1961 Officers Elected At Annual Meeting Of R&W Association

Members of the NIH Recreation and Welfare Association elected a new slate of officers for 1961 at the R&W annual meeting held December 7 in Wilson Hall. Dr. Harold P. Morris, NCI, was elected president; Julia A. Rowady, NIMH, first vice president; James C. Hawkes, OD, second vice president; Jean T. Torgerson, DRS, secretary; and Carol E. Miller, NIMH, treasurer.

The outgoing president, Helen M. Anderson, NIDR, submitted her annual report, and called for a vote on three amendments to the Association's by-laws relating to the duties of the treasurer and general manager. All amendments were passed.

Hope for Building

Miss Anderson's report concluded with the hope that eventually the R&W would be able to obtain a building of its own.

The treasurer reported receipts of $104,933 for the first 11 months of the year, and disbursements of $101,704. A total of $8,151 was transferred to patient welfare use. Awards were given as door prizes to Mary R. Cahill, OD, and Margaret C. Parsons, NIMH. Others won candy, cartons of cigarettes, and stationery.

1948 Pre-Xmas Memo Asks: 'Was It Goat or Reindeer?'

One of the essentials of Dan's job is a lively interest in the Archives. Animals and Administration are Dan's business 24 hours a day throughout the year, for he is the Administrative Officer of the Laboratory Aids Branch, DRS, and all experimental animals issued to research investigators come from the Animal Hospital and Animal Production Sections of that Branch.

Archives is another of Dan's responsibilities. Careful records kept around the clock on animal husbandry practices are vital to the branch he serves, and he is keeper of the records.

Dan's archival responsibility broadened considerably last February when the following editorial was written:

The Spirit of Christmastide

Christmas came to NIH this week with gayety, greenery, and caroling. Serving as Santa Claus, the NIH Recreation & Welfare Association provided Christmas trees for the CC lobby and solarium, and greenery for the front of the building. All the nursing units looked festive, and wreaths were hanging on the director's doors.

Carol singing, led by members of the NIH Chorus, was a feature of today's annual Christmas party for all NIH employees, scheduled for 11:30 a.m. in the CC auditorium, with greetings from Dr. Shannon, invocation by the Rev. William R. Andrews, Protestant chaplain, and benediction by Father Francis Veith, Catholic chaplain.

Patients Entertained

Festivities started early for the CC patients. On December 12, Santa Claus, an Air Force dance band, and the Walter Johnson High School choral group entertained. During that week the Washington Y-teen members and the Westminster Congregational Church choir came caroling, and a play was presented by the Catholic University players. During this pre-Christmas week, carols will be sung by the 9th grade chorus of the North Bethesda Junior High School and by local church groups. The Bethesda-Chevy Chase High School and the American Guild of Variety Artists are each scheduled.

Gold and white musical notes, tinsel, and bells ornament the "Peace on Earth" Christmas tree in the 14th floor CC auditorium.

The 8-foot spruce is a gift to patients of the Clinical Center.

Many Join in Bringing Here

Yule and New Year Issues Are Combined in This One

This 8-page pre-Christmas issue of the Record combines the customary 4-page year-end and early New Year issues. Publication date of the next issue, therefore, is January 17. So, Merry Christmas and Happy New Year!
Men and Plows Battle Two-Day Storm
From Sunday Noon to Monday Midnight

The cleared roadways and parking lots encountered by NIH employees returning to work on Tuesday, December 20, following the weekend's 14-inch double snowstorm, were the result of continuous round-the-clock labor—from noon Sunday until midnight Monday—by two Grounds Maintenance crews totaling 20 men.

With the Weather Bureau forecasting a heavy snowfall, Milford D. Myers, Chief of the Grounds Maintenance and Landscaping Section, PEB, began calling his men into action. At 8:30 a.m. the first crew left, returning at 5 p.m. to relieve the second crew, and continued working until midnight.

In all, 400 overtime man-hours (exclusive of Monday), three tons of rock salt and sand, 176,000 cubic feet of dirt and sand were required to clear the roads and parking lots. Also in use were six Jeeps, four trucks, and two tractors, all plow-equipped.

Mr. Myers said he regretted that cars parked along Center Drive were plowed in, but he had no choice since they were left there during the storm.

Road, N.E. When asked to comment on the memorandum, he was genuinely sorry that he had no followup information to supply.

"Don't know whether AI counted the goats or not," he said. (Ed. Note: Hold—why less, why? Voluntary removal of surplus property?)

