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 G. 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 functions 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 $104,533 for the first 11 months of the year, and disbursements of $101,754. A total of $8,159 was obtained to purchase Christmas trees for the CC lobby and solaria, and greens for the front of the building. All the nursing units looked festive, and wreaths were hanging on the directors’ 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-teens and the Westmoreland 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 8th grade chorus of the North Junior High School and by local church groups. The Bethesda-Chevy Chase High School and the American Guild of Variety Artists are each scheduled for the CC auditorium.

Gold and white musical notes, cloths, 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.

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

One of the essentials of Dan Clink’s job is a lively interest in Administration, and Archives.

Animals and Administration are Dan’s business 24 hours a day throughout the year, for he is the Administrative Officer of the Laboratory Administrative 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 following the death of Dr. Harold P. Morris, Dan’s predecessor. As Chief Archivist of this collection, Dan has in his custody a folder marked “Animals,” and in it he’s discovered an item that is particularly appropriate to the Christmas season.

“Mr. Martin’s duties,” Dr. Watt said, “will include the development of plans and programs for new and strengthened activities, and he will assist in our work with the National Advisory Heart Council and will direct our Heart Information Center.”

Mr. Martin was previously with the Heart Institute, having served as its Information Chief for the eight years following its establishment in 1948.

Has Wide Experience

He has been in the Public Health Service for 17 years, principally in its venereal disease program and on field assignments before joining the Heart Institute.

Previously he was a reporter and photo editor for the Associated Press and a trade magazine editor. He was also engaged in daily and weekly newspaper work and in public relations, and taught and coached in high schools and in the Civilian Conservation Corps.

In announcing Mr. Martin’s appointment, Dr. Watt called attention to the fact that the Heart Institute’s Information Service is now a full-fledged public relations organization.

Dr. James Watt, Director of the National Heart Institute, yesterday announced the appointment of Lealon E. Martin, Assistant Chief of the Office of Research Information for the past four years, as his Staff Assistant for Scientific and Public Information.

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 14, following the weekend's 14-inch double snowstorm, were the result of continuing 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, began calling his men Sunday morning. By noon he had a 12-man crew in action.

By midnight this crew had all roads, sidewalks, and parking lots cleared of the 6-inch snow deposited by the first storm. Then, shortly after midnight, the second storm struck, bringing an additional eight inches of snow. And the weary crew went back to work.

At 4:30 Monday morning these men were joined by a second 8-man crew. At 8:30 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 snow-throw, and 75 tons of 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 near Post Office 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.

"I don't know whether Al counted the goats, or not," he said. (Ed. Note: He did—one less. Why? Voluntary removal of surplus property?)

Goats are still housed by the Laboratory Aids Branch, according to Mr. Hull; 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 a new farm near Post Office. As to reindeer, at last count LAB had none, but here again Dan has to hedge. Part of his uncertainty is due to a well-developed sense of caution.

"Believe it or not, we had a large flock of seagulls earlier this year," he said, when pressed for explanation.—J. T. T.

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 by Personnel Management Branch from DHEW.

Correction

The story on changes in the administration of NIH grants in the December 8 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 1943.
Science Section

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 L. Higgins, Laboratory of Bacterial Products, DBS, was presented this week at the first of the conferences on cholera, sponsored by the South East Asia Treaty Organization. The 4-day conference is being held in Dacca, 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 comma* were established in 1949 by the World Health Organization but without a unit of potency, because of failure of collaborative assays. Two years ago, WHO's interest was renewed and a Study Group in which Dr. Pittman participated formulated recommended requirements for cholera vaccine.

The need for comparing laboratory potency values with prophylactic efficacy in man was emphasized and the development of a mouse-protection test to evaluate 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 work has been the standardization of the variables which influence the test, as well as the selection 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 freeze-drying, and various methods are now under investigation.

Potencies Determined

Using the mouse protection test, reproducible relative potencies of vaccines prepared in other countries and under widely different conditions, have been determined. 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 potency of cholera vaccine, clinical trials of vaccines 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. Royick Murray, Director of DBS, was attended by more than 50 virologists.

Dr. John Enders, whose work with measles viruses 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 protection against natural measles 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 virulent measles virus, 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 clinical reaction—primarily fever. However, when administered concurrently with gamma globulin, such reaction was virtually nonexistent. This so-called active-passive immunization was favored by two groups of investigators but additional studies are necessary.

Although various methods of preparing the vaccine have been used, propulsion in chick embryo tissue culture is preferred, since adventitious agents which might be pathogenic for man are less likely to be encountered.

There has been some question in the past whether a live vaccine of sufficiently high titer could be produced which would maintain its potency during storage. It is now generally agreed that it is possible to stabilize the vaccine in the dry state.

