned to the Government, this time to the Army, as a statistician. He held various positions in several Federal agencies before coming to NIH in August 1958.

Prior to his Government service, Dr. Anderson taught mathematics at the University of Illinois, Louisiana State University, and John Carroll University in Cleveland.

**Lots of Travel Plans**

He is a graduate of Ohio University and the University of Illinois and earned his Ph.D. in Mathematical Statistics from the latter university.

Dr. Anderson’s plans for retirement include travel—and lots of it. Later this month he and his wife Lois—also an NIH statistician with the Division of Research Grants—will embark on a 20-day cruise to Mediterranean ports.

Dr. Anderson would also like to visit Yugoslavia where he spent 6 years of his boyhood. Although he can now only speak a “broken” Hungarian and Croatian, Dr. Anderson learned both of these languages before he learned English.

Other plans include managing his 150-acre farm in Thurmont, Md., where he and his wife have lived since 1950. The population there includes three ponies, two donkeys, and two dogs.

Dr. Anderson also plans to take a greater interest in the management of various tracts of timberland he owns in the area.

Dr. Anderson has written extensively on marketing and statistics. While at the University of Illinois he was both a Scholar and Fellow in Mathematics and has been listed in Who’s Who in America and American Men of Science.

He also received the Certificate of Merit from the Ohio University Alumni Association.

Dr. Anderson’s colleagues will bid farewell to him at a luncheon in his honor tomorrow, Oct. 13.
**NHLI Develops Programs For Evaluating Methods To Detect Hypertensives**

Pilot programs to develop and evaluate methods of detecting and caring for hypertensive persons have been started by the National Heart and Lung Institute.

Nine communities throughout the U.S. were chosen to take part in the research on high blood pressure. Medical doctors connected with universities and hospitals in these areas will head each program.

Dr. Richard Remington, associate dean, School of Public Health, University of Texas, will direct the Statistical Coordinating Center for the studies.

**Agents Reduce Pressure**

Effective anti-hypertensive agents to reduce high blood pressure are available. But past research has shown that these therapies must be applied continuously if death and disability from the long-term effects of hypertension on the heart, brain, or kidneys is to be reduced as well.

Furthermore, blood pressure may rise and persist at abnormally high levels for many years without altering one's subjective sense of health until there is serious damage, typically a stroke or heart attack years later.

The problem of motivating hypertensives to seek and stay on therapy is the first phase of the pilot programs. Phase I should take at least a year.

**Details Given**

About 300 or more hypertensives will be identified in each community by repeated blood pressure measurements.

Those with persistently high levels, or hypertension, will be referred to medical care and health education programs and periodic long-term follow-ups.

Dr. M. J. Moskowitz is the newest member appointed to the NIAMD Board of Scientific Counselors. Counselors advise Institute Directors on intramural research programs and scientific program policy. Attending a recent meeting were (l to r): Dr. Solomon Berson, Dr. William Harrington, Dr. Julian, Dr. J. E. Rall, NIAMD scientific director, and Dr. Donald Seldin.

**NCI Project to Improve Survival Time of Lung Cancer Patients Starts**

A new HEW-supported project to improve survival time of lung cancer patients by applying early detection methods will be conducted at the Mayo Clinic. This and a related study at the Johns Hopkins University are being funded by National Cancer Institute contracts to improve the diagnosis of lung cancer.

In the study at the Mayo Clinic, the project director, Dr. Robert S. Fontana, and his co-workers will screen persons at high risk of developing lung cancer: men 45 years of age or older who smoke at least one pack of cigarettes per day. The investigators will examine two groups, each of 3,000 men.

After an initial examination, participants of the first group will return for follow-up examinations according to their individual habits of going to a doctor. The second group will be closely controlled and participants will return every 4 months for follow-up examinations.

**Examinations Listed**

The two groups will undergo chest X-rays and microscopic examinations of cells obtained from deep cough sputum samples, the only procedures so far proved useful in detecting presymptomatic lung cancer.

This part of the study, designed to continue for at least 5 years, will yield information on the natural history of lung cancer and the amount of time and money needed for such a program.

This will be the first large-scale, prolonged surveillance of persons at risk to lung cancer, studied with chest X-ray and sputum cytology.

The investigators will also evaluate techniques for locating cancers too small to be seen by X-ray but whose presence is indicated by cancer cells in the sputum.