Goats are still housed by the Laboratory Aids Branch, according to Mr. Olink, and although an accurate count is reported each month, he guesses that there are about 15 goats on the old animal farm. Eventually, they will be moved, along with other animals, to the new farm near Poolesville. As to the goats, Mr. Clink, and although an accurate count is reported each month, he guesses that there are about 15 goats on the old animal farm. Eventually, they will be moved, along with other animals, to the new farm near Poolesville. As to the goats, Mr. Clink acknowledged authorship. The addressee was Albert H. Siepert, now Director of Administration, National Aeronautics and Space Administration, but then NIH Executive Officer.

Dr. Dyer is now living in retirement in Atlanta, at 2159 East Lake

Inauguration Day Is Holiday

The approaching Inauguration Day—Friday, January 20, 1961—and succeeding Inauguration Days are statutory holidays in the Metropolitan Area of the District of Columbia, according to word received here from Personnel Management Branch from DHEW.

Correction

The story on changes in the administration of NIH grants in the December 2 issue of the Record stated incorrectly that Dr. Ernest M. Allen is a Commissioned Officer in the Public Health Service. Dr. Allen holds a commission in the PHS Inactive Reserve Corps but has been a Civil Service appointee since 1949.
DBS Method for Assay Of Vaccine Presented At Cholera Conference

A mouse protection test for the assay of cholera vaccine, developed by Dr. John C. Feeley and Dr. Margaret P. Pittman, Laboratory of Bacterial Products, DBS, was presented this week at the first of a series of conferences on cholera, sponsored by the South East Asia Treaty Organization. The 4-day conference is being held in December at the recently established laboratory for cholera research in East Pakistan, where the disease is endemic.

Reference Established

International reference cholera vaccines of the Inaba and Ogawa types of Cholera common were established in 1948 by the World Health Organization but without a unit of potency, because of failure of collaborative assay trials. Two years ago, WHO's interest was renewed and a study group was formed to establish recommended requirements for cholera vaccine. The need for comparing laboratory potency values with prophylactic efficacy in man was emphasized and the development of a unit of potency for cholera was recommended. This was to be derived from the potency of cholera vaccine quantitatively was initiated by DBS in anticipation of clinical trials to be carried out by WHO.

The major emphasis in Dr. Feeley's paper has been the standardization of the variables which influence the test, both in the production and preservation of a U. S. reference vaccine to determine its relative potency. Difficulty has been encountered in preserving the potency of the reference vaccine during freezing and, various methods are now under investigation.

Potencies Determined

Using the mouse protection test, reproducible relative potencies of vaccines prepared in other countries, as well as WHO reference preparations, have been obtained. It has also been possible to determine the mouse cross-protection of the two C. comma types, Ogawa and Inaba—a problem which has received much attention in the past.

Although the DBS test can be used for the evaluation of the mouse protective potencies of cholera vaccine, clinical trials of vaccine of known laboratory potency must be carried out before its relation to epidemiologic effectiveness can be evaluated.

Measles Vaccine Research Assessed at DBS Meeting

Results of clinical and laboratory research during the past 19 months, presented by independent investigators of university and pharmaceutical laboratories at a day-long conference at the Division of Biologics Standards on November 18, indicate progress in the development of a satisfactory immunizing agent against measles.

The meeting, chaired by Dr. Roderick Murray, Director of DBS, was attended by more than 50 virologists.

Dr. John Enders, whose work with measles virus established the principles for an attenuated measles vaccine, summarized his recent experience with the Edmonston strain of virus grown in chick embryo cells. Clinical data presented by other groups using live vaccine made from this strain gave evidence of its capacity to elicit satisfactory protective antigenicity in unvaccinated volunteers, as well as specific antibodies among the vaccines.

The Enders vaccine was shown by three groups of investigators to give 100% protection in children exposed to natural viral measles viruses, while the unvaccinated controls showed the expected high incidence of the disease. Evidence of satisfactory antibody titer at the end of 18 months was also presented. To date, close to 1,000 children have been given this vaccine.

Additional Studies Needed

In most cases, the Enders vaccine caused some local—principally fever. However, when administered concurrently with gamma globulin, such reactioniltering was reduced as well as specific antibodies among the vaccines.

Dr. Harry Mayer, Laboratory of Virology and Rickettsiology, DBS, outlined work being done in DBS laboratories in developing serologic tests for detection of measles antibodies. Methods for preparation of a dried reference serum were being investigated for use in both the complement fixation and neutralization tests. The standardization of gamma globulin preparations for measles antibody content is also planned.

Work will be continued by the various investigative groups in acquiring a larger clinical experience. DBS will continue to coordinate these studies and to encourage the exchange of new data.

