NCI’s Dr. George Khoury
Named 1977 Outstanding
Maryland Young Scientist

Dr. Khoury, a graduate of Princeton University and Harvard Medical School, became interested in virology while working in Dr. John Enders’ lab during medical school.

At a banquet held Jan. 29, Dr. George Khoury received the Allan C. Davis Medal of the Maryland Academy of Sciences and a cash award as the 1977 Maryland Outstanding Young Scientist.

Dr. Khoury is head of the Virus Tumor Biology Section, Laboratory of DNA Tumor Viruses, Viral Oncology Program, Division of Cancer Cause and Prevention, National Cancer Institute.

 Came to NIH in 1971
After graduating from Harvard Medical School, he interned in general medicine at Massachusetts General Hospital.

He came to NIH in 1971 as a research associate in the Laboratory of Biology of Viruses, National Institute of Allergy and Infectious Diseases, working with Dr. Malcolm Martin.

Cited for Contributions
Dr. Khoury was cited “For his contributions to tumor virology by mapping of the virus genome and elucidation of viral gene expression.”

NIH Director Dr. Donald S. Fredrickson’s nomination of Dr. Khoury for the award states in part, “Dr. Khoury has made major contributions on transcriptional and post-transcriptional control of SV40 virus genetic information. He (See DR. KHOURY, Page 6)

Interagency Committee
To Consider Therapies
For Pain, Discomfort

Following the initiative of Dr. Peter Bourne, who feels that certain drugs have not been sufficiently evaluated for their ability to control pain, an Interagency Committee on New Therapies for Pain and Discomfort was established by NIH Director Dr. Donald S. Fredrickson and has been meeting at NIH since January.

Dr. Bourne Meets Directors
Dr. Bourne is Special Assistant to the President for Health Issues and Director of the White House Office of Drug Abuse Policy.

Dr. Fredrickson and several Institute Directors met with Dr. Bourne, and the Committee held its first meeting on Jan. 9.

According to Dr. Seymour Perry, NIH Associate Director for Medical Applications of Research, who is Committee chairman, it was decided at the meetings that several areas should be examined. These include:

Areas Needing Investigation
- Need for improvements in processing of drugs placed on Schedule 1. Such drugs as heroin and marijuana are very difficult to obtain for research.
- Greater emphasis needs to be given to understanding the mechanism of pain and the alleviation of pain and analgesics, mechanical stimulation of nerves, acupuncture, etc.
- Need to develop guidelines for improved care of the terminally ill, including examination of the hospice concept.

Concern for Terminally Ill
Dr. Bourne indicated that there is a growing concern for improved treatment of the terminally ill. He noted that approximately 200 “hospices” are currently in the talking stages in the Nation, and that he hoped that the Federal government would take the lead in the hospice movement.

The Interagency Committee will be meeting regularly, and the next meeting is scheduled for March.

PROJECT REACH
NIH Disseminates Its Research Findings
By Communications Technology Satellite

Project REACH—Research, Education, and Community Health—utilizing the Communications Technology Research satellite, got under way Jan. 1977 with investigations in Bethesda addressing and answering questions from an audience at the University of Colorado Medical School in Denver.

Programs sent by satellite will continue through 1978, with NIH-sponsored scientists presenting programs at the National Library of Medicine’s ground station for the satellite, CTS, a Joint project of

Waiting for their cues to appear for Project REACH are (1 to r): Drs. Steinhschneider, Hasselmeyer, and Salans.

the Canadian government and NASA.

These programs will be transmitted to ground terminals at several other sites in the U.S. and Alaska.

Featured on the Jan. 3 program were Dr. Lester Salans of the National Institute of Arthritis, Metabolism, and Digestive Diseases, discussing Near Miss Babies—Hypothesis: Are These Healthy Babies? Appearing with Dr. Hasselmeyer was pediatrician Dr. Alfred Steinh Schneider, an NICHD consultant.

Appearing Feb. 16 were Dr. Robert N. Butler, Director of the National Institute on Aging, speaking on Aging; Dr. Heinz W. Berendes, NICHD, talking on Contraceptive Safety; and Dr. Frederic Barter,
Coast Guard Sailing Class Begins Feb. 28

The NIH Sailing Association offers a program of sailing instruction which combines a classroom course with on-the-water experience. Students successfully completing both parts will qualify to charter the Sailing Club’s four Flying Scots, 19-foot daysailers owned on the Chesapeake Bay at Annapolis.

Principles of Safe Sailing, the 9-week classroom course taught by the U.S. Coast Guard Auxiliary in cooperation with the Sailing Club, begins Tuesday, Feb. 28, at 7:30 p.m. in Conference Room 4, Bldg. 31 (A-wing, first floor).

Fullfills Requirement

Cost is $4 for text (which may be shared within families) and $2.50 for registration materials. There is a classroom course requirement for the Sailing Club’s on-board training, and this Auxiliary class is one way to fulfill it.

