Roles are reversed as NIH Director Dr. Donald S. Fredrickson snaps a picture of NIH photographer Tom Joy, while he signs the official guest book in the Director's office on the day of his retirement. For the past 20 years, Mr. Joy has photographed visiting dignitaries as well as employee activities.

Experts Review Causes and Treatment Of Poor Nutrition in Cancer Patient

By Susan Johnson
‘NIH Record’ Staff Writer

Nineteen outstanding clinicians and researchers from the U.S. and Europe met at the National Cancer Institute last month to discuss the problem of nutrition in the cancer patient.

Malnutrition and weight loss, commonly associated with advanced stages of cancer, are among the patient's most debilitating problems. Investigators in the Eastern Cooperative Oncology Group have found that even small amounts of weight loss, less than 5 percent of body weight, decrease the patient's response to treatment and shorten his survival.

The participants at the meeting reviewed current knowledge in three areas: decreased appetite in cancer patients, host/tumor metabolism, and nutritional support for cancer patients.

The major cause of reduced caloric intake in patients with tumors is loss of appetite.

The investigators discussed some of the factors which influence appetite loss.

Dr. Seoras Morrison, NCI, has found that animals with tumors cannot gauge the amount of calories they have eaten as well as normal animals. It is not clear, he said, whether this observation applies to humans.

He has also found that animals with tumors have decreased capacity for activity, and that this is a factor in decreased eating.

Changes in brain chemistry that can decrease appetite have been studied in tumor-bearing animals by Dr. Josef E. Fischer, University of Cincinnati Medical Center.

The amount of the amino acid tryptophan entering the brain may be slightly increased in animals with tumors, resulting in higher levels of serotonin in the brain, he told the participants. Serotonin may be one of the chemicals that suppress appetite.

Efforts to find drugs which will stimulate

(See NUTRITION, Page 8)

WaldmannGives Mider Lecture On Feb. 27

Dr. Thomas A. Waldmann, chief of the National Cancer Institute Metabolism Branch, will give the G. Burroughs Mider Lecture on control of the immune response Wednesday, Feb. 27, in the Masur Auditorium.

The lectureship is awarded annually by the scientific directors of NIH to an NIH scientist who has made a significant contribution in biomedical research.

Dr. Waldmann's talk on The Control of the Immune Response: Regulatory Cellular Interactions and the Control of Lymphocyte Differentiation will deal with his research of the past 8 years into how the immune system works against infections and cancers.

Research Noted

He is well known for his contributions to the understanding of suppressor lymphocytes, white blood cells of the immune system that turn off the production of antibodies by other lymphocytes.

Antibodies are highly specific proteins that adhere to the surfaces of invading disease organisms and to abnormal or cancerous cells, triggering other immune responses that destroy the foreign cells.

The suppressor lymphocytes are especially

(See MIDER LECTURE, Page 11)
Tax Help Now Available  
Tax forms, tax information, and limited assistance in computing 1979 tax returns are available in Bldg. 31, Rm. 5A-35, or by calling 496-2188.  
Tax assistance (walk-in service) is available from 10 a.m. to 2 p.m.  
Tax assistance (by appointment only) may be obtained from 8:30 to 10 a.m. and from 2 to 5 p.m.  
A “draft” copy of your tax return should be completed as much as possible and, together with booklets furnished you by Federal and State governments, brought to the tax assistant when requesting help.  
Tax forms are also available in Bldg. 10, outside of the Masur Auditorium, and at the Westwood Bldg., Rm. 436.

Ski Club Charters Bus To Blue Knob  
R&W Ski Club members are chartering a bus to Blue Knob for Mar. 14-16, leaving Friday, Mar. 14.  
The price includes transportation, 2 nights lodging, breakfast and dinner on Saturday and Sunday, ski equipment and lesson, transfers to ski areas, and all taxes and gratuities.  
A wine and cheese party will be held on Saturday afternoon. An indoor-heated swimming pool, sauna, and game parlor are available.  
Price per person is: two per room $94; three per room $86; and four per room $81.  
Sign up now at the R&W Activities Desk, Bldg. 31, Rm. 1A-18.

'Federal Employee Almanac' May Be Purchased at R&W Gift Shops  
The 1980 edition of the Federal Employee Almanac is now available at all R&W Gift Shops and the Activities Desk.  
In addition to regular updated items, this edition includes many new features. The cost is $2.25.

Earn College Credit Through Examination  
Apr. 8 will be the next date when NIH employees can participate in the College-Level Examination Program, a nationally recognized testing program, where individuals can receive college credit for knowledge they have obtained outside of school. Test registration must be made by Mar. 4.  
Almost 30 different tests are available, such as: English composition, history, French, German, Spanish, psychology, economics, sociology, biology, chemistry, algebra, calculus, analytic geometry, FORTRAN, data processing, and accounting.  
Further information about the CLEP tests can be obtained from the Career Education Center, Bldg. 31, Rm. 4B-03, or by calling 496-5025.

Hobie Cat Sailing Film To Be Shown at Next Meeting  
The next meeting of the NIH Sailing Club will be Thursday, Feb. 28, at 8 p.m.  
The program will feature a film entitled, “Hobie Cat 16 Worlds,” which brought catamaran sailors from 19 different countries to Hawaii. Dramatic coverage captures the stupendous sailing, the emotions, the humor, and the pressures of competition of the world’s best 16 Hobie sailors.  
Further information on this year’s Sailing Club activities will also be presented at this meeting, to be held in Bldg. 30, Rm. 117.  
Refreshments will be served.

Berg String Quartet Gives FAES Concert on Feb. 24  
The sixth concert of the 1979-80 Chamber Music Series, sponsored by FAES, will present the Berg String Quartet.  
The concert will be held on Sunday, Feb. 24, at 4 p.m., in the Masur Auditorium.  
Admission is by ticket only.