Variability Is Found in Excretion of Labeled And Unlabeled Calcium

During the course of studying the excretion of certain minerals in man, National Institutes of Health investigators found evidence of unexpected variability in the renal clearance of labeled and unlabeled calcium. These findings of possible significance to metabolic studies employing radioactive calcium as a tracer have now been reported in Nature.

In experiments by Dr. Robert Likins and Miss Doris Craven, Laboratory of Biochemistry, weaning rats (Group I) were injected intraperitoneally with a solution containing Ca and a truce amount of unlabeled calcium. Urine was collected at the end of 30 minutes and 60 minutes, and analyzed for radioactivity and total calcium.

Blood Analyzed

One hour after injection, blood from each animal was also analyzed. There was no difference between the groups.

Results showed that in the two groups of animals the percent of the injected dose of labeled calcium excreted in the urine was significantly less in the case of the weaned rats. On the other hand, the total amount of calcium excreted remained the same in the weaned rats and the starved animals.

While a slower absorption of the injected calcium is accounted for, these results show that significantly less was excreted in the urine of the starved rats than in the weaned animals. Although the explanation for this phenomenon is not yet known, it is pointed out that the renal clearance of calcium in the case of the weaned rats was significantly less in the case of the starved rats. On the other hand, the total amount of calcium excreted remained the same in the weaned rats and the starved animals.

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Human Bone Studied For Fluoride Effects

In an effort to identify more clearly the role of fluorides in preventing dental decay, National Institutes of Health investigators are studying the metabolic changes that occur in calcified tissues of the body.

Studies of the composition of human bones and teeth reveal a wide range of skeletal fluoridation concentrations as carried out by Dr. J. Zipkin, Dr. F. J. McClure and Mr. W. A. Lee Laboratory of Biochemistry, NIDR. Analyses were made of 20 bone specimens from 25 individuals ranging from 25 to 90 years of age who consumed drinking water containing up to 4.0 ppm fluoride for 10-30 years prior to death.

The levels of ash, calcium, phosphorus, sodium, potassium, magnesium, carbon dioxide, and citrate of the skeletal tissue were studied in relation to its fluoride content. Results showed that a ten-fold range in concentration of bone fluoride is associated with a slight increase in magnesium, a decrease in carbon dioxide and a consistent decrease in citrate content, but no change in calcium and phosphorus. These observations parallel similar in vitro findings. A slight decrease in sodium and little or no change in potassium was also observed.

It appears that the ions showing change, presumably oriented on the bone surface crystal, may be replaced by surface deposited fluoride. Such chemical changes, attributed to fluoride, were not associated with any change in the normal histological pattern.
New Analytic Technique Helps Solve Problems Of Protein Structure

Progress in solving an important problem in protein chemistry research, the rapid and sensitive analysis of proteins for their amino acid content, has been made by Dr. H. A. Saroff, a physical biochemist at the National Institute of Arthritis and Metabolic Diseases.

Working with the relatively new analytic technique known as gas chromatography, Dr. Saroff has been able to expand the application of this technique so that 75 per cent of the amino acids can be rapidly identified and measured in minute test samples.

**Speeds Process**

Gas chromatography is similar to the older methods of column and paper chromatography used to separate mixtures of different compounds. In gas chromatography, however, the substances to be tested are first vaporized and mixed with an inert "carrier" gas before fractionation. This innovation greatly increases the speed with which the separation can be done, allowing analysis of as many as 75 amino acids in an extremely small sample.

The gas chromatographic technique has great potential for rapid amino acid analysis, but for various reasons it is not yet generally applicable. One of the problems has been the proper preparation of the test substances before they are vaporized.

To overcome this problem, the NIAMD scientist has improved upon a technique developed by other investigators for preparing volatile substances from the amino acids. Essentially, it involves a means of preparing N-trifluoroacetyl-methyl esters of the amino acids for vaporization.

**Response Differentiate Four Human Cell Lines**

Established lines of human cells are widely used in cancer research, and their utilization is increasing. Because of their morphologic similarity, methods of differentiating such cell lines are required. They are now commonly characterized by nutritional requirements, chromosome counts and anomalies, sex hormone sensitivity with their variations, (immunologic response, and virus susceptibility.

A report by scientists of the National Cancer Institute's Laboratory of Chemical Pharmacology reveals that D227, a new compound discovered by the NIAMD-grantee at the Elgin State Hospital, Elgin, Illinois, and found that vitamin E stabilizes certain essential fats in body tissues.