Details on the on-board training, which will begin about the first of May, will be presented at the first class meeting. For additional information call 656-1027 early mornings or evenings before 8 p.m.

Jeffrey Solow To Be Featured In FAES Concert on Feb. 26

Jeffrey Solow, cellist, will appear in a recital on Sunday, Feb. 26, at 4 p.m., in the Masur Auditorium.

In memory of the great cellist, Gregor Piatigorsky, an additional concert is being sponsored this year by the Foundation for Advanced Education in the Sciences.

Admission is by ticket only.

Health Lobbying Is Info. Training Seminar Topic

The Work of Health Lobbyists will be the topic of discussion on Monday, Feb. 27, at 2:30 p.m. in Conference Room 7, Bldg. 31, C Wing.

Everyone is invited to attend the session, sponsored by the NIH Information Training Committee.

Lobbyists Present Views

Speakers will be: Nathaniel Peterson, who represents the American Cancer Society, Research to Prevent Blindness, and other organizations; and Bill Macklin and Peter Van Haverbeke, who represent the Epilepsy Foundation of America.

A question and answer period will follow the presentations.

Bank Hours Change

The Bank of Bethesda’s NIH branch, located in Bldg. 10, Room B1-C25, has new hours. Services will be available from 8:30 a.m. to 2 p.m. Monday through Friday, and during extended hours of 8:30 a.m. to 4 p.m. on Civil Service pay days.

Enter Bethesda Chase!
Form Teams, Train Now For May Challenge Relay

On Sunday, March 5, the Bethesda Chase will include three races beginning at 10 a.m. Many NIH’ers are anticipated to be entrants in the 2-mile Run for Fitness, 10 km race-walk, or the 20 km run.

The latter races will follow a course through Bethesda including the NIH campus. For information on routes, advance registration, and entrance fees, call 986-1101.

Health’s Angels Sponsor Relay

To promote friendly competition on the NIH campus, the NIH Jogging Club (Health’s Angels) is planning an Institute Challenge Relay on Wednesday, May 24.

Teams of persons may compete, each person running ¼ mile. Teams formed from the same Institute, lab, section, or branch are encouraged, but teams are not required to be co-workers.

Ribbons will be presented to all participants, and the fastest all-male and all-female teams will receive prizes.

NIH Director Dr. Donald S. Fredrickson has agreed to be the official starter in front of Bldg. 1, and will present the Director’s Cup to the winning team.

For further information and team application forms, contact Dr. Peter Pentchev, Bldg. 1, Room 3D-14.

To join the Jogging Club, write to Pat Carmichael, Bldg. 1, Room 118.

NIH Visiting Scientists Program Participants
1/29—Dr. Alison P. Howat, United Kingdom, Cytokine Production and Research Branch. Sponsor: Dr. Janet Brunelle, NIDR, Westwood Bldg., Rm. 354.
1/29—Dr. Maria Zeneroli, Italy, Digestive Diseases Branch. Sponsor: Dr. J. D. Jones, NIAMDD, Bldg. 10, Rm. 4D52.
1/30—Dr. Frederik H. Gmelig, The Netherlands, Metabolism Branch. Sponsor: Dr. Thomas A. Waldmann, NCI, Rm. 10, Rm. 4N117.
2/1—Dr. Marcel A. Juillerat, Switzerland, Laboratory of Chemical Biology. Sponsor: Dr. Hiroshi Taniuchi, NIAMDD, Bldg. 10, Rm. 6N310.
2/1—Dr. Kevin Nicholas, Australia, Laboratory of Biochemistry and Metabolism. Sponsor: Dr. Yale Topper, NIAMDD, Bldg. 10, Rm. 9B18.

Visits From Taiwan
2/1—Dr. Fai Po Tsui, Taiwan, Division of Bacterial Products. Sponsor: Dr. William Egan, Bureau of Biologics, Bldg. 29, Rm. 452.
2/7—Dr. David Proud, United Kingdom, Laboratory of Chemistry. Sponsor: Dr. John Pisano, NHLBI, Bldg. 10, Rm. 7N262.
2/13—Dr. F. Anders Karlsson, Sweden, Diabetes Branch. Sponsor: Dr. Jesse Roth, NIAMDD, Bldg. 10, Rm. 8S244.

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CLINICAL CENTER BLOOD BANK
Open 8 a.m. to 4 p.m.
Monday through Thursday
8 to 11:30 a.m., 2 to 4 p.m. Friday
Bldg. 10A, Room 1E33; 496-1048

Mrs. Lasker Are Cited

Sen. Javits, Rep. Pepper, and Congressman Claude Pepper, and Mrs. AHA, NHLBI Celebration: of continuous and influential support aimed toward the prevention and care of cardiovascular disease within the past 30 years, exemplifying the true purpose of the National Heart Act of 1948: "To improve the health of the people of the U.S."