With the aid of a bronchoscope, the investigators will collect cells from lung tissue by a brushing technique. They will use a new type of disposable brushes with controllable tips and protective sheaths. The cells will then be studied under a microscope.

Special X-ray techniques, employing materials such as opaque tantalum dust for sharper contrast between cancerous and surrounding normal tissue, will also be used.

In another part of this study, Mayo Clinic investigators will vary various new but as yet unproven procedures, including the use of radioactive materials to locate lung tumors and the use of special staining procedures, not previously used on lung tissue, to help visualize tumors with the aid of a bronchoscope.

They will apply these tests to about 50 patients known to have primary lung cancer and 50 persons known to be free of the disease. If these procedures are effective in initial tests, they will be evaluated in larger study groups.

Some of the procedures used in this study were developed and improved in contract-supported work at Johns Hopkins University.
Dr. W. Baker Appointed Assistant Chief, DRR's Biotechnology Resources

Dr. William R. Baker, Jr., has been named to the new position of assistant chief of the Biotechnology Resources Branch, Division of Research Resources.

Dr. Baker will serve as program director for the computer resources component of the branch.

He comes to NIH from Vanderbilt University where he held positions as chairman of the Department of Biomedical Engineering, professor of Engineering, and assistant professor of Radiology.

Education Noted

Dr. Baker received his B.S. in 1943 and his masters in 1962 in Mechanical Engineering from the University of Oklahoma, and his doctorate (1965) in Engineering from Case Institute of Technology.

He was the recipient of a Science Faculty Fellowship from the National Science Foundation in 1962-63, and an NIH Special Fellowship in 1963-64.

One of Dr. Baker’s main interests is the application of engineering techniques and technology to the solution of human health problems.

He has been chairman of the University Committee on Biomedical Engineering and the Operating Committee for the Biomedical Engineering Computer Facility at Vanderbilt, as well as serving on several other health-related committees.

Dr. Baker’s research papers have appeared in such publications as Science and the Journal of Theoretical Biology.

Minorities Hold More Fed’l Jobs

Despite decreases in overall Federal civilian employment, minority group Americans hold more Government jobs and a greater proportion of the better paying jobs than ever before, according to the U.S. Civil Service Commission.

Complete Amino Acid Sequence—First of Six Known Protein Components of Lipoproteins—Worked Out

The complete amino acid sequence of the first of six known protein components of lipoproteins, the transport vehicles for most of the fatty substances (lipids) in human blood, has been worked out by Drs. H. Bryan Brewer, Jr., Richard S. Shulman, Peter Herbert and by Rosemary Ronan and Katherine Wehrly, of the National Heart and Lung Institute.

Their findings were reported by Dr. Brewer, head of NHLI’s Section on Peptide Chemistry, on Sept. 10 at the Fourth International Symposium on Drugs Affecting Lipid Metabolism, held in Philadelphia, Sept. 7-11.

The three classes of lipids—cholesterol, triglycerides, and phospholipids—travel in the circulation in combination with proteins, which conveys solubility on fatty substances that would otherwise be insoluble in plasma. These fat-protein complexes, called lipoproteines, are produced mainly by the liver and gastrointestinal tract.

Lipoproteins are divided, somewhat arbitrarily, into three classes on the basis of density.

**Classes Listed**

The lightest are the very low-density (VLDL or beta lipoproteins), which contain only 2-15 percent (by weight) of protein, the remainder being lipid.

Low-density (LDL or beta) lipoproteins contain 20-25 percent protein, and high density (HDL or alpha) lipoproteins contain 45-55 percent protein.

Each lipoprotein transports a mixture of lipid, so that triglyceride, cholesterol, or phospholipid may travel in combination with lipoproteins of any weight class.

However, as it works out, VLDL transports most of the triglycerides of plasma, LDL most of the cholesterol, and HDL most of the phospholipid.

High-density lipoproteins and the lipids that they carry do not appear to be atherogenic; and, in fact, a robust HDL fraction may actually confer some protection against the development of atherosclerosis.

However, excessive blood levels of VLDL result in elevated blood triglycerides and excessive blood levels of LDL result in elevated blood cholesterol, both of which are strongly associated with premature development of atherosclerosis and coronary heart disease.

During the past few years, studies have shown that blood-lipid abnormalities can be best considered in terms of lipoprotein abnormalities.