Credit Union Election Results  
Members voted for six candidates, four of whom will serve on the board of directors. The three highest vote getters will each serve one 3-year term. The candidate receiving the fourth largest number of votes will serve out the remaining 2-year term on the board that has been vacated.  
Only two of this year’s four candidates for the credit committee will serve one 2-year term each.  
Members were asked to sign their ballots and mail them before the election deadline.  
The results of the election will be announced at the annual meeting to be held on Thursday, Feb. 28, at noon, in the Masur Auditorium.  
This year’s candidates for the board of directors are: Norman R. Goulet, Kenneth Cooke, Frances H. Pettinato, Joanne Panza, Tom Reed, and Otis Ducker. Credit committee candidates are: Syd Carter, Stephen A. Ficca, Marie C. Morris, and Walter E. Moten.

R&W Is Offering Flash Passes For Metro Riders  
Daily metrobus and metrorail commuters may save up to $6.75 every 2 weeks by using a “Flash Pass,” which includes unlimited metrobus rides plus metrorail.  
Commuters just show their passes to the bus operators or use them in the faregates as they would a farecard.  
The Base Flash Pass, costing $10, and the Maryland Flash Pass, at $16, are available at the R&W Activities Desk, Bldg. 31, and the R&W Gift Shops in the Westwood Bldg. and Bldg. 38.  
For further information, call 496-4600.
Peptides May Prove Safe Contraceptives for Women and Men

Peptides, a new generation of contraceptives, may be available for commercial use as early as 1983, according to NICHD-supported scientists speaking at a recent press briefing at NIH.

These peptides, believed to have virtually no side effects, could replace the widely used birth control pill for women and become the first successful chemical contraceptive for men.

At the press briefing, researchers discussed the potential of peptide contraceptives and the outcome expected from recently initiated clinical trials.

The development of modified copies, or analogues, of luteinizing hormone-releasing hormone (LHRH) and the subsequent elucidation of the chemical structure of LHRH started with basic research on brain hormones by Drs. Andrew Schally and Roger Guillemin, explained Dr. Gabriel Bialy, chief of NICHD's Contraceptive Development Branch. This work won them a share of the 1977 Nobel Prize in Physiology or Medicine.

LHRH serves as a chemical messenger from the brain, said Dr. Wylie Vale, Salk Institute for Biological Studies. The hormone enters the bloodstream and is carried to the pituitary gland at the base of the brain. There, it stimulates the pituitary to secrete other hormones that regulate the functions of the ovary in women and the testis in men.

According to Dr. Vale, scientists have produced many LHRH analogues which either mimic or inhibit the action of natural LHRH. These substances have already proven successful in the diagnosis and treatment of women suffering from irregularities in their menstrual cycles, he said.

They have also been used to induce ovulation in women who could not bear children because eggs were not released from their ovaries.

In addition, the analogues have restored fertility in men who were unable to sire children because eggs were not released from their ovaries.

Clinical Care Chief Retires From NIMH

After 25 years at NIH, Dr. Harold A. Greenberg, NIMH chief of clinical care, has retired. He came to NIMH in 1955 from the Sheppard and Enoch Pratt Hospital in Towson, Md., where he had been chief of service. He joined the staff of the Adult Psychiatry Branch and worked with Drs. Jay Shurley, David Hamburg, and Lyman Wynne. In 1969, he succeeded Dr. William Jenkins as chief of clinical care.

In addition to his many responsibilities in the Intramural Research Program, he has also served for many years as associate examiner for the American Board of Psychiatry and Neurology and as a member of the committee on therapeutic care of the Group for the Advancement of Psychiatry.

Friends and well-wishers held a retirement luncheon for him recently honoring him for his many contributions to the NIMH clinical investigations program and to the general Clinical Center patient care programs.

Dr. Greenberg has given a quarter of a century of service to his patients.

Relation of Mind to Brain—Two Views To Be Heard

A discussion of the relation of mind to brain by two authorities, a neurologist and a philosopher, is being held on Tuesday, Mar. 4, from 3 to 5 p.m. in Wilson Hall.

Moderated by Dr. H. Lansdell, Fundamental Neurosciences Program, NINCDS, the discussion is sponsored by the Committee on Science and Human Values at NIH.

The speakers are: Dr. Richard M. Restak of Georgetown University School of Medicine, who is the author of a recent book, The Brain: The Last Frontier, and Dr. Richard H. Schlager, chairman of the department of philosophy, George Washington University, and an expert on the history of science.

The last half-hour of the discussion will be open for questions.

Lack of Exercise Prime Cause Of Obesity

Are you struggling to keep your weight down? Recent studies indicate that lack of physical activity is more often the cause of overweight than overeating.

These studies—comparing the food intake and activity patterns of obese persons with those of normal weight—showed that the obese people did not consume more calories but that they were less active.

The idea that increased physical activity increases appetite is untrue. A lean person in good health may eat more following increased activity, but the extra exercise burns up the extra calories.

Adding 30 minutes per day of moderate exercise to your schedule can result in a loss of up to 25 pounds in 1 year, assuming the food intake is the same.

A booklet published by the President's Council on Physical Fitness and Sports, Exercise and Weight Control, offers tips on balancing exercise and calories.

For a copy, send 60 cents to the Consumer Information Center, Dept. 121 H, Pueblo, Colo. 81009.

New Booklet Explains Inflation Problems

The news is full of stories about high interest rates, the credit crunch, and the shrinking value of the dollar. But these are just some of the many elements in the inflation story.

A new booklet offers an explanation of our current inflation problems.

To learn about inflation and what you can do about it, send for a copy of Dollars and Sense. It's free from the Consumer Information Center, Dept. 620H, Pueblo, Colo. 81009.

D.C. Mayor Marion Barry receives a complimentary boutonniere prior to his addressing an audience gathered to observe Black History Month in the Masur Auditorium on Feb. 11.
Carcinogenic Potential Of Metals Evaluated at Meeting

Chronic Renal Disease Topic of 3-Day Meeting

Dr. Fowler adjusts the electron microscope in his Triangle Park, N.C., laboratory.

Dr. Bruce A. Fowler, an NIEHS research biologist, was one of several members of a working group to evaluate the carcinogenic potential of beryllium, arsenic, chromium, and lead at a meeting of the International Group in the Laboratory of Organ Function and Toxicology, Research Triangle Park, N.C.

Dr. Fowler was one of 20 invited participants from 10 different countries to attend the meeting. He is head of the Renal and Metabolic Studies related to the cancer-causing potential of these metals. The group also looked at available human epidemiological cancer data from occupational exposures to better understand human risks from these agents.