The citation reads: "In recognition of... their roles in the enactment of the National Heart Act of 1948, and their continuing battle against heart disease, the American Heart Association presents to the Honorable Jacob K. Javits, United States Senator from New York, and the Honorable Claude Pepper, United States Representative from Florida, Awards of Meritorious Service..."

Dr. James Hunt, professor and chairman, department of medicine, Mayo Clinic and Mayo Medical School, presented the First Distinguished Service Award of the National Heart, Lung and Blood Advisory Council to Mrs. Lasker.

She was cited for "... her vision and pioneering efforts culminating in the creation of the National Heart Institute. Her continuing role in influencing Congressional policy in support of research... her foresight... and her continuous enthusiasm, generous spirit, and loving heart..."

Baltimore Platelet Center Seeks Donors

Johnny Unitas, former Colts quarterback, recently donated an ounce of blood at the Baltimore Cancer Research Platelet Donor Center in the hope that he might match the blood platelets of one of the Center's leukemia patients.

Platelets are the clotting factors in the blood without which a leukemic patient often suffers fatal hemorrhage. These patients need matched platelets to keep them alive and free from the threat of bleeding while their therapy has time to work.

The Center, at the corner of Eutaw and Redwood Streets, is trying to platelet type as many people in the Baltimore area as possible in order to beat the 5,000 to 1 odds against a match between unrelated persons. Donors living near Baltimore may contact Cathi Kohler, (301) 656-2272.

Bethesda Donors Also Sought

NIH employees, their families, and friends in the Bethesda area are also being invited to donate platelets for those CC patients who need transfusions which must be matched by HLA type.

They may be HLA typed through the NIH Plateletopheresis Center adjacent to Bldg. 10.

The first step in donating platelets is to be HLA typed. They are typed by the NC Regular Blood Donor Center as described by Bldg. 10.

The sample is sent to a laboratory for typing, and results are back within 24 to 48 hours. If the platelet matches, the donor is contacted for the plateletopheresis procedure, which takes 2½ hours.

Under supervision of physicians and nursing staff, a unit of blood is drawn and placed in a centrifuge which spins the blood at 2,400 rpm for 3 minutes, separating plateletrich plasma from red blood cells.

The red blood cells are returned immediately to the donor while the platelet-rich plasma is once again centrifuged, this time at 4,000 rpm for 5 minutes. This causes the platelets to concentrate into a small "button."

Plasma Returned to Donor

The plasma is then returned to the donor. This procedure is repeated 3 more times to get a total of 4 units of platelets. During this time donors may read or watch television.

Their platelets are replaced by the body within 24 to 48 hours and the healthy donor may donate twice a week if necessary.

For an HLA test and to donate platelets call (301) 656-2272 in the Baltimore area for an appointment and 496-5022 in Bethesda.

Sign Up for Poison Ivy Study

Dr. Steven Shama, Dermatology Branch, National Cancer Institute, is interested in seeing volunteers who are sensitive to poison ivy.

Volunteers must be between the ages of 18-69 and have a history of a rash after touching poison ivy and preferably have had an active rash within the past few years. Some financial remuneration will be included.

Contact Dr. Shama at 496-2481 for further information.

New HEW Policy Seeks To Discourage Smoking In All Dept' Facilities

As a result of increasing evidence that smoking is hazardous to our health, a new Department policy on smoking in HEW-occupied buildings and facilities was approved last month by HEW Secretary Califano, Jr. The con" current with his announcement of a new initiative to discourage Americans from smoking.

This new HEW policy recognizes the rights of individuals to work or visit in an environment reasonably free of contamination by tobacco smoke, while providing for the rights of individuals who smoke.

- Smoking is prohibited in all Department conference rooms, classrooms, auditoriums, libraries, elevators, and shuttle vehicles.

- All cafeterias will have designated smoking and nonsmoking areas.

- In common work areas, in which two or more people are assigned, supervisors will prohibit smoking. If an employee objects in writing to tobacco smoke in the immediate work area on the basis that it is having an adverse effect on his health, the Cartel will be taken.

In the spirit of this revised policy, NIH will eliminate cigarette vending machines from its buildings.

Also, the NIH Recreation and Welfare Association is offering alternatives—the purchase of “One Step at a Time,” an 8-week smoking withdrawal system, or a SMOKE onboard course in early March (if enough interest is evidenced).

If interested in participating, contact the R&W Activities Desk, 496-4600.

Next Medicine History Society Meeting Features 2 Speakers

The next Washington Society for the History of Medicine meeting on Tuesday, Feb. 21, will feature the two speakers originally scheduled for the Jan. 19 meeting which was cancelled.

The meeting will take place at 8 p.m. in the Billings Auditorium, National Library of Medicine.