**Separate Proteins Revealed**

During the past three years, scientific interest has focused as much on the protein content of lipoproteins as on the lipids that they carry.

These studies have revealed that at least six separate proteins, called apoproteins, are components of the lipoproteins of human plasma.

As is the case with lipid, each lipoprotein class may have several apoprotein constituents, some of them present in other lipoprotein classes.

The isolation and purification of the various apoproteins of human lipoproteins constituted a step toward 1) identifying and classifying genetic factors operative in lipoprotein synthesis and in hereditary forms of hyperlipoproteinemia and, 2) shedding new light on lipoprotein structure (still poorly understood) and the differing affinities of the various lipoproteins for the lipids of human plasma.

Also, 3) clarifying the specific mode of action of lipid-lowering diets and drugs, and 4) bringing to light other functions of apoproteins, other than confusing solubility on the lipids being transported, that may have great importance in lipid metabolism.

The determination of the amino-acid sequence of the first of these apoproteins, designated apoLP-alanine, which comprises some 30 percent of the protein of very-low-density lipoproteins, constitutes still another important step toward the same goals.

Dr. Brewer and co-workers employed the Edman technique, which permits the removal in sequence of the terminal amino-acid residues from the chains of peptides and proteins, and hence the determination of their chain structures.

**Edman Procedure Performed**

The Edman procedure was performed on intact apoLP-alanine and also on fragments of this protein molecule obtained by using the proteine-digesting enzyme trypsin to break the peptide chain at various points.

The procedures were performed manually and also automatically, using the Beckman Sequencer, which chops off one terminal amino-acid residue each time a bond from whatever peptide is fed into it.

The individual amino-acid links were identified by gas or thin layer chromatography, and mass spectrosopy.

**Analysis and comparison of the data from the intact protein and**

(See AMINO ACID, Page 6)
Naturally Infected Cats Harbor Parasite; Toxoplasmosis Transferred by Filth Flies

Naturally infected stray cats harbor the parasite, *Toxoplasma gondii*, and filth flies have been shown to pick up cat feces. These findings—important for an understanding of the transmission of *toxoplasmosis*—have been reported by Dr. Gordon Wallace of the National Institute of Allergy and Infectious Diseases.

Last year NIAID scientists and grantees identified the domestic cat as a possible reservoir of *toxoplasmosis* by infecting animals in the laboratory.

**Occurs Naturally in Strays**

Now, Dr. Wallace, of NIAID's Laboratory of Parasitic Diseases, Pacific Research Section, Hawai'i, has shown in two separate studies that *Toxoplasma gondii* occurs naturally in stray cats on the island of Oahu, and the common house fly and the Oriental blow fly can contaminate human food with *toxoplasma* parasites picked up from cat feces.

These findings further implicate the domestic cat as a reservoir for the spread of disease and explain transmission of the infection to man.

It has been known for some 45 years that this single-cell, protozoa, *T. gondii*, produces disease in man and animals. Although usually mild, the disease can result in blindness, or even death. The outcome of a congenital toxoplasmosis infection can be severe birth defects or stillbirth.

**Parasite Isolated**

In the August issue of *Journal of Infectious Diseases*, Dr. Wallace describes his isolation of the infectious form of the *toxoplasma* parasite, the oocyst (or fertilized egg) in feces of 6 of 1,023 stray cats.

Blood studies showed that 29 percent of 320 cats judged to be older than 6 months had antibodies to the parasite, indicating previous infection. Antibodies were found in only 7 percent of the cats under 6 months of age.

The relative lack of antibody in the young cats can be explained by the hypothesis that toxoplasmosis in cats is usually acquired through the ingestion of an intermediate host of the parasite, such as a rodent or bird. Ordinarily, a young cat is too successful in capturing them.

Although a very small percentage of cat feces examined contained infectious oocysts, the rate assumes more significance when one considers the number of domestic cats in the United States and other countries.

The Hawaiian Island of Oahu alone has an estimated cat population of 60,000, about 50 percent of these being strays.

**NIH Visiting Scientists Program Participants**

9/1—Dr. Rong S. Chen, Taiwan, Analytical and Synthetic Chemistry Branch. Sponsor: Dr. Lawrence Fishbein, NIEHS, Research Triangle Park, N.C.