A final IARC monograph on beryllium, arsenic, chromium, and lead from the meeting will be published in about 6 months. For further information contact IARC, 150, Cours Albert-Thomas-69372, Lyon, Cedex 2 France.

CC Diagnostic Radiology Exhibit Honored at Scientific Meeting

The Clinical Center Diagnostic Radiology Department staff recently won honorable mention for their exhibit, CT Findings in Severe Anemic Disorders with Hemochromatosis.

The exhibit was honored at the 65th Scientific Assembly and Annual Meeting of the Radiological Society of North America.

Dr. John Doppman and John Long, both of Diagnostic Radiology, and Dr. Arthur Nienhuis, Clinical Hematology Branch, NHLBI, received certificates for their collaborative efforts on the exhibit.

Dr. John McLachlan. The first place team was undefeated in the Research Triangle Park, N.C, Volleyball League.

The champion NIEHS volleyball team, dubbed "Old Dudes and the Dudette," proudly display their trophy. L to r are: Dr. Alan Wilson, Dr. Dick Philpot, Dr. Coral Lamartiniere, Dr. George Lucier, Brenda Smith, Dr. Jim Lamb, and Dr. Ken Korach. Not pictured are Dr. Pen-Erik Mansson and general manager Dr. John McLachlan. The first place team was undefeated in the Research Triangle Park, N.C, Volleyball League.
'Ham' Operators Help Bring Patient to CC

Today three children in Bogota, Colombia, have new hope for their mother and their futures because of a long distance ham radio conversation between a National Cancer Institute scientist in Bethesda and a Colombian surgeon.

The children are happy because the casual conversation transmitted over thousands of miles last Labor Day weekend set into motion an almost overnight effort to diagnose and treat their ailing mother.

Maria Lopez-de-Mesa, their mother, underwent exploratory surgery revealing cancer in September. Doctors gave her an unfavorable prognosis, so she attempted to prepare her children and family for the time she would not be with them.

Coincidence as well as medicine played a part in her story. Everyone connected with helping her, in one way or another, shared an interest in amateur radio operation.

Dr. Victor H. Zeve, Office of the Director, NCI, a licensed radio operator since he was 13 years old in Youngstown, Ohio, made an early morning transmission from his home radio station (WB3JWZ) to Mrs. Lopez's uncle, a surgeon in Bogota. Both men had spoken with each other regularly for almost a year.

"I was just talking when he told me about Maria and her condition," says Dr. Zeve, who for 17 years worked as an NCI researcher. During the transmission, he learned that Mrs. Lopez's father, also a physician and ham operator, was coming to Washington the following week.

Dr. Zeve suggested that he bring several slides with him so that NIH pathologists could review them.

Mrs. Lopez-de-Mesa's slides revealed that she did have cancer, but that it was a type treatable by chemotherapy.

After learning the nature of Mrs. Lopez's cancer, Dr. Zeve requested that she be admitted to the Clinical Center for further testing and treatment.

"I just couldn't believe it," said Mrs. Lopez-de-Mesa, describing how she felt when she heard over a radio telephone patch the news that her cancer was treatable and that she would be admitted to NIH.

"I'm back to my normal weight," she says enthusiastically, after a 3-month stay at NIH and so far is tolerating her chemotherapy well. When Mrs. Lopez-de-Mesa first arrived at NIH, she was very apprehensive, but a "family of ham operators and a doctor" helped her to overcome her anxiety.

Twice a week, her morale is given a boost because of radio transmissions she makes to her children in Bogota from the NIH Radio Club station (K3YGG) located in Bldg. 11. "I can tell by their voices if everything is all right," she says.

She is not the only NCI patient that Dr. Zeve has helped to contact their families via ham radio. Over the past year, he has assisted patients from Costa Rica, Equador, and Panama. "I usually hear about a patient with such a need by word of mouth or by talking with other people," says Dr. Zeve.

He hopes to enlist the help of other licensed radio operators at the NIH Radio Club to sponsor some of the CC patients who may need to call their families. Dr. Zeve says that he helps the patients with their calls because it is difficult for them to keep in touch with their families and "people should know about the wonderful things that go on here at the NIH."

Dr. Zeve is no stranger to helping people who are ill with his radio. In 1963, when he was with the NIH West African Research in Ghana, he set up a radio network that arranged for a 4-month-old Ghanian infant to have surgery at Boston's Childrens Hospital.

Mrs. Lopez-de-Mesa's physician, Dr. Kenneth C. Micetich, has released her from the Clinical Center, but her treatment will continue for at least the next 6 months. She will be commuting from Boston where she will be staying with a friend who is also a ham radio operator.

Baltimore-NIH Vanpools Have Openings

Two 15-passenger vanpools are now operating between Baltimore and NIH.

The vans leave the Westview Shopping Center in Baltimore at 7 a.m. One van goes through the reservation to the Westwood Bldg.; the other terminates its run at the NIH campus.

Each pool has openings for additional members. Interested employees should contact Shirley Gregg, 496-4506, or Al Bedell, 496-6515.

Animal Models Book on CF Research Now Available

"Model Systems," the third volume in the continuing series: Cystic Fibrosis: A Disease in Search of Ideas, is a new publication now available from the National Institute of Arthritis, Metabolism, and Digestive Diseases.

It surveys existing cellular, tissue, and whole animal models used in research on cystic fibrosis.

The new work is of interest to clinical pathologists, cell biologists, and others engaged in establishing models for cystic fibrosis.

Specifically, Model Systems calls for a systematic study of factors governing the secretory process of exocrine glands, including the physiology and biochemistry of the secretory cell, the physiology of whole glands, and the biochemistry of exocrine gland products.

Model Systems is available from the Office of Scientific and Technical Reports, NIAMDD, Bldg. 31, Rm. 9A-04, 9000 Rockville Pike, Bethesda, Md. 20205.

February 19, 1980

The NIH Record
Science Writers Hear Neuroscience Advances

Science writers from the national and local media heard four NIH researchers describe their explorations into the "inner space" of the brain and nervous system at a recent Science Writers Seminar.