The functions of almost all B vitamins have been determined by all investigators, but there is information regarding the functions of the fat-soluble vitamins, which include vitamin E, has been lacking.

Dr. Bieri's work, using the chick as the experimental animal, established that vitamin E acts to prevent oxidation of unsaturated fatty acids in body tissues. If this occurs, the oxidized product may cause a loss of vital cell structures or inhibit important cell chemistry.

He also provided evidence that vitamin E has a potential for replacing part of the requirement for vitamin E in animals, namely, selenium and the amino acid cysteine, probably do so by their antioxidant action in the tissues.

Dr. Bieri has been able to show that if the unsaturated fatty acid content of the diet is kept very low, these substances do not accumulate in the tissues and no significant oxidation of the fatty acids occurs. Under such conditions, the chicks have been raised and maintained symptom-free for over a year without any dietary vitamin E. Chemical analyses showed that the chicks were devoid of the vitamin.

If, however, the unsaturated fat content of the diet was increased, the chicks promptly developed "deficiency" symptoms. These symptoms could be prevented by feeding vitamin E or other non-antioxidant compounds.

It is apparent that there is a dietary requirement for an antioxidant, which is normally furnished as vitamin E. This requirement may vary widely depending on the unsaturated fatty acid content of the diet. In contrast to the high degree of specificity shown in the requirement for the various B vitamins, the requirement for vitamin E can be fulfilled by other compounds (antioxidants), Dr. Bieri said.

Although deficiency of vitamin E in man is almost unknown due to widespread occurrence of the vitamin throughout the plant kingdom, Dr. Horwitt, working at the Elgin State Hospital, has experimentally produced such a deficiency state in man for several years. Vitamin E physiology was obtained in the human studies and results indicated that vitamin E was functioning primarily as an antioxidant, agreeing with the work of Dr. Bieri.

Although there are still unanswered questions in this area, the results of Dr. Bieri's studies, together with those of other American investigators, indicate that vitamin E has a unique function when compared with the function of other vitamins. One of Dr. Bieri's most recent publications on this subject, with Dr. A. A. Anderson, appeared in the Archives of Biochemistry and Biophysics.

**Certain Essential Body Tissue Fats Found To Be Stabilized by Vitamin E**

Research conducted by Dr. John G. Bieri, National Institute of Arthritis and Metabolic Diseases and by Dr. Max K. Horwitt, an NIAMD-grantee at the Elgin State Hospital, Elgin, Illinois, and found that vitamin E stabilizes certain essential fats in body tissues.

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Two Tick-Borne Diseases Identified By Fluorescent Antibody Technic

In two separate studies at the Rocky Mountain Laboratory of the National Institute of Allergy and Infectious Diseases, in Hamilton, Montana, Drs. Willy Burgdorfer and David Lackman have used the fluorescent antibody technic to identify Colorado tick fever virus, and Rocky Mountain spotted fever. Their report of the identification of the virus of Colorado tick fever appears in the Journal of Bacteriology.

The study concerned with visualization of R. rickettsii by fluorescence is reported in the Journal of Infectious Diseases.

Using homologous antibody labeled with fluorescein isothiocyanate, the investigators isolated 34 CTF viruses in suckling mice with suspensions of Dermacentor andersoni, the northern species of wood tick which transmits CTF. They also used blood samples of three species of rodents collected in nature. Control tests performed simultaneously indicated that the reactions which occurred were specific.

Technic Is Practical

The fluorescent antibody technic as a means of identifying isolates of CTF virus in suckling mice is of practical value in studies on the ecology of this virus. Using this method, it is now possible to make frequent isolations of the virus either from the tick vector or from the blood of rodents that serve as hosts for the immature stages of ticks. In the past, each isolate had to be identified by time-consuming neutralization tests in suckling mice.

Using the same technie in another investigation, Drs. Burgdorfer and Lackman have succeeded in identifying R. rickettsii, the etiologic agent of Rocky Mountain spotted fever, in smears of gut tissues from experimentally infected D. andersoni.

In smears of infected nymphal ticks the organisms stained consistently with a very bright fluorescence. In those prepared from adult ticks several weeks after molting, the rickettsiae fluoresced less strongly, although they were still detectable.

The fluorescent antibody technic has been used at the PHS Communicable Disease Center, on rickettsiae of Rocky Mountain spotted fever, using individual ticks.

Characteristic beading and disruption of cell membrane, fragmentation of cytoplasm, and cytoplasmic granularity found in strain D277 cells 48 hours after exposure to 1 mg per ml Saramin sodium. Note ghostlike cells with missing nuclei, and moth-eaten appearance of cytoplasm.