9/1—Dr. Malcolm P. Tyror, U.S.A., Metabolic Diseases Branch. Sponsor: Dr. Scott M. Grundy, Phoenix Clinical Research Section, NIAMD.

9/2—Dr. William B. Marks, U.S.A., Laboratory of Neural Control. Sponsor: Dr. Karl Frank, NINDS, Bldg. 36, Rm. 5A29.

9/8-Dr. William J. Bowmer, Australia, Laboratory of Neural Control. Sponsor: Dr. Robert E. Burke, NINDS, Bldg. 36, Rm. 5A26A.

9/12—Dr. Ritva Poukka Evarts, Finland, Laboratory of Nutrition and Endocrinology. Sponsor: Dr. John G. Bieri, NIAMD, Bldg. 10, Rm. 5N102.

9/12—Dr. Ryoko Tsukui, Japan, Laboratory of Biophysical Chemistry. Sponsor: Dr. David Kominz, NIAMD, Bldg. 4, Rm. B103.

9/13—Dr. A. Bhakdiar, Thailand, Human Genetics Branch. Sponsor: Dr. Jerry D. Niswander, NIDR, Bldg. 30, Rm. 106.

9/19—Dr. Takashi Tokuyama, Japan, Laboratory of Chemistry. Sponsor: Dr. Bernhard Witkop, NIDR, Bldg. 4, Rm. 390.

9/20—Dr. Kambhampati C. Rao, India, Biometry Branch. Sponsor: Dr. David W. Gaylor, NIEHS, Research Triangle Park, N.C.

Dr. B. Rifkind Appointed NHLI Project Officer, Lipid Clinics Program

Dr. Basil M. Rifkind has been appointed project officer for the recently created National Heart and Lung Institute's Lipid Clinics Program. He will coordinate and review the activities of the NHLI contract-supported clinics.

Dr. Rifkind comes to NHLI from Glasgow, Scotland, where he was Senior Registrar in Medicine to the Glasgow Teaching Hospitals at the Glasgow Royal Infirmary.

In Glasgow, Dr. Rifkind established the Clinic for Lipoprotein Disorders and carried out studies on the prevalence of hyperlipoproteinemia in vascular disease.

From 1967 to 1968, he worked in the Laboratory of Molecular Diseases, NHLI, as a British Heart Foundation and American Heart Association Exchange Fellow.

Dr. Rifkind has received several awards, among them the Brunton and Fullerton Awards, presented to the "most distinguished graduate of the year" of Glasgow University from which he graduated with commendation in 1957.

He received the Gold Medal and Rankine Prize in Pathology and Bacteriology at the Glasgow Royal Infirmary and, in December 1970, gave the Watson Prize Lecture of the Royal College of Physicians and Surgeons in Glasgow.

Dr. Rifkind recently lectured on the "Clinical Disorders of the Lipoproteins" at the Biochemical Society's Symposium held in London.

**Dr. Rifkind has lectured on hyperlipoproteinemia and lipoproteinemia phenotyping at several meetings.**

9/21—Dr. William G. Cotton, Australia, Experimental Pathology Branch. Sponsor: Dr. Jerry M. Rice, NCI, Bldg. 37, Rm. 2B08.

9/23—Dr. Motohiko Fuke, Japan, Laboratory of Molecular Biology. Sponsor: Dr. David R. Davies, NIAMD, Bldg. 2, Rm. 316.

9/24—Dr. Umberto L. Torelli, Italy, Human Tumor Cell Biology Branch. Sponsor: Dr. Robert Gallo, NCI, Bldg. 10, Rm. 6B18.

**Amino Acid**

(Continued from Page 5)

the fragments resulting from trypsin digestion indicated the exact amino acid sequence of the apoprotein, which consists of 79 amino acids.

A short carbohydrate side chain is attached to the peptide chain at the 74th amino acid link (threonine). A number of other lipoprotein apoproteins appear to have carbohydrate side chains.

Their functions, if any, as determinants of apoprotein or lipoprotein function or as factors possibly affecting the antigenic behavior of lipoproteins are presently under study.

ApolP-alanine is the first apoprotein of a human lipoprotein whose chemical structure has been precisely defined. Doubtless, the other five known apoproteins will be similarly characterized in the near future.

From this work may spring new knowledge of great importance to medical understanding of lipoprotein function and metabolism and of the role of these lipid-transport particles in the genesis of atherosclerosis.