Studies with both experimental animals and human subjects have given assurance that the Enders strain is devoid of deleterious neurotropic effect.

Dr. Fredric A. Gifhorn, University of Illinois School of Medicine, and his colleagues, using electroencephalography to determine neurologic reaction, showed that approximately 50% of children develop significant abnormalities in their EEG patterns during the course of natural measles. In contrast, no such changes were evident in children inoculated with the Enders vaccine.

This would indicate that central nervous system involvement, which does occur in natural measles, rarely if ever occurs with attenuated vaccine.

Dr. Harry Murray, 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 are being investigated for use in both the complement fixation and neutralization tests. The standardization of gamma globulin or 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 acquisition of new data.

Human Bone Studied For Fluoride Effects

In an effort to identify more clearly the role of fluorides in preventing dental caries, National Institutes of Health, is prepared with the cooperation of the Information Offices of the Institutes and Divisions of the National Institutes of Health.

Variability Is Found in Excretion of Labeled And Unlabeled Calcium

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

In experiments by Dr. Robert Linkins and Miss Doris Craven, Laboratory of Biochemistry, weanling rats were fed intraperitoneally with a solution containing Ca45 and a trace amount of unlabeled calcium. Urine was collected at the end of 30 minutes and 60 minutes, and analyzed for radio-calcium and total calcium.

Blood Analyzed

One hour after injection, blood from each animal was also analyzed for Ca45. A comparable group of rats (Group II) were denied food for 12 hours and the experiment repeated.

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 starved rats. On the other hand, the total amount of calcium excreted remained the same in starved and unstarved animals.

While a slower absorption of the injected Ca45 is logically accounted for this diminished excretion by Group II rats, additional experiments showed that plasma of similarly starved rats contained as much radio-calcium 30 minutes after injection as did non-starved controls.

Although the explanation for this discrimination against radio-calcium is not readily apparent, there is a tendency to believe that the renal clearance of Ca45 and Ca40 differs intrinsically.

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It appears that the ions showing change, presumably oriented on the bone crystal surface, 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 lies in the rapid and sensitive analysis of proteins for their amino acid content, as has been made by Dr. H. A. Saroff, a physical biochemist at the National Institute of Arthritis and Metabolic Diseases.

Dr. Saroff believes that vitamin E stabilizes certain essential fats in body tissues. The functions of almost all B vitamins have been determined by their presence in the carbohydrate metabolism of animals, but the functions of vitamin E have been difficult to establish because vitamin E is required by only a few species of animals. Vitamin E can be called antioxidant, agreeing with the results of Dr. Bieri's studies, to explain the 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 vitamin E, but symptoms were 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 unique functions when compared with the function of other vitamins. One of Dr. Bieri's more recent publications on the 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, at the Elgin State Hospital, Elgin, Illinois, has shown that vitamin E stabilizes certain essential fats in body tissues.

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Responses 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, chromosomes counts and anomalies, sex hormone receptor, cell surface variations, immunologic response, and virus susceptibility.

A report by scientists of the National Cancer Institute's Laboratory of Chemical Pharmacology suggests the possibility of characterizing four morphologically indistinguishable cell lines by their response to certain chemicals. The strains are: HeLa, a line of malignant cells derived from a patient with cervical cancer; and three lines, designated as D227, D189, and D164, which resulted from spontaneous in vitro transformation of normal human fibroblasts into cells histologically similar to malignant cells.

Strain D227 was the only line to respond to Suramin sodium. After one to two days' exposure to this compound, D227 exhibited a number of changes, including glosite-like cells with missing nuclei and moth-eaten cytoplasm, fragmentation and beading of the cell membrane, pronounced vacuoles appearing in the cytoplasm of cells of strain D189 after three days' exposure to .01 mg. hydrocortisone per ml. of nutrient medium. Exposure to .1 mg. per ml. of hydrocortisone for ten days produced sporadic vacuolization in D164 cells and cellular enlargement and nuclear aberration in HeLa cells.

These findings demonstrate that the four lines are free from cross-contamination, and suggest that the D derivatives represent completely different biological variants.

Henry C. Orr and Dr. Morris D. Bunin collaborated on the report, which appears in the April issue of The Journal of the National Cancer Institute.

Dr. Bunim Cites Impressive Gains Over Arthritis

"The tremendous growth of research on arthritis and the other rheumatic diseases during the past ten years has yielded impressive dividends," NIAMD's Dr. Joseph J. Bunim told a recent conference sponsored by the Canadian Arthritis and Rheumatism Society in Toronto, Canada.

"Two serious and crippling diseases have now become preventable," he said, "and the development of newer and more powerful cortisone-like drugs has brought relief from pain to thousands of arthritics."