The researchers described techniques for watching the brain "talk" to the body and for observing functional activity in the brain. They discussed how the brain controls movement in the body, and how pain is transmitted in the spinal cord and brain stem.

Dr. Louis Sokoloff, chief of NIMH's Laboratory of Cerebral Metabolism, explained a recently developed method which allows researchers to look at functional activity in the animal brain.

Tissues use energy in relation to the amount of work they do, he said. By measuring energy metabolism, then, scientists can assess the functional activity of tissues.

Glucose utilization is a measure of energy metabolism in the nervous system. The new procedure uses a radioactive analogue of glucose, 14C-deoxyglucose, to trace glucose metabolism in the brain.

The analogue was chosen over glucose because it produces a metabolic product which accumulates in the cerebral tissues and can be measured, whereas glucose is rapidly metabolized to carbon dioxide and water.

The concentrations of radioactivity in the local cerebral tissues are measured by a quantitative autoradiographic technique which produces pictures of the relative rates of glucose utilization in all the cerebral structures.

Computer-assisted image-processing techniques can be used to transform the autoradiographs into color illustrations which give even more quantitative data on glucose utilization, Dr. Sokoloff said.

The deoxyglucose method is a useful tool for metabolic mapping of functional neural pathways, localizing sites of action of centrally acting drugs, and identifying regions of disturbed function in diseased animals, he explained.

Autoradiography cannot be used on humans, because the technique requires sacrificing the subject. To get around this problem, Dr. Sokoloff and researchers at several other institutions developed a method of using positron emission transverse tomography (PETT) to measure glucose utilization in man.

A different radioactive analogue of glucose—fluorodeoxyglucose, which is a positron emitter—is used in the human studies.

Dr. Edward V. Evarts, chief of the Laboratory of Neurophysiology, NIMH, discussed his studies on the control of movement by the brain.

A major aim of current research in this area is a better understanding of how the various cortical and subcortical structures in the brain work together to control the final "messages" from the motor cortex to the spinal cord and then to the muscles, he said.

Within the last 10 years, Dr. Evarts and his colleagues have gained many insights into how we move by studying the brain cell activity of monkeys as they perform learned movements.

The motor cortex—a specialized region in the cerebral cortex—was traditionally believed to initiate and control all movement in the body.
System for Controlled Release of Fluoride Developed By Dental Institute Scientists

The first system for the controlled release of fluoride or other agents directly in the mouth to prevent tooth decay has been developed by scientists of the National Caries Program, National Institute of Dental Research. A small pellet, attached to the tooth surface, will release fluoride at a constant, predetermined rate for a period of up to 6 months without maintenance or adjustment.

By controlling both the rate and the site of release, this new system can provide a more effective and efficient way to deliver an agent.

Releasing an agent at or near the intended site of action allows lower doses to be used, and controlling the rate of release helps achieve more uniform blood and salivary concentrations. The system enhances patient compliance because it is easy to use.

The new system consists of a fluoride-containing copolymer core surrounded by a rate-of-release controlling copolymer membrane. The copolymers or plastics are similar to the copolymers used to make soft contact lenses. Fluoride is released at a constant rate when the device is placed in a wet environment, such as the mouth, where the device would be wetted by saliva.

Different release rates can be achieved with this system simply by varying the exposure surface area of the device and/or the thickness of the membrane. The smaller the surface area or the thicker the membrane, the slower the rate of fluoride release.

Devices have been fabricated with release rates varying from 0.02 to 1.0 mg of fluoride per day and durations of action varying from 30 to 180 days.

One mg of fluoride is the daily amount of fluoride normally consumed by a person drinking fluoridated water on a regular basis or taking sodium fluoride tablets on a daily basis.

The fluoride-releasing system has been subjected to extensive preclinical testing, including a study in primates that showed that a single device designed to release 0.5 mg of fluoride per day can produce a thirtifold increase in the level of fluoride in saliva and fivefold increase in plaque fluoride levels.

The National Caries Program has filed an IND application covering the fluoride-releasing system with the Food and Drug Administration and has received permission to carry out a short-term human trial. This trial is currently in progress and will evaluate devices designed to release 0.5 mg of fluoride per day for 30 days.

Each of the 11 adult male volunteers in this study has had fluoride-releasing devices glued to two molars.

Scientists are monitoring the fluoride released from the devices by taking periodic samples of saliva, blood, urine, and dental plaque.

For areas in which fluoridated drinking water is not available and to supplement treatment in fluoridated areas, the use of the controlled release delivery for fluoride may be an effective decay-fighting measure.

Criteria for Wisdom Teeth Removal Discussed at Consensus Conference

A number of criteria for removing wisdom teeth were identified at a recent consensus development conference, sponsored by the National Institute of Dental Research.

In a report released in late January, the conferees recommended that third molars (wisdom teeth) be removed if there is infection present, if there are untreated cavities (caries lesions), cysts, tumors, or destruction of adjacent teeth and bone.

If third molars are to be removed, the consensus group concluded, clinical experience suggests that pain and complications may be reduced if impacted wisdom teeth are removed at an early age.

There are enough questions, however, about the life cycle of third molars to suggest that well-designed studies be undertaken, the group added.

Predictions Not Reliable

Although one workshop group agreed that there are documented reasons for early removal of wisdom teeth, it felt that the suggested practice of removing third molar buds, based upon predictive studies of children ages 7 to 9 "is not currently acceptable."

Current means of predicting whether third molars will erupt "are not highly reliable, are overly simplistic, and should be used with caution," said the workshop participants.

Montgomery County Hotline Celebrates Tenth Anniversary

Hotline, 949-6603, the crisis intervention telephone service, sponsored by the Mental Health Association of Montgomery County, is celebrating its 10th year in March.

Since its establishment, the Hotline has handled well over a quarter of a million calls relating to a variety of concerns including drug information, child abuse, family and marital problems, sexuality, suicide, alcoholism, as well as information about community resources. All calls are confidential and remain anonymous.

A number of NIH’ers and their spouses are serving as volunteer telephone aides in their spare time.

For further information about Hotline and its training for volunteers, call the Mental Health Association, 949-1255, weekdays, 9 a.m. to 4:30 p.m.
appetite in tumor-bearing animals have been largely unsuccessful, reported Dr. Silvio Garattini, Instituto Di Ricerche Farmacologiche, Milano, Italy.