A New Initiative to Discourage Smoking in HEW Occupied Facilities

Dr. Fitzhugh Mullan, National Health will discuss the Sickness of Frederic Chopin: A Study of Disease and Society.

Dr. William Graebner of the State University of New York at Fredonia will speak on the topic: Americans Discover Retirement and Old Age: Dr. Osler’s ‘Fixed Period’ Address, 1905.

Guests are welcome. For information, call 496-501.
Pimas Continue Use of Dairy Products Despite an Inability to Digest Lactose

Virtually all full-blooded Pima Indians lose the ability to digest milk by the time they are 4 years old. And the older they get, the more often they report diarrhea and gastrointestional problems after drinking milk.

Yet Pima of all ages continue to consume milk and other dairy products containing lactose (milk sugar). In fact, Pima schoolchildren drink nearly three glasses of milk and adults about a glass a day, plus small amounts in coffee, cereal, and ice cream.

These are among the findings of a study reported in the December 1977 issue of Gastroenterology.

Was Collaborative Study

The Pima study was a collaborative project of the National Institute of Child Health and Human Development; National Institute of Arthritis, Metabolism, and Digestive Diseases; Stanford University department of pediatrics; and department of geography at the University of California, Davis.

The project is the latest in a series of studies of lactose intolerance among different ethnic groups, conducted by Dr. Norman Kretchmer, NICHD Director, his colleagues at Stanford University, and other investigators.

Lactase Usually Disappears

Researchers found that most of the world's people lose the ability to absorb lactose soon after they are weaned because in most humans and all land mammals the enzyme lactase, needed to break down lactose, occurs in sufficient quantities in the intestine only until the end of the suckling period.

But members of a few groups—including Northern Europeans and nomadic herdies of East Africa—continue to synthesize enough lactase to digest milk sugar throughout their lives.

Why did these few peoples deviate from the normal mammalian pattern of lactase malabsorption?

Dr. Kretchmer and his colleagues believe these "milk digesters," all members of dairy cultures, inherited a dominant mutation of the gene that controls lactase synthesis.

Pressure on Genes Selective

Thousands of years ago, when these groups began to keep dairy animals and consume milk products, a selective pressure was created in favor of the variant gene controlling ability to absorb lactose. Thus milk digesters had a selective advantage under new environmental conditions.

But in most parts of the world, where dairy farming became central to the economy, inability to digest lactose was not a disadvantage. Thus lactose malabsorption after infancy remains the normal state for human adults, including most Africans, Asians, and native Americans.

The Pima fit this normal human pattern: traditionally they were irrigation farmers and consumed no milk after weaning. The researchers found that 95 percent of full-blooded Pima adults cannot digest milk.

The adults who can absorb lactose, they found, are those with Anglo-American ancestors—and the more Anglo ancestors, the better the chances that a Pima adult can metabolize lactose.

Ancestry Affects Absorption

Of 41 Pima who had mixed Indian-Northern European ancestry, 25 percent could not absorb lactose, and among them prevalence of lactose malabsorption correlated with the degree of northern European admixture in their families.

But full-blooded Pima who can't absorb lactose may still be able to drink milk without feeling sick. Investigators distinguish between lactose "malabsorbers," who are shown in lab tests to be unable to absorb significant amounts of milk sugar, and lactose "intolerants," who show clinical symptoms after drinking milk.

In the Pima study, only 23 percent of the "malabsorbers" recognized that milk disagrees with them. This changes with age: while only 7 percent of the teenage malabsorbers reported indigestion from drinking milk, a full 68 percent of the malabsorbers over age 18 said drinking milk brought on symptoms.

Compare Milk Drinking Habits

Yet there was little difference between the amounts of milk drunk by Pima who can and cannot absorb lactose.

In fact, among children younger than age 12, the lactose absorbers drank less milk than did the malabsorbers.

Thus the inability of many Pima to absorb lactose does not stop them from consuming milk and other lactose-rich foods.

"By world standards," the researchers note, "the diet of the Pima, especially of young people, is high in lactose-containing dairy products."

Dr. Stephen L. Gordon

Dr. Stephen L. Gordon, formerly with the National Highway Traffic Safety Administration, Department of Transportation, has joined the Grants Associates Program for health science administration training.

Dr. Gordon received his B.S. degree in 1967 from Drexel University, where he also received M.S. and Ph.D. degrees in biomedical engineering.

From 1968 to 1973, he was associated with the Crews Systems Department, Naval Air Development Center, Warminster, Pa. After receiving his Ph.D. degree in 1973, he joined the National Highway Traffic Safety Administration as head of the Biomedical Engineering Group in the Occupant Restraint Systems Division. He also served as a part-time instructor in mechanical engineering at the University of Maryland since 1974.

Dr. Gordon was the recipient of an NIH Predoctoral Fellowship, a Chrysler Corporation Scholarship, and a Drexel University Board of Trustees Scholarship.