In this study, all of the staining reactions, from strong fluorescence to a notably decreased amount, were specific as shown by the results of control experiments. Inhibition could be observed regularly with unlabeled immune serum, and staining was not detected when heterologous conjugate was applied or when smears of normal ticks were treated with specific conjugate.

Triturates of ticks found positive for R. rickettsii produced clinical or serologic evidence of Rocky Mountain spotted fever infection in guinea pigs. Triturates free of rickettsiae did not cause the disease when injected into guinea pigs.

Untreated control cells (strain D277) show epithelium-like sheet of cells and well-defined cell outlines.

Strain D277 cells 48 hours after exposure to 1 mg per ml Saramin sodium. Note ghostlike cells with missing nuclei, and moth-eaten appearance of cytoplasm.

Studies Describe Ion Flow Through Nerve Membrane

Biophysical studies of electrical currents across the squid axon membrane confirm and extend the validity of nerve impulse transmission theories which have been expressed mathematically by Hodgkin and Huxley.

New data have resulted in the development of an equation which more accurately describes the characteristics of potassium ion flow through a membrane after it has been highly polarized, as well as under other electrical and environmental conditions.

Equations Evaluated

A critical survey and evaluation of the Hodgkin-Huxley equations is being conducted by Drs. Kenneth S. Cole and John W. Moore, Laboratory of Biophysics, National Institute of Neurological Diseases and Blindness, who have reported their present study in the Feb. issue of the Biophysical Journal.

The investigators found that the original equations were valid when the membrane's electrical potential was initially at or below the resting level. When the membrane had been kept at an abnormally high potential, however, the flow of potassium ions was delayed and these equations were not applicable.

Therefore, a new formula was developed to express more accurately the delayed rise of the potassium current. Although more complex, it was found to apply under a variety of experimental conditions. Both formulas were in close agreement in situations where the original work was applicable, indicating that the underlying assumptions are probably valid.

Theories Supported

Experiments also supported the original theories that sodium and potassium ion currents across the squid axon membrane are independent of each other. In addition, they confirmed that the potassium current pattern is dependent on a single variable, defined by a first order differential equation.

The use of mathematical expressions greatly simplifies the interpretation of complex data from direct studies of ionic membrane currents. Although these processes cannot be investigated in higher animals or man, information obtained from the large axons of squid and several other invertebrates has been found applicable to vertebrates.

The nerve-population ratio has increased almost fivefold in the U. S. since 1910, according to PHS.
Rheumatic Fever Response to Steroid Is Found No Better Than to Aspirin

Clinical studies conducted in four states by the Combined Rheumatic Fever Study Group indicate that prednisone is no more effective than aspirin in preventing residual heart disease following rheumatic fever attacks.

The National Heart Institute grant-aided studies were conducted by 12 investigators in children's cardiac services in eight hospitals: four in New York City, two in Baltimore, and one each in Boston and Cleveland. Coordinated by Dr. A. G. Kuttner of New York University-Bellevue Medical Center, the investigators reported their combined findings in the New England Journal of Medicine.

Their findings are similar to those of an earlier cooperative study of aspirin vs. steroid therapy, sponsored jointly by the Research Council of Great Britain and the American Heart Association. In the present study, however, steroids were given in larger doses and over a longer period of time.

57 Patients Studied

Admitted to the study were 57 patients who met the following criteria: 1) they were 12 years of age or younger; 2) they had suffered their first attack of rheumatic fever not more than 28 days previously; and 3) they had moderate to severe carditis as evidenced by pericardial rub or effusion, cardiac enlargement, congestive heart failure, and/or significant heart murmurs.

About half of these patients received large daily doses of prednison which totaled 3 grams over a 12-week treatment period; the remaining patients were given doses of acetylsalicylic acid sufficient to maintain blood levels at 25 to 35 mg./100 cc., also for a 12-week period. Three weeks after termination of therapy and again one year later, all patients were examined for the incidence of residual heart disease in each group.

The study group found that both prednisone and aspirin controlled acute rheumatic symptoms in most patients and, during the ensuing year, all patients remained free of rheumatic recurrences.

Recovery Complete

Of those patients available for study at the end of the year, 12 in the prednisone group and 16 in the aspirin group recovered completely with no signs of residual rheumatic heart disease, whereas 16 in the prednisone group and 14 in the aspirin group had residual heart disease at this time. Of three patients originally allocated to the aspirin group but later switched to prednisone, one recovered completely and two were left with residual heart disease.