Cancer treatments such as radiation and chemotherapy can contribute to appetite loss by producing learned food aversions in patients.

Dr. James C. Smith, Florida State University, reported that if an animal eats a food and then is made ill by radiation, he will associate the sickness with that food and avoid it.

The strength of the association is greatest if the food is eaten shortly after radiation therapy, he said, but associations can be formed with foods eaten up to 24 hours before or after radiation. Usually, radiation treatments are given to patients every 24 hours.

Dr. Smith found that the phenomenon may be mediated to a certain extent by histamine, and that antihistamines may decrease the learning association in animals.

Dr. Ilene L. Bernstein, University of Washington, described a clinical study which dramatically demonstrated the relationship between learned food aversion and chemotherapy.

She gave an experimental group of pediatric patients an unusual flavored ice cream 1 hour before chemotherapy. A control group did not get the ice cream.

Four weeks later, she offered both groups a choice of eating the same flavored ice cream or playing with toys. The majority of the control group chose the ice cream. Most of the experimental group, however, preferred to play with the toys.

A clinical study of 90 cancer patients relating caloric intake to energy needs revealed that 25 percent of the patients did not eat enough to provide the body with the energy required for bed rest, Dr. William DeWys, NCI, told the participants. An additional 45 percent ate only enough to provide the body with the energy needed to rest and to perform limited activity, he said. Only 30 percent of the patients had a caloric intake sufficient for more than moderate activity.

Cancer patients have increased energy requirements. They can also have a number of metabolic disturbances which may cause inefficient utilization of the nutrients they consume.

Dr. Christopher Helroyde, Lankenau Hospital, Philadelphia, reported that one factor distinguishing cancer patients who lose weight from those who do not is increased Cori cycle activity.

The Cori cycle is the cycle in carbohydrate metabolism in which glucose is converted to lactate and lactate is then converted back to glucose. Patients with tumors produce four times as much lactate from glucose as do normal persons.

As more glucose is used to make lactate, the body draws on other sources to make glucose. Dr. Christine Waterhouse, University of Rochester Medical Center, and Dr. Murray Brennan, NCI, demonstrated how amino acids taken from body muscles may be used to produce this glucose.

The feeding chamber used in Dr. Morrison's studies is designed to measure the size of each meal, the time required to eat each meal, and intervals between meals without interfering with the test animal in any way.

Muscle metabolism is also different in cancer patients, reported Dr. Kent Lundholm, University of Goteborg, Sweden.

Each day, the body normally releases some amino acids from muscle and takes up other amino acids to rebuild the tissue. The breakdown and synthesis are balanced, and the muscles stay the same in the long run.

Dr. Lundholm found that in the cancer patient there is an increased breakdown of muscle and decreased synthesis of new muscle tissue.

More amino acids enter tumor tissue than leave it, Dr. Brennan told the participants. Since amino acids are the building blocks of tissue, this explains how the tumor can continue to grow while other parts of the body deteriorate.

Treatment of malnutrition in cancer patients remains a complex, frustrating problem, according to the participants.

Supplemental nutrition can partially, but not totally, prevent muscle breakdown in tumor-bearing animals, reported Dr. Martin Popp, University of Cincinnati Medical Center.

Dr. Ivan Cameron, University of Texas, raised the concern that some of the nutritional support given a cancer patient may find its way into the tumor and increase tumor growth.

Cancer treatments such as radiation and chemotherapy can contribute to appetite loss by producing learned food aversions in patients.

This has been clearly demonstrated in animal tests. As a general rule, he said, nutritional support should be given in combination with treatment aimed at destroying the tumor.

Several studies comparing the treatment response and survival rates of patients given intravenous nutritional support to those of patients with similar diseases not receiving this support were reported. The results suggest that the type of cancer may be an important factor in whether nutritional support is helpful.

A study of colon cancer patients showed no difference in response to chemotherapy between the two groups, but the patients receiving I.V. support had shorter survival times, reported Dr. Daniel W. Nixon, Emory Clinic, Atlanta. These patients had slightly more extensive tumors than those not receiving support, which may help explain the negative results, he added.

Positive results from I.V. nutritional support in patients with small cell cancer of the lung were reported by Dr. Manuel Valdivieso of the M.D. Anderson Hospital and Tumor Institute, Houston.

In his study, 85 percent of the patients receiving I.V. support responded to chemotherapy, whereas only 59 percent of the patients not receiving support responded. It is too early to draw conclusions about survival rates, he said, but so far no difference has been found.

Dr. Brennan said that studies he is working on at NCI have shown no difference between the response and survival rates of lymphoma and sarcoma patients receiving I.V. nutritional support and those not receiving support.

NCI is currently funding a large study of I.V. nutrition in patients with small cell lung cancer, which is responsible for 20 percent of all lung cancers.

The conference on Nutrition of the Cancer Patient was sponsored by the Diet, Nutrition, and Cancer Program and the Division of Cancer Treatment, NCI. Drs. DeWys, Brennan, and Daniel L. Kirsner, Division of Cancer Treatment, served as moderators.
Cytopheresis Lab. Observes First Anniversary

The Cytopheresis Laboratory of the Arthritis and Rheumatism Branch, NIAMDD, will complete its first year of operation on Feb. 20.

The laboratory was created to conduct double-blind clinical trials of a blood separation technique called “apheresis,” as a potential treatment for rheumatoid arthritis, systemic lupus erythematosus, and Graves’ disease, says Dr. John L. Decker, chief of the Arthritis and Rheumatism Branch and clinical director.

Under the supervision of Dr. Jacob Karsh, staff nurses Cheryl Yarbora and William Campbell over the past year have administered 230 apheresis procedures to 19 patients.

Apheresis involves withdrawing blood, removing one or more components, such as lymphocytes (white blood cells), and returning the blood to the body.

When lymphocytes are removed, the procedure is referred to as lymphapheresis; when plasma is removed, plasmapheresis; when lymphocytes and plasma are removed, lymphoplasmapheresis.

Cytopheresis, the removal of cells, is used to designate the procedure because of the nature of the double-blind clinical trials.