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SATELLITE (Continued from Page 1)
NIA Scientific Counselors Board Discusses Goals At Its Inaugural Meeting

The newly appointed Board of Scientific Counselors of the National Institute on Aging recently held its inaugural meeting at the Gerontology Research Center in Baltimore.

The eight board members advise the Directors of NIH and NIA on intramural research, with particular attention to long-range objectives.

Dr. Richard C. Greulich, NIA scientific director and director of the GRC, is executive secretary.

At this first meeting, NIA Director Dr. Robert N. Butler, spoke about the current status and prospects of the Institute.

NIA Deputy Director for Science Dr. DeWitt Stetten, Jr., and the Assistant Director for Intramural Affairs Dr. Philip S. Chen, Jr., discussed the role of boards of scientific counsellors.

Various Center research programs were described during the remainder of the 5-day session.

Board Members Listed

Board members are: chairman, Dr. Byron H. Waksman, department of pathology, Yale University School of Medicine; Dr. Paul J. Davis, head, endocrinology division, State University of New York at Buffalo; Dr. Dorothy H. Eichorn, associate director, Institute of Human Development, University of California at Berkeley; and Dr. Robert Kohn, department of pathology, Case Western Reserve University School of Medicine.

Also, Dr. John I. Lacey, chief, section on behavioral physiology, Fels Research Institute; Dr. Alexander Leaf, Harvard University School of Medicine; Dr. William Hinrich, Nebraska Psychiatric Institute, University of Nebraska Medical Center; and Dr. Jean Paul Revel, department of biology, California Institute of Technology.

The next meeting of the Board is tentatively May 1978.

Experts To Share Data On Structure of Enamel During Dental Symposium

Experts from 12 countries will share the most recent information on tooth enamel structure and function during a 5-day symposium, sponsored by the Intramural Research Program of the National Institute of Dental Research.

This symposium at the Dulles Marriott Hotel, Fairfax, Va., on March 19-23, will be concerned with current research on cellular, mineral, and protein components of enamel tissue in health and disease.

Dr. John D. Terriere, 496-1476, research chemist in the Laboratory of Biological Structure, and Dr. Marie U. Nyleen, 496-1483, director of intramural research, NIDR, are organizing the program.

California Scientists Find Baking Soda Can Reverse Kidney Disorder, Stunting

As part of the research that found a way of correcting the short stature that usually accompanies this disease, Dr. McSherry measures a patient who has renal tubular acidosis.

Clinical researchers at the University of California at San Francisco Medical Center have found that stunted growth in children caused by a kidney disorder called renal tubular acidosis can be reversed by treatment with precise doses of common baking soda.

In an article in the February edition of the Journal of Clinical Investigation, researchers at the University of California at San Francisco Medical Center—Dr. Curtis Morris, Director of the General Clinical Research Center, and Dr. Eliabeth McSherry of the Pediatric Clinical Research Center—reported the research which led to the discovery.

Dr. Morris is a grantee of the National Institute of Arthritis, Metabolism, and Digestive Diseases.

Specialized Facilities Provided

The Pediatric Clinical Research Center, where the research took place, one of 82 such units throughout the U.S., funded by the Division of Research Resources, provides specialized patient-centered research facilities to the entire medical staff of the University of California at San Francisco.

Dr. McSherry has carried out exhaustive studies on children suffering from classic renal tubular acidosis (RTA), a kidney disease that does not allow the body to excrete acid in normal amounts. In many cases of this disease, the noticeable effect is short stature.

Many children who suffer from RTA find the psychological problems associated with the short stature more damaging than the physical impairment.

Based on their research, Drs. McSherry and Morris feel the disease and the stunted growth it causes are far more prevalent than once thought.

For years, researchers questioned whether the kidney disease itself or the build-up of acid in the body caused the short stature. About a decade ago, scientists felt that children with renal tubular acidosis were stunted because too much acid accumulated in their bodies, a condition termed "acidosis."

However, when children with the disease were given an alkali substance (baking soda) in amounts believed sufficient to neutralize the excess acid, little or no increase in their stature occurred. Physicians then shifted their opinion, feeling the stunted growth was caused mainly by the kidney disease itself.

Researchers at the University of California at San Francisco, led by Dr. McSherry and Dr. Morris, continued looking into the original theory that too much acid in the system of children with RTA caused their stunted growth.

Questions Recommended Dose

Using the laboratory, diet kitchen, and hospital beds of the Clinical Research Center, Dr. McSherry observed that the dose of alkali recommended in the past corrected acidosis for a short time, but the correction did not last.

Continued correction of acidosis required that the dose of sodium bicarbonate be progressively increased to amounts much larger than those previously thought necessary and unprecedented for any patients with classic renal tubular acidosis.