**Tickets for Illegal Parking Exceed Number Anticipated**

New parking regulations have been in force since April 1, but employees and visitors continue to park illegally—at the rate of 40 to 60 tickets issued per day.

This figure far exceeds the number anticipated, less than 10 each day.

Employees are urged to comply with the NIH rules and regulations concerning parking.

Copies of the regulations are available from the Parking and Traffic Control Section, Bldg. 31, Room B1-C-11.
NCI Awards Contracts For Related Research To VPI and Foundation

Dr. Gene Lewis Named To 2nd Post, Region IV, For Health Manpower

Dr. Gene P. Lewis has been named acting associate regional health director for Manpower for the Bureau of Health Manpower Education in Region IV, Atlanta, Ga. Dr. Lewis, a PHS officer, recently became regional dental program director in Region IV for the Division of Dental Health, BHME.

He has been on special assignment with the Tennessee State Health Department developing a dental care system for children of low-income families in southeastern Tennessee.

Dr. Lewis received a D.D.S. degree from Baylor University (1961) and an M.P.H. degree from the University of Michigan (1969).

Shortly after graduation, he entered the PHS and was assigned to the Indian Health Service.

Dr. Lewis joined DDH in 1966 and set up the first comprehensive neighborhood health centers in the southeastern states.

Dr. Lewis

Nixon Nominees Four To Board of Regents, Library of Medicine

President Nixon has nominated two medical librarians, the head of a state university, and a practicing physician for membership on the Board of Regents of the National Library of Medicine.

Bernice M. Hetzner, Librarian of the University of Nebraska Medical Center in Omaha, and Dr. Susan N. Crawford of Chicago, Director of the Archive-Library Department of the American Medical Association, were named to 4-year terms expiring in August 1975.

Dr. Marshall Selected

Dr. J. Stanley Marshall, President of Florida State University, was selected to fill the unexpired term of Dr. James C. Fletcher.

Dr. Marshall joined the Florida State faculty in 1958 and became President in 1969.

Dr. Angelo M. May of San Francisco, a 1937 graduate of George Washington University School of Medicine, was named to a full 4-year membership on the Board.

A general and thoracic surgeon, Dr. May is a former President of the American College of Angiology and the California Chapter of the American College of Chest Physicians.

The new regents will attend the next meeting of the Board here Nov. 22-23.

D.C. Children’s Hospital Offers 1-Year Fellowship

The Children’s Hospital of the District of Columbia is recruiting for a one-year Fellowship in Adolescent Medicine. Applications are being accepted from physicians who have completed at least 2 years residency.

The program is designed for physicians interested in a third year of pediatrics prior to practice, or for those interested in adolescent medicine as a career.

The Fellowship is available immediately.

For further information, contact Dr. C. Andrew Rigg, Children’s Hospital, 2125 Thirteenth St., N.W., Washington, D.C. 20009, or call (202) 835-4352.

Trenton College Develops Student Nursing Curriculum Stressing Self-Instruction

A nursing curriculum to reduce student frustration and failure is being developed at Mercer County Community College, Trenton, N.J., with a Division of Nursing Special Project Grant for Improvement in Nurse Training. The project is expected that student frustration and failure is being developed at Mercer County Community College, Trenton, N.J.

The curriculum emphasizes self-instruction and calls for adapting teaching materials that include television and films. Computers will be used to assign problems and assess the answers.

The Mercer faculty will evaluate the project. It is expected that this plan will enable community colleges to cope with students who are dissimilar in age, background, and work experience.
McCune Heads NIDR’s Biomaterials Program

Dr. Robert J. McCune has been appointed chief of the Biomaterials Program in the Extramural Programs of the National Institute of Dental Research.

Research and research training activities in this area are directed toward developing new materials and methods for restoring or replacing teeth and other oral tissues.

Efforts include the search for new dental adhesives, artificial tooth implants, transplants, and improved dental restorative materials.

Dr. McCune comes to the NIDR from the Division of Dental Health, DHME, where he was chief of the Care Development Branch.

Prior to that he was chief of the Materials and Technology Branch at the Division’s Dental Health Center in San Francisco.

During his tour at the Center, Dr. McCune took graduate training in Crown and Bridge and Materials Science at the University of Indiana School of Dentistry from 1966 to 1968.