Thus, "large doses of prednisone given for 12 weeks were not found to be superior to acetylsalicylic acid in preventing residual rheumatic disease," conclude the investigators.

The chief action of both prednisone and salicylates appears to be suppression of the inflammatory reaction caused by this disease. In many patients, however, even if the acute symptoms are promptly and well controlled, cardiac damage is not prevented, they state.

In view of these findings, all but one of the investigators felt that long-term steroid therapy was unwarranted, although no serious side effects of prednisone were noted in this study.

and to observe whether time alone turns latent diabetes into the irreversible condition. It is necessary to know more about the actual health of the latent diabetic; whether or not there is a significant loss of efficiency in the time he or she is latent and whether it is proper to continue to ignore this phase until symptoms become prominent. It will be valuable to ascertain whether dietetic control of obesity during this phase would absolutely or delay the onset of symptomatic diabetes. There appears to be a need to observe the parous woman, her own weight, and the size of her infant.

The opinions of other investigators to the effect that "until we have more evidence such as might be obtainable over a period of 10, 20, or 30 years by continuous observation of two or three static natural communities, the answers will possibly evade us."

Diabetes

Younger age group there were twice as many males as females: in the newly diagnosed diabetics, about equal (11 males-14 females), but the known diabetics were in the proportion of three females to one male.

The incidence of obesity was found to be higher in the group with latent diabetes. Too, the history of stress, such as personal or family illness, domestic or financial anxiety or employment difficulties, was present in 58 percent of the males and in 73 percent of the female group in the newly diagnosed diabetics.

"Not unlike previous surveys," stated Dr. Walker, "our findings are far from conclusive. It appears important to find out more about the genetic pattern of inheritance, and to observe whether time alone turns latent diabetes into the irreversible condition. It is necessary to know more about the actual health of the latent diabetic; whether or not there is a significant loss of efficiency in the time he or she is latent and whether it is proper to continue to ignore this phase until symptoms become prominent. It will be valuable to ascertain whether dietetic control of obesity during this phase would absolutely or delay the onset of symptomatic diabetes. There appears to be a need to observe the parous woman, her own weight, and the size of her infant."

ARTHRITIS

(Continued from Page 4)

Large Population Group Reports Incidence of Oral Ulcerated Lesions

Herpes labialis (fever blisters) and aphthous stomatitis (canker sores) are both recurrent painful ulcerations of the mucous tissues of the mouth. A study of these diseases in a large population group has now been reported by National Institute of Dental Research scientists.

The purpose of the investigation, involving some 1,800 persons, was to determine the prevalence of and patient experience with aphthous and herpes labials and to compare incidence levels, in the study included the student bodies of the Schools of Medicine, Dentistry, Dental Hygiene, Veterinary Medicine, Graduate Nursing, and Hospital Nursing of the University of Pennsylvania. All participating were nursing students at the Philadelphia General Hospital and the Presbyterian Hospital.

Checked for Accuracy

A specially designed questionnaire was employed and all responses were checked for accuracy by comparison with answers to similar questions on completed medical history forms.

Analysis showed that thirty-eight percent of the students had a history of recurrent herpes labials with no sex differences noted. The number of significant age differences seen was 57% of females and 52% of males that had aphthous ulcerations. In addition these prevalence levels were considerably above those previously reported in population studies by other investigators.

Age, racial background, marital status, school, and class differences were not seen in either disease, and students susceptible to episodes of aphthous stomatitis experience more frequent recurrences than those susceptible to herpes labialis. Although both conditions may be triggered by metabolic or environmental changes, laboratory and clinical data now available do not pinpoint an etiological relationship between the two diseases.

These studies, reported in the Journal of Oral Surgery, Oral Medicine, and Oral Pathology, were under the direction of Dr. S. L. Ship, formerly of the NIDR Clinical Investigations Branch. Dr. Ship is now with the Dental Research Laboratory, Philadelphia General Hospital.
Recently Released Film Depicts Normal Control Role in NIH Research

"Serving by the 'Pool of Bethesda'" is the title of a new motion picture, the first to be released by the Clinical Center.

Produced by the Communicable Disease Center in cooperation with the CC Information Office, the film describes the contributions volunteers normal control patients are making to the medical research program at NIH.

Portrays Experiences

The 17-minute sound-color film explains the goals and functions of NIH and vividly portrays actual experiences of volunteers in the CC who have come from all parts of the country to participate in numerous research projects for varying periods of time.

Although the film was prepared especially for presentation to Bethesda and Montgomery County Tuberculosis and Heart Association groups, where most of the volunteers are recruited, it had its initial showing at Bennington College in Vermont recently and was well received by the students and staff.