When Dr. McSherry administered the larger doses, the stunted growth of the affected children began to correct itself.

The researchers found the essence of the disease is that the affected children not only cannot excrete acid in normal amounts, they actually "waste" large amounts of sodium bicarbonate in their urine.

Bicarbonate must be ingested in amounts large enough both to neutralize the acid produced by the body, and to offset the sodium bicarbonate "wasted" in the urine. Given these large amounts of sodium bicarbonate, the patients grow normally.

According to Drs. McSherry and Morris, it was necessary to carefully study the effect of the increasing amounts of baking soda given to these patients.

Thus, it became important to do sophisticated chemical balance studies repeatedly on each patient to determine the amount of baking soda (in tablet or liquid form) needed by each affected child.

These balance studies required that the affected children be hospitalized in the Pediatric Clinical Research Center.

Patients' Growth Evaluated

Drs. McSherry and Morris report that growth was evaluated in 10 infants and children with classic renal tubular acidosis. When alkali therapy was begun, six patients were stunted.

Of the four who were not, two infants were too young to have been stunted, and two children had been documented earlier to be non-acidotic even though they suffered from RTA.

With sustained alkali therapy, each patient attained and maintained normal stature. The rate of growth increased two to three fold, and normal heights were attained within 6 months of initiating alkali therapy in the stunted infants and within 3 years in the stunted children.

School Work Improved

With prolonged correction of acidosis and normalization of growth, the patients performed better in their school work. In addition, some patients grew enough to play varsity sports for the first time.

"As it is, the answer to the problem turns out to be rather simple, but we could have never found that simple answer without a tremendous amount of sophisticated research talent and equipment that all came together at one place and time on a unit like the Clinical Research Center," explains Dr. McSherry.
Artificial Kidney, Chronic Uremia Conference Tell Of Promising Techniques

Some 326 scientists, including 45 from abroad, attended the 11th Annual Contractors’ Conference of the Artificial Kidney-Chronic Uremia Program of the National Institute of Arthritis, Metabolism, and Digestive Diseases.

The 3-day conference, held Jan. 16-18 in Bethesda, brought together senior representatives from each of the 96 active research contracts to present their work.

**Subject To Be Discussed**

Topics discussed included uremic pathophysiology; carbohydrate, lipid, and acetate metabolism; anemia of chronic disease; ascorbic acid and biocompatibility; therapeutic use of adsorbents, membranes and new devices; nutrition in dialysis; and therapy evaluation.

A full day was devoted to a workshop on progress in peritoneal dialysis, a technique which utilizes the lining of the abdominal cavity as the membrane through which uremic waste products are filtered and removed from the body.

**Importance Increases**

Although not as common as hemodialysis, this technique is becoming increasingly important in therapy as the risk of infection and other disadvantages have been overcome by NIAMD-sponsored research.

In addition to NIAMD contractors, four guest scientists with extensive experience in the field of peritoneal dialysis spoke at the workshop: Dr. D. G. Oreopoulos of the Toronto Western Hospital; Dr. Christopher Blagg of the Northwestern Kidney Center, Seattle; Dr. Barry Von Hartitsch of the Hillcrest Medical Center, Tulsa; and Dr. N. Di Paolo of the Policlinico Universitario, Siena, Italy.

**CAPD Therapy Discussed**

A novel and dramatic dialysis technique capable of providing adequate and practically continuous removal of metabolic waste from the blood of kidney patients—known as Continuous Ambulatory Peritoneal Dialysis (CAPD)—was discussed by Dr. Robert P. Popovich, University of Texas; Dr. J. W. Moncrief of the Austin Diagnostic Clinic; Dr. K. D. Nolph of the University of Missouri Medical Center; and Dr. D. G. Oreopoulos.

In the new CAPD therapy now under investigation, patients maintain small volumes of dialysis solution in their peritoneal cavities 24 hours per day, except for short periods of drainage and installation of fresh solutions several times during their waking hours.

No fluid or dietary restrictions are needed with this method, and patients feel uniformly better with this less expensive treatment than under conventional dialysis.

**Possible Risk Is Problem**

The investigators emphasized that although the technique holds great promise by significantly reducing costs of dialysis and freeing patients from machines, frequent visits to dialysis centers and lengthy treatment sessions, the risk of peritonitis in patients receiving the therapy is still a problem.

The principal organizers of the conference were Dr. Benjamin T. Burton, associate director, NIAMD, and Dr. Robert J. Wine- man, associate chief of the Artificial Kidney-Chronic Uremia Program.

**Deadline Is Extended For Module on Social And Behavioral Issues**

The deadline for the STEP module to be held May 31-June 2 has been extended from Feb. 1 to March 15.

Persons interested in participating in this module should forward their application, Form NIH-2245, to the Special Programs Office, Bldg. 1, Room 314. Applications may be obtained by calling 496-5368.