OMM Study Indicates Minorities and Women Advance

Minorities and women continue to move into better-paying full-time professional, administrative, and technical jobs in the Federal Government, according to an Office of Personnel Management study.

Findings of the November 1978 study show:

- Women and minority employment in the Federal civilian work force increased by an average of 2 percent between 1977 and 1978, more than twice the rate for all other groups.
- Minority employment (531,998) now accounts for 22 percent of the full-time Federal work force, while women employees (752,766) represent 31 percent of the full-time Federal work force (2,418,151).
- About one-half of all minority employees now work under the General Schedule and equivalent pay systems. Minorities gained additional jobs in most junior and all mid- and senior-level grades between 1977 and 1978, but declined slightly at the GS 16-18 executive grades.
- Both women and minorities also made significant gains under the better-paying white-collar occupational categories. Specifically, the professional, administrative, and technical categories gained 22,699 positions between 1977 and 1978, and those positions were distributed as follows: 30 percent (6,757 jobs) minority women; 14 percent (3,222 jobs) minority men; 50 percent (11,424 jobs) non-minority women.

Overall, women now represent about 22 percent of the professional and administrative and 40 percent of the technical full-time Federal civilian jobs as of November 1978.

Heart Attack Mortality Not Reduced by Aspirin

Aspirin should not be routinely given patients who have suffered a heart attack, according to a major study sponsored by the National Heart, Lung, and Blood Institute.

The Aspirin Myocardial Infarction Study was designed to test the hypothesis, based on preliminary evidence, that regular administration of aspirin can reduce mortality among heart attack patients.

“The difference in death rates was not statistically significant between the 2,257 patients who took the equivalent of three aspirins a day and the 2,257 patients who took a placebo,” Dr. Robert I. Levy, NHLBI Director, said.

“In fact,” he added, “there were slightly more deaths due to recurring heart attacks in the group which took the aspirin.”

Dr. Levy also noted that gastrointestinal side effects were considerably higher in the patients taking aspirin; symptoms suggestive of peptic ulcer, gastritis, or erosion of gastric mucosa occurred in 23.7 percent of the aspirin group as opposed to 14.9 percent in the placebo group.

“On the basis of these findings,” Dr. Levy said, “the National Heart, Lung, and Blood Institute would advise physicians not to give aspirin on a sustained basis to heart attack patients as a means of preventing another myocardial infarction.”

The AMIS study involved 4,524 patients at 30 clinics, each of whom was followed for at least 3 years. It represents the largest completed study of aspirin in the post-heart attack population.

While indicating that regular administration of aspirin does not reduce mortality for heart attack patients over a 3-year period, the AMIS study did provide evidence supporting earlier findings that aspirin reduces the frequency of cerebrovascular events, such as stroke.

While mortality was slightly higher in the aspirin group, AMIS also found that the number of recurring nonfatal heart attacks was slightly lower in the aspirin group, but the difference was not statistically significant.

AMIS did not attempt to validate the hypothesis that aspirin given immediately after a heart attack would be of value, since the volunteer patients in AMIS did not enter the study until at least 2 months after having a myocardial infarction.

Dr. Levy also announced that NHLBI will sponsor a workshop beginning on Feb. 20 that will review and analyze studies dealing with aspirin and other drugs used to inhibit platelet aggregation. Some of these studies have suggested more promise for aspirin.

Attendees will try to reach a consensus as to which areas are most likely to provide definitive answers through additional research.

The AMIS study involved men and women from age 30 to 69. Each had a documented myocardial infarction or heart attack from 2 to 60 months prior to their entry into the AMIS clinical trial.

Each patient did not have any other major disease or known sensitivity to aspirin. The first patients were enrolled in early June 1975. The last followup visit was August 1979.
NIH Golf Association Ends Successful Season

The NIH Golf Association recently completed a successful season with its annual ceremony following a luncheon attended by 85 golfers and their friends.

President Dan Kenney presented awards for both Match Play and Stroke Play team championships to Team #8, the Mashies.

Jimmy Pratt of Team #8, the Mashies, won the Directors’ Cup for the lowest average gross score, and Tom Harrison of Team #1, the Sodbusters, won the President’s Cup for the lowest average net score.

Following the award presentations, elections were held. The officers elected were:

- President, Bill Cissel; vice president, Brad Crowley; secretary, Ralph Stork; treasurer, Jim Harrington; and handicapper, Joe Corliss.

The five officers and eight team captains who constitute the NIHGA board of directors will hold their first meeting on Wednesday, Feb. 13, in Bldg. 31, Rm. B1C-02, to plan the 1980 tournament schedule.

Golfers are urged to give their names to any board member for inclusion in the team rosters. An attractive tournament schedule is taking shape, with the first outing likely to be held the first week of April.

Five Employees Named to Colleges’ ‘Who’s Who’

Five students in the NIH Career Education Center have won national recognition by being selected for inclusion in the 1980 Who’s Who Among Students in American Universities and Colleges.

Betty Dahler, CC/DR, a junior in business management; Dorothy Hackett, NCI/DCCRC, a senior in sociology; Sandra Meadows, NINCDS/ETB, a senior in biology; Catherine Neely, DRS/VRB; and Virginia Ono, NIGMS/OD, a senior in political science, were selected for this highly regarded national honor on the basis of their outstanding academic achievements and significant contributions to college or community life.

CEC Offers 50 Courses

The Career Education Center, located in Bldg. 31, Rm. 4B-03, offers over 50 college courses each semester and is open to all qualified NIH employees without charge. Information about the program may be obtained by calling 496-5025.

Dr. Paul L. Day Dies; Retired Scientific Director Of NHLBI

Dr. Paul L. Day, retired scientific director of NHLBI’s Extramural Research and Training Branch, died of cancer Feb. 1 at the age of 80.

Dr. Day came to Washington in 1943. She worked first for the Public Health Service in the Division of Nurse Education, then on Capitol Hill for Representative C. W. Bishop (Ill.) and Senator Alexander Wiley (Wis.). She also worked on the majority policy committee in the Senate before “retiring” for 6 years to raise a family.