Participation in the NIH volunteer program has steadily expanded from one volunteer in 1958 to 68 this year.

Visit to NIH Scheduled For Mobile X-Ray Unit

Cards were being distributed this week to NIH employees to prepare for the scheduling of chest X-ray examinations here in March by the Mobile Unit of the Montgomery County Tuberculosis and Heart Association.

Employees wishing to have chest X-ray examinations are asked to return the card to the NIH Employee Health Service, Bldg. 10, Rm. B2-A-06. Each employee will then be notified of the day and hour of his scheduled examination.

Employee Health Service points out that the chest X-ray, technically called a photofluorogram, makes it possible to detect not only tuberculosis but certain heart and other conditions.

The Service urges all employees who are not already scheduled for annual chest X-ray examinations to take advantage of this opportunity.

The Mobile Unit will be centrally parked near the loading platform at the rear of Building 1. The dates and hours of its appearance here will be:
March 2, 8 a.m. to 4 p.m.; March 3, 9 a.m. to 5 p.m.; March 30, 9 a.m. to 5 p.m.; and March 31, 8 a.m. to 4 p.m.

NII Visit December 29 Scheduled for Members Of Dental Fraternity

Approximately 400 dentists from all parts of the U.S., Canada, and Mexico are scheduled to visit NIH December 29 as a feature of the Fifty-Third Annual Convention of the Alpha Omega Dental Fraternity, to be held in Washington December 26-31.

Following breakfast in the CC cafeteria, the group will meet in the CC auditorium for welcoming remarks by Dr. Jack Masur, CC Director, and Dr. Francis A. Arnold, Jr., Director of NIDR.

Rep. Fogarty Honored

The program will include discussions by several NIDR scientists on the work of the Institute, and a showing of the NIH orientation film.

At its convention the fraternity will present the Alpha Omega Achievement Award to Rep. John E. Fogarty of Rhode Island. The award is given annually to some person outstanding in dentistry and is well merited in recognition of his professional contributions.

The Alpha Omega Dental Fraternity was founded in 1907 at the Pennsylvania College of Dentistry. Today it is an organization with more than 8,000 members in 47 alumni and 35 undergraduate chapters.

CC Cafeteria Reports Slight Food Cost Rise

Due to the new pay raise for Wage Board employees, prices in the cafeteria of Building 10 showed a slight increase this week.

Under Government regulations the cafeteria is a service supplied to the staff of NIH, and its cost must be fully recovered on an annual basis. It is not permitted to show either a profit or a loss.

According to Miss Edith Jones, Chief, Nutrition Department, the cafeteria is open 22 hours per day, Monday through Friday, and 17 hours per day on Saturdays, Sundays, and holidays, in order to serve food to the patient care staff day and night.

Most entree items will advance 10 cents while vegetables will cost 5 cents more, as will soups and salads.

"No raise in the cost of coffee is contemplated at this time," Miss Jones said. "We hope the modest increase in cost of the general food items will take care of the additional income from sales we need to meet the new Government pay increase for our Wage Board employees engaged in food preparation and service for the cafeteria."

"Annie" Dates Are Set for Middle of January

The nights of January 18, 19, 20, and 21 have been set by the R&W Hamstets for their production of "Annie Get Your Gun."

The musical comedy, with a cast of 35, will be presented in the Clinical Center auditorium. Curtain time is 8:30 p.m.

Tickets, at $1.50 each, go on sale December 27 through R&W representatives, ticket sellers in each building, the CC post office, and the R&W film desk.

The proceeds from the performances, "Annie," will be presented for CC patients and their friends and relatives on January 17.

SPSE MEMBERS TOUR PHOTO SERVICES

Dr. George Z. Williams, Chief, Clinical Pathology Department, CC (right), explains the use of image-intensification equipment in the Clinical Center to members of the Society of Photographic Scientists and Engineers. The SPSE members were here November 14 for a tour of NIH photographic services arranged by Roy Perry, Chief, Photographic Section, DRG (center). Dr. Williams adopted the image-conversion technique to ultraviolet microscopy, which he now employs in hematology studies. The converter is used to view and photograph living cells without staining. Another technique demonstrated by Dr. Williams was the ultraviolet television microscope, which combines a motion picture camera and UV microscope with closed-circuit TV for time-lapse cinematography of chemical changes in living unstained cells.