In recent years, the primary NIH biomedical research mission has become increasingly involved with a variety of societal and behavioral concerns. This module was developed to identify and explore some of these concerns and increase awareness and understanding of them.

Specific topics under consideration for discussion include the conceptual and methodological differences between behavioral, sociological, and biological research; and the psychosocial impact of some important aspects of health and disease.

**More Topics Considered**

Also, a critique of the medical model of health and disease, including an examination of the relation between mind and body; sense and nonsense in holistic approaches to health and disease; and the psychological aspects of factors such as pain, stress, heart disease, smoking, and obesity.

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**NLM’s Dr. Anne Caldwell Retires After 29 Years**

Dr. Anne E. Caldwell, research analyst in the Bibliographic Services Division, retired in January after more than 29 years of service with the National Library of Medicine.

She joined the Army Medical Library in 1948 and has worked in several areas as that institution evolved into NLM.

Dr. Caldwell has been interested in the fields of psychopharmacology and psychiatry. She is the author of *Origins of Psychopharmacology* and the chapter, “History of Pharmacology,” in W. G. Clark’s *Principles of Pharmacology*.

She also teaches a course in scientific writing for the Foundation for Advanced Education in the Sciences at NIH.

In her retirement, she plans to continue writing and teaching and to pursue her hobby of playing the cello.

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**Graffito**

*Life isn’t always a bowl of cherries—sometimes it’s a pint of blood!*

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**Colloquium on Diarrheas of the Young Will Focus On Interrelated Issues**

A Colloquium on Selected Diarrheal Diseases of the Young (March 7-8) in Wilson Hall, Bldg. 10A, will include research scientists from England, Canada, and the U.S.

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**DR. KHOURY**

*(Continued from Page 1)*

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**Other noteworthy contributions were made on the homology and evolutionary relationship between SV40 and parvoviruses."**

Dr. Michael J. Kuhar, a grantee of the National Institute of Mental Health and of the Alcohol, Drug Abuse, and Mental Health Administration, received the 1977 Maryland Distinguished Young Scientist Award.

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**Colloquium on Diarrheas of the Young Will Focus On Interrelated Issues**

A Colloquium on Selected Diarrheal Diseases of the Young (March 7-8) in Wilson Hall, Bldg. 10A, will include research scientists from England, Canada, and the U.S.

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**Interrelated Issues**

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**Employee Assistance Program**

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NLM Reports on Medical Use of 2-Way Television, Computer Assisted Instruction

Almost a decade of experience in planning, building, and operating a two-way, interactive medical television network is summarized in a recent report prepared for the Lister Hill Center.

The report—The New Hampshire/Vermont Medical Interactive Television Network—began in 1968 with a 30-mile two-way television link between Dartmouth and Claremont General Hospital. This link was funded by the National Institute of Mental Health to explore the possibilities of using television to provide psychiatric consultation.

In 1970, NLM’s Lister Hill National Center for Biomedical Communications entered into the first of a series of research and development contracts with Dartmouth Medical School, Hanover, N.H.

Since then, NLM contract funds have been used to expand the services offered over the Dartmouth/Claremont link:

- build and operate an interstate microwave network connecting the medical schools of Dartmouth College and the University of Vermont, Burlington, with fixed stations also at Claremont General Hospital and the Central Vermont Hospital, Berlin;
- acquire a van and the mobile microwave equipment to serve three additional sites (Claremont, Hanover, and Middlebury College); and make the transition from a field trial to a fee-for-service operational network.

The report focuses on planning, management, production, and evaluation issues which have been encountered.

Also, from September 1971 through May 1975 the Lister Hill Center—together with the Ohio State University College of Medicine and Harvard University (Massachusetts General Hospital) and a communications contractor (Tymshare, Inc.)—built and operated a national time-sharing Computer-Assisted Instruction network.

A third university, the University of Illinois Medical Center in Chicago withdrew from the network in March 1974.

New Pamphlet Describes GCRC’s for Patients

A new pamphlet designed to acquaint patients and their families with the purpose and operation of the NIH General Clinical Research Centers has been published by the Division of Research Resources.

Entitled General Clinical Research Center Patient Information, the 6-page pamphlet describes a typical center, how the patients are selected, their objectives, their funding, the personnel involved, criteria for and conditions of admittance, and other pertinent information.

All 82 GCRCs throughout the U.S. have been supplied with the new patient orientation booklet for distribution to both inpatients and outpatients.

Single or multiple copies of the pamphlet are available from the Office of Science and Health Reports, DRR, Bethesda, Md. 20014.

Primate Plan Proposal: Comments Are Sought

Increased conservation measures, greater domestic production of primates, and international arrangements to insure a stable supply of primates are among the principal recommendations of a proposed National Primate Plan, published in the Feb. 10 Federal Register.