Retirement plans include restoring a traditional bay home 15 miles south of Annapolis in Felicity Cove, Md., where she and her husband live. Traveling, boating, fishing, and reading are also planned.

In the rest of her spare time, Mrs. Peabody will convert a room in the house into a studio in which to paint watercolors of the bay.

Rachael Peabody Retires After 20 Years at NIH

Rachael Peabody, coordinator of the NIH Associate Training Program, retired Jan. 31 after 30 years of Federal service.

Mrs. Peabody completed 20 years at NIH, beginning her career with Dr. Murray Brown in the Clinical Center’s Clinical and Professional Education Branch.

She later took over the educational programs of the CC and has continued to coordinate the NIH Associate Training Program, which provides research and training opportunities for physicians as clinical, research, or staff associates in clinical and laboratory investigation.

A native of Lexington, N.C., Mrs. Peabody came to Washington in 1943. She worked first for the Public Health Service in the Division of Nurse Education, then on Capitol Hill for Representative C. W. Bishop (Ill.) and Senator Alexander Wiley (Wis.). She also worked on the majority policy committee in the Senate before “retiring” for 6 years to raise a family.

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The students that were honored are: (l to r) Ms. Dahler, Ms. Hackett, Ms. Meadows, and Ms. Neely. Ms. Ono is not shown.

Players Invited To Participate in M.C. Table Tennis Tournament

Several R&W Table Tennis Club members will be competing in the Seventh Annual Montgomery County Table Tennis Tournament on Mar. 15 and 16 at the Bauer Drive Recreation Center in Rockville.

Nonmembers May Enter

Nonmembers are encouraged to enter. Several categories, from novice to advanced, are available for men, women, and persons under 17 years.

To obtain entry forms, contact the Montgomery County Department of Recreation, Attn: Special Events, 12210 Bushey Drive, Silver Spring, Md. 20902, telephone, 468-4217. The deadline is Mar. 7.

For additional information, call Dr. Paul Nichols, 496-5021.

Deaths resulting from heart disease decreased in the United States by 22 percent between 1968 and 1977.

The students that were honored are: (l to r) Ms. Dahler, Ms. Hackett, Ms. Meadows, and Ms. Neely. Ms. Ono is not shown.
Research Projects Aimed at Health Needs of Women Discussed by NICHD Scientists

The Women's Organization of the National Institute of Child Health and Human Development met with several of that Institute's scientists recently to learn how NICHD research programs can help meet the health care needs of women.

Although all of the Institute's intramural research programs relate to women, most research is basic research, making it difficult to predict practical applications, Dr. Marvin Cornblath, special assistant to the scientific director, told the audience.

Projects that clearly have clinical implications, he said, are male and female infertility studies and research on prevention of postoperative lesions using dextran infusions (see story, NIH Record, May 30, 1979, p. 10).

Dr. Wendy Baldwin, chief, Behavioral Sciences Branch, spoke about research in adolescent sexuality and current trends in the sexual activity of teenagers and their use of contraceptives.

Recent studies reveal that more babies are being born to very young teens (13 to 16 years of age) than ever before, she said. Studies also show that adolescents who report good relationships with their parents are generally more responsible sexually than those who report having communication problems at home.

Dr. Baldwin reported survey data showing that most mothers believe they are aware of the sexual activity and contraceptive practices of their daughters when, in fact, the girls are not totally candid with their mothers.

The audience was surprised to learn that in one study, 5 to 6 percent of mothers suspected that their daughters were sexually active, while over 30 percent of the girls reported sexual activity.

Dr. Michele Forman of the Epidemiology and Biometry Branch talked about present trends in breast and bottle feeding.

Studies show that more women are breastfeeding than ever before in modern times, she said. In 1969 approximately 16 percent chose to breastfeed, while over 46 percent breastfeed today. More white women breastfeed exclusively, while black women seem to prefer breastfeeding with bottle supplements.

Dr. Billy Baggett, Contraceptive Evaluation Branch, reported on the health effects of male and female contraceptives. (See story, page 3.)

Recent studies reveal that use of oral contraceptives is associated with increased risk of heart attack among white women without medical problems that predispose to heart attacks, he told the audience.

Research also shows an association between oral contraceptive use, either past or present, and an increased risk of stroke. The risk is greatly exacerbated by smoking, he said.

Dr. Baggett emphasized that development of a contraceptive method as effective as oral contraceptives yet with fewer side effects is of major concern.

A group of new drugs that resemble naturally occurring hormones has just been introduced into clinical trials on both men and women, he said.

Prior research demonstrated their usefulness in treating male and female infertility, and subsequent research suggests they will also be effective as contraceptives.

According to Dr. Baggett, these nonsteroid drugs could become a new generation of both male and female contraceptives. (See story, page 3.)

Dr. Baggett also reported current research on the side effects of vasectomy. Studies are being supported on whether the sperm antibodies that develop in some men following vasectomy adversely affect their health and on whether vasectomy hastens the development of atherosclerosis.

He said preliminary evidence from primate studies shows there may be a relationship between vasectomy and atherosclerosis.

Three important projects planned for fiscal year 1980 include a consensus development conference on birth by cesarean delivery; a conference on women's health, to identify critical health needs of women; and a conference on how girls, teenagers, and young women formulate sex roles, Jan Notopoulos, Program Planning and Evaluation, told the audience.

Dr. Jos. Lee To Assist FIC With China Studies

Dr. Joseph C. K. Lee, a China specialist in the International Cooperation and Geographic Study Branch, Fogarty International Center, will assist in the development of studies involving China, including an information system and workshops concerning biomedical research conducted there.

Born in China, Dr. Lee received his medical degree in 1964 from the University of Hong Kong. In 1970, he received his doctorate in pathology from the University of Rochester. In 1972, he was appointed an F.R.C.P. by the Royal College of Physicians and Surgeons of Canada.

He is licensed to practice medicine in Hong Kong, Canada, and New York.

He is an associate professor of pathology and oncology at the University of Rochester. In 1978, he served as a consultant in pathology to the University of Hawaii postgraduate medical education program for Okinawa at the Okinawa Central Hospital. In 1979, he served as a consultant to the University Associated for Research and Education in Pathology, Inc. and to the National Radiation Pathology Reference Center. Dr. Lee was also a special consultant in pathology.