Penicillin Prophylaxis Used

It has now become possible to prevent rheumatic heart disease and recurrences of rheumatic fever by the prophylactic use of penicillin. In goat, another rheumatic disease, the recurrent acute attack of goyti arthritis can be prevented, as can the "gouty tophi" or nodules which form in joints and other parts of the body.

Within the past ten years four effective anti-gout drugs have been developed; only one, colchicine, had been developed previously. For rheumatoid arthritis patients, a whole spectrum of new anti-inflammatory corticosteroid drugs, all more powerful than cortisone, have been developed to reduce pain and swelling.

Speaking about medical research in general, Dr. Bunin said that an inherent principle is that research goals should not and cannot be too narrowly defined. Many times, discovery of interest in one disease field turn out to have their gain.
Latent Diabetes Seen Social Debit in Survey Conducted in England

Detection of latent diabetes and the epidemiology of diabetes in general were discussed by Joan B. Walker, M.D., Head of the Diabetic Department, Leicester Royal Infirmary, Leicestershire, England, at a recent NIAMD-sponsored seminar.

"The magnitude of the public health problem in dealing with latent diabetes has yet to be appreciated fully," stated Dr. Walker. "We do not know how far the latent condition gives rise to the loss of energy in earlier years. Fatigue or lassitude is the most constant feature of poorly controlled diabetes, which, in itself, is a factor no society can afford to ignore."

First British Survey

Dr. Walker's survey, sponsored by the British Diabetic Association, was the first of its kind to be conducted in England. After careful deliberation as to which detection method would disclose the most precise picture of England's overall diabetes problem, Dr. Walker decided to study a complete natural population group, patterned along the lines of the Wilkerson-Krall survey of Oxford, Massachusetts, in 1947.

Dr. Walker and her team of three field workers—a biochemist, a technician, and a photographer—concentrated on the village of Ibstock, in the midlands of England. In Ibstock, the population of 5,405 (1951 census) is nearly static, with fewer than 50 persons coming into or leaving the village annually. The general practitioners in the area and the staff at the diabetic clinic localize all diabetes cases from town cooperated in the study.

Tested Enzymatically

Ibstock has been surveyed in 20 power months during the period from May 1, 1957, to July 1958. Urine samples from 81 percent of the town's population, or 4,501 people (2,071 males and 2,034 females) over five years of age, were tested by an enzymatic method (Clinistix) for detecting the presence of sugar. In addition to the 33 known diabetics in Ibstock, the tests disclosed an additional 167 unreported glycosurics, whose physicians placed them immediately on an appropriate dietetic regimen.

Dr. Walker's comparison of certain factors in the affected and in the unaffected population shows that a gradual rise of the glucose-tolerance curve appears to follow the rise in age of the suspected glycosuric. The sex distribution ratio also changed. In the newly formed glycosurics among the 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.

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 Infections Diseases.

Using homologous antibody labeled with fluoresceinisothiocyanate, the investigators identified 34 CTF virus isolates 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 sucking 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 stage of ticks. In the past each isolate had to be identified by time-consuming neutralization tests in suckling mice.

Using the same technic in another investigation, Drs. Burgdorfer and Lackman have succeeded in identifying R. rickettsii, the etiological 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 the nervous system, the technic always produced clinical or serological evidence of Rocky Mountain spotted fever infection in guinea pigs. Tryptic facts of rickettsiae did not cause the disease when injected into guinea pigs.

Studies Describe Ion Flow Through Nerve Membrane

Biophysical studies of electrical currents across the squid axon membrane confirm and extend the validity of nerve axon 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 these studies in the first 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 accurately the delayed rise of the potassium current. Although more complex, it was found to apply under a variety of experimental conditions. Both formulae 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 highly complex 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 nurse-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) had suffered their first attack of rheumatic fever not more than 28 days previously, and 3) 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 prednisone which totaled 3 grams over a 12-week treatment period; the remaining patients were given doses of acetylsalicylic acid (aspirin) 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 reexamined and the incidence of residual heart disease in each group compared.

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 prednisone group and 16 in the aspirin group recovered completely with no signs of residual rheumatic heart disease, whereas 16 prednisone and 7 aspirin-treated patients 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 heart disease,” concluded the investigators.

The chief action of both prednisone and salicylates appears to be to suppress 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 the risk of prolonged steroid therapy was unwarranted, although no serious side effects of prednisone were noted in this study.

ARTHRITIS

(Continued from Page 4)

In conclusion, cortisone appears to be a valuable therapeutic agent for the treatment of rheumatic fever, but its value is not as great as that of antiphlogistins, such as salicylates. The use of cortisone alone is not advisable but rather combined with other antiphlogistic agents