The Plan, prepared by an Interagency Primate Steering Committee, is designed to insure a continual availability of nonhuman primates for essential health research. In recent years these critically needed animals have been in short supply in the U.S.

The Steering Committee, established in 1974, is composed of representatives from the National Science Foundation, the Department of Defense, and five agencies of HEW, with NIH designated as the lead agency.

The Committee was charged with developing a unified, Government-wide approach to insure a continued supply of primates.

The Committee is soliciting comments on the proposed Plan from all interested parties prior to issuing the Plan in final form later this year. All comments must be received by April 4.

Comments should be addressed to, and single copies of the proposed Plan may be obtained from: Executive Director, Interagency Primate Steering Committee, NIH, Bldg. 14G, Bethesda, Md. 20014.

Dr. Rob't Smith Retires; Was Chemist at RML

Dr. Robert Smith, a chemist at the NIH’s Rocky Mountain Laboratory, Hamilton, Mont., for over 20 years, recently retired after 25 years of Government service.

He served as a group leader and research area coordinator and participated in the Laboratory’s scientific and management programs.

After his Army service, Dr. Smith earned a Ph.D. degree in biochemistry at the University of Minnesota in 1951. His career was again interrupted by recall to active duty for 2 years during the Korean conflict.

Dr. Smith devoted much of his off-duty time to promoting education and community development.

National Commission Will Hold Hearing On Digestive Diseases

Digestive diseases, one of the Nation’s major health problems, will be the subject of a public hearing, Monday, March 2, from 9 a.m. to 6 p.m. in the Auditorium of the Hubert Humphrey Building, HEW, 200 Independence Ave., S.W., Washington, D.C.

The hearing will be conducted by the National Commission on Digestive Diseases to improve understanding of problems related to digestive disorders. The Commission, established by Congress, has been directed to develop and submit by October 1978 a long-range plan for more effective use and more efficient organization of national resources to combat digestive illnesses.

The local planning group is headed by Dr. William M. Lukash, the White House Physician.

In announcing the session, Dr. Eugene D. Jacobson, Commission chairman, called broad public involvement vital.

He noted that diseases of the organs making up the digestive system affect nearly 13 million Americans with consequent economic costs approaching $17 billion annually; are a leading cause of hospitalization in the Nation’s population; the second major cause of disability and days lost from work; the third leading cause of death; and rank behind only cardiovascular diseases as a cause of visits to physicians.

Dr. Jacobson is associate dean for basic science and research, University of Cincinnati College of Medicine.

The 26 members of the Commission, who will participate fully in the hearings, include research scientists, medical educators, physicians, dietitians, and representatives of the public.

Written Testimony Requested

Hearings will be informal, but the presentation time of individual witnesses may be limited to accommodate all those seeking to testify. Written testimony from witnesses is requested for the Commission’s report to Congress.

Further information on the hearings and the work of the Commission may be obtained from Dr. Thomas P. Vogl, Executive Secretary, National Commission on Digestive Diseases, Federal Bldg., 7550 Wisconsin Ave., Bethesda, Md. 20014, (301) 496-1347.

Medical Ethics will be held July 16-23 at Dartmouth College, N.H.

A brochure describing workshop agenda, registration, and costs is available from The Hastings Center, 360 Broadway, Hastings-on-Hudson, N.Y. or call (914) 478-0600.
A Century of DNA—
Dr. Cohen of NICHD
Publishes Gene Study

"Contrary to popular belief, the discovery of deoxyribonucleic acid (DNA) did not occur within the past several years and was not accomplished by a select group of scientists." This statement begins a new book, A Century of DNA: A History of the Discovery of the Genetic Substance.

The book was written by Dr. Jack S. Cohen, National Institute of Child Health and Human Development biochemist, and Dr. Frank H. Portugal, formerly with the National Cancer Institute and now with the Carnegie Institution.

It took a century of research to progress from the discovery of DNA (nuclein) by Friedrich Miescher in 1869 to elucidation of the genetic code by Dr. Marshall Nirenberg and his co-workers at NIH in the 1960s.

The book was written, says Dr. Cohen, to explain this slow progress and to show how understanding developed of what DNA does within the cell.

In the 19th and early 20th centuries inadequate technology was one factor causing delay. The scientists themselves also slowed progress. Like people everywhere, they made miscalculations, forgot important data, and overlooked obvious techniques. Their motivations, prejudices, egotism, and loyalties played a part in advancing or inhibiting research.

The book explains how, despite these and other obstacles, our knowledge of DNA has taken giant steps in the last several years and was not accomplished by a select group of scientists.

The final chapter of the book outlines current research directions, including recombinant DNA research.

The book's foreword is written by Lord Todd, president of the British Royal Society, who was awarded the Nobel Prize for his discover of the chemical structure and function of nucleosides—the components of DNA. He states, "As a contribution to the history of science and as a guide to the basis of molecular biology, it is outstanding."