His research interests include: iron in cell pathology; quantitation of neo-osteogenesis by cancer cells; effects of neoplastic cells on bone resorption and bone accretion; cardiopulmonary and solumedrol; Crohn's disease; and radiation injury of the liver.

He has a long-lasting interest in Chinese affairs, and is fluent in three Chinese dialects: Mandarin, Cantonese, and Toyshan.

Dr. Lee, the author or co-author of 26 publications, has served as a special consultant in pathology, president of the Rochester Area Association of Pathologists.

Dr. William A. Waldmann and his co-workers have found that certain types of cancer can promote suppressor cell action, thereby limiting the immune system's response to the cancer.

This work suggests a new therapeutic approach to cancer, in which the suppressor cells are selectively eliminated and the immune system allowed to work against the tumor.

"Elephant Man" Tickets Now Available

R&W is offering tickets to the award-winning play, "The Elephant Man," starring Philip Anglim at the Kennedy Center.

Orchestra seats are available for NIH'ers on Wednesday, March 12, at $13.50 (plus service charge) per ticket.

Tickets may be obtained at the R&W Activities Desk, Blgd. 31, Rm. 1A-18.

MIDER LECTURE

(Continued from Page 1)

important in preventing the immune system from making antibodies against the body's own tissue, which is the situation in autoimmune disease.

Dr. Waldmann and his co-workers have found that certain types of cancer can promote suppressor cell action, thereby limiting the immune system's response to the cancer.

This work suggests a new therapeutic approach to cancer, in which the suppressor cells are selectively eliminated and the immune system allowed to work against the tumor.
Clinical Center TV
For Patients To Begin
On Channel 10 Feb. 25

Clinical Center patients will be able to watch regularly scheduled programs on health on their own hospital TV sets next Monday, Feb. 25, at 10 a.m., when Clinical Center Television Channel 10 makes its debut with the first of a weekly series of programs on health topics, ranging from the hazards of smoking to the secrets of sleep.

Initially, CCTV will feature 4 hours of programming daily, Monday through Friday. The schedule includes films from the well-known public television NOVA science series, a guided tour of Washington, videotapes from NIH's Medicine for the Layman series, and information about CC activities.

To a large extent, the CC Office of Clinical Reports and Inquiries has based CCTV programming on the experience of other hospital closed-circuit TV systems. Patients at a number of hospitals in the Cleveland area have responded favorably to health programming available through a cooperative system called the Cleveland Area Hospital Network.

This and other hospital closed-circuit networks are also tapping into a satellite system that relays programs to various hospitals. The Clinical Center may eventually join the medical centers making use of this kind of broadcasting.

The Clinical Center's Television Engineering Section modified the hospital's existing television system for CCTV and will handle transmission of CCTV programming.

Monday morning programming will begin with "The Gift of Energy," a 30-minute film on the benefits of physical fitness and how to achieve it. Newsbreaks, a listing of patient activities and other CC events, will complete each day's schedule.

Patients will receive weekly schedules offering short descriptions of programs as well as the scheduled times.

Skin Disease Subject of Combined Clinical Staff Conf.

There will be a Combined Clinical Staff Conference on Thursday, Feb. 21, at 3 p.m. in the Masur Auditorium. Dermatitis Herpetiformis—The Skin and the Gut will be the lecture hosted by NCI's Dr. Stephen Katz. This lecture is approved for category 1 credit.

Dr. G. Halsey Hunt Dies; Former Chief of Division Of General Medical Sciences

Dr. G. Halsey Hunt, 77, former chief of the Division of General Medical Sciences, died on Feb. 2 in San Diego, Calif., where he had lived since 1973.

He was named chief of DGMS in 1958 and retired from the Division in 1962 to become executive director of the Educational Council for Foreign Medical Graduates in Philadelphia.

After being commissioned in the Public Health Service in 1936, Dr. Hunt served on the surgical staff of several PHS hospitals before coming to Washington in 1945 with the Bureau of Medical Services.

While with the bureau, he was assistant chief of the Division of Hospitals; and from 1952 to 1956, Dr. Hunt served as assistant surgeon general and associate chief of the bureau.

He was assigned to NIH in 1956 as the first director of the Center for Aging Research before being named DGMS chief.

Born in Newton, Mass., Dr. Hunt graduated from Brown University and received his medical degree from Columbia University College of Physicians and Surgeons.

Nat'l Dietary Research Guidelines Released

Seven dietary guidelines which could improve American eating habits and maintain health were released recently by the U.S. Department of Agriculture and HEW.

The dietary recommendations represent a nutritional consensus by scientists in the Government's food and health agencies.

The recommendations are:

• Eat a variety of foods
• Maintain ideal weight
• Avoid too much fat, saturated fat, and cholesterol
• Eat foods with adequate starch and fiber
• Avoid too much sugar
• Avoid too much sodium
• If you drink alcohol, do so in moderation.

The guidelines booklet, Nutrition and Your Health: Dietary Guidelines for Americans, contains details and explanations of what is known about the relationships of fat, sugar, sodium, and cholesterol to specific diseases and physical conditions.

"The problems of heart and blood vessel diseases, tooth decay, and obesity can be traced to our diets," said Dr. Julius B. Richmond, HEW Assistant Secretary for Health and Surgeon General. "And recent evidence indicates that even some cancers may be related to diet.

"Improved nutrition will not eliminate these diseases; however, the nutrition information in the guidelines which are based on the best scientific judgment we are able to get now may prevent further public disregard of the importance of a good diet as a first line of defense against disease.

"In an affluent society such as ours, more is not always better," Dr. Richmond added. "The problems of our nutrition relate to our abundance. There are still people in our society who do not have enough to eat, yet the greatest problem for all of us is to make intelligent and informed choices about what foods we should eat to promote our own health and prevent disease, regardless of our income."

The dietary recommendations were developed after scientists reviewed the present knowledge of nutrition and recent scientific findings on the diet-disease relationship.

Copies of the guidelines may be obtained free from: Office of Governmental and Public Affairs, USDA, Washington, D.C. 20250; state cooperative extension nutrition specialists at land grant universities; or public health nutrition directors in state departments of health.