Dr. McCune advises the Pan American Health Organization on conducting dental clinical studies in South American countries.

Scientists Manipulate Surface Properties Of Mouse Cells; May Aid Cancer Research

A discovery by National Cancer Institute scientists has potential implications for the defense of normal tissue against the spread of cancer. For the first time, the surface properties of mouse cells growing in tissue culture have been manipulated without affecting their normal protein synthesis.

Dr. Peter T. Mora, of NCI’s General Laboratories and Clinics, discussed this finding at the 162nd American Chemical Society meeting held in Washington, D.C., Sept. 13-17.

Dr. Mora reported that he and Dr. Paul W. Kent, a guest investigator from Oxford University’s Department of Biochemistry, have found a way to control the amount of carbohydrate or sugar substances that collect on the surface of inbred mouse embryo cells.

By blocking the build-up of sugar residues, they expect to increase the accessibility of certain antigens on the surface of tumor cells, and in this way increase the possibility of rejection of the tumor cell.

Some scientists suspect that the antigen, tumor specific transplantation antigen (TSTA), acts by a mechanism similar to that of antigens in organ transplants.

During the complex biochemical processes of the normal cell, the carbohydrate substances of the cell’s surface are normally attached in long “strings” to the lipids and proteins.

These glycolipids and glycoproteins participate both in the later growth of the cell, in “contact inhibition,” a phenomenon of normal cells’ mutual control of their growth when in contact with one another, and also in the antigenic rejection of the cells by the host.

A distinguishing feature of cancer cells is their lack of contact inhibition, resulting in abnormal and uncontrolled growth. Previous work by Dr. Mora and Dr. Roseo O. Brady and Roy M. Bradley, both of the Laboratory of Neural Control, NINDS, and Vivian W. McFarland, of GL&G, NCI, showed that transformation of normal mouse cells by a certain DNA virus shortened the carbohydrate “strings” in the glycolipids of the cell surface.

Similarity Suspected

Because this result was observed with two cancer-causing viruses—Simian Virus 40 (SV40) and polyoma virus—the scientists suspected a common metabolic influence.

At Oxford, Dr. Kent, an international authority on carbohydrate chemistry, synthesized halogenated (fluorine or iodine containing) carbohydrate derivatives.

At NIIH, Drs. Mora and Kent were able to inhibit the incorporation of the carbohydrate residues in tissue culture grown cells by adding non-toxic concentrations of these carbohydrate derivatives as enzyme inhibitors to the cell sugar metabolic pathway.

This suggests the inhibition was successful not only in virally transformed cells, but also in “spontaneously” transformed tumor cells, and on carbohydrate residues attached to both glycolipids and glycoproteins, indicating that successful manipulation of metabolic pathways is possible for different types of cells.

Normal protein synthesis, necessary for antigen activity in the virally transformed cells, apparatus was not affected.

Ethical Genetic Issues Now Being Considered In 5-Day Conference

A 5-day conference on “Ethical Issues in Genetic Counseling and the Use of Genetic Knowledge” is now under way (Oct. 10-14) at Airlie House, near Warrenton, Va.

The Fogarty International Center and the Institute of Society, Ethics and the Life Sciences are jointly sponsoring the international conference.

Participants—including physicians, other scientists, theologians, and jurists—are discussing how knowledge of genetic diseases is being applied, and are considering such techniques as screening of large population groups.

At the Institute of Society, Ethics and the Life Sciences, located in Hastings-on-Hudson, N.Y., was incorporated in 1969 by scholars and concerned citizens to consider issues arising from the “biological revolution.”

Dr. M. David Hoggan is awarded the PHS Commendation Medal by Dr. Dorland J. Davis, NIAID Director, for his “systematic research investigations to identify and characterize the parvoviruses...” Dr. Hoggan, who came to NIAID’s Laboratory of Virologic Diseases in 1963, was a co-discoverer of the adenovirus-associated viruses (AAV). He first identified these viruses as an unusual class of particles in electron micrographs of certain adenoviruses.

Blood Bank Donors May Win Color TV—Register NOW!

About 1,000 names have been entered in the lottery for the Blood Bank Campaign to recruit new donors. The lottery prize is a new color TV.

The campaign closes the end of January. There is still time to register to become a donor for more than one time—thus increasing the chances of winning that television set. For further information call Ext. 64500.