In the center is Dr. Robert F. Williams, Chief of the Clinical Pathology Department, CC, while Dr. Williams, Chief, Clinical Pathology Department, CC (right), explains the use of image-intensification equipment in the Clinical Center to members of the Society of Photographic Scientists and Engineers. The SPSE members were here November 14 for a tour of NIH photographic services arranged by Roy Perry, Chief, Photographic Section, DRG (center). Dr. Williams adopted the image-conversion technique to ultraviolet microscopy, which he now employs in hematology studies. The converter is used to view and photograph living cells without staining. Another technique demonstrated by Dr. Williams was the ultraviolet television microscope, which combines a motion picture camera and UV microscope with closed-circuit TV for time-lapse cinematography of chemical changes in living unstained cells.

Dr. Francis L. Schmehl, Chief, the Health Research Facilities Branch, DRG, was awarded an honorary degree of Doctor of Science by the University of Michigan at Ann Arbor on December 1.

The degree was presented at a ceremony dedicating the nation's largest college building for pharmaceutical research, recently constructed with the aid of an NIH grant.

Dr. Schmehl was cited for his "sound professional judgment, exceptional executive gifts and unfailing tact" in carrying out the Health Research Facilities Program.

His honorary diploma states: "Health scientists throughout the nation are deeply in his debt. The University of Michigan expresses a widely shared sense of gratitude and esteem in conferring upon him the degree of Doctor of Science."

Dr. Schmehl has headed the HRF program since its inception in 1956.

Francis L. Schmehl, DRG, receives the honorary degree of Doctor of Science at the University of Michigan on December 1. At left, Prof. Richard C. Boys of the Michigan faculty.

He also served in DRG as a Biological Chemist from 1947 to 1955. In the interim he held posts as Executive Officer of the Children's Cancer Research Foundation and Assistant Chief of the Cancer Chemotherapy National Service Center of NCI.

Francis L. Schmehl, DRG, receives the honorary degree of Doctor of Science at the University of Michigan on December 1. At left, Prof. Richard C. Boys of the Michigan faculty.
Dr. E. L. May Named NIAMD Section Chief

Dr. Everett L. May has been appointed Chief of the Section on Medicinal Chemistry (formerly the Section on Analgesics) in NIAMD's Laboratory of Chemistry. He succeeds Dr. Nathan B. Edy who retired in September of this year following a distinguished career with the Public Health Service.

A member of the WHO Expert Advisory Panel on Addiction Producing Drugs, Dr. May is a member of the team which developed a new analgesic, phenazocine, which is many times more powerful than morphine and may be safer for long-term administration.

MARTIN
(Continued from Page 1)

To Avoid Xmas Fires Follow These 10 Tips

Within the three days beginning at 6 p.m. Christmas Eve last year, 43 persons lost their lives in fires in this country, according to the National Board of Fire Underwriters.

For a Christmas season free from the tragedy of fires this year, the Record offers the following 10 suggestions from NIH. Fire Marshal Kenneth W. Gettings.

Choice and Care of Your Tree
- Select a fresh Christmas tree, with needles firmly attached.
- Saw the trunk off at an angle, at least one inch above the original cut.
- Anchor the tree securely in a water container and keep the water level above the cut.
- Place the tree in coolest part of the room, away from radiators, heaters, and fireplace.

Elimination of Hazards
- Check electric lighting sets for frayed insulation, loose connections, and broken sockets. Use only those sets that bear the UL label.
- Use non-combustible or “flameproofed” decorations.
- Don’t buy pyroxylin plastic dolls or toys.
- Discard gift wrappings promptly.
- Turn tree lights off at night and before leaving home.
- Discard the tree as soon as it has served its purpose.

CHRISTMAS
(Continued from Page 1)

Irmn E. Strunk Wins Performance Award

At a special award ceremony November 23, Irmn E. Strunk, Travel Clerk in the Office of the Director, DBS, was the recipient of a sustained superior performance award and check for $140 for having “continuously maintained a degree of service which must be defined as far above the normal degree of operations.” Dr. Roderick Murray, DBS Director, made the presentation.

Since 1957 Mrs. Strunk has processed all DBS travel requests, both domestic and foreign, including orders and vouchers for meetings, and inspectors' and consultants' travel requests.

DBS travelers have spent a total of 150 days in 15 foreign countries during the past two years, and Mrs. Strunk has taken in stride problems associated with arranging the itineraries of international trips, as well as security clearances, passports, and conversion of foreign currency to dollars.

Protestant religious services will be held in the CC chapel at 6:30 p.m. on the 24th, and at 10 a.m. on the 25th.

Catholic Mass will be celebrated at midnight on the 24th, preceded by 15 minutes of carol singing, and on the 25th at 7:15 and 8:30 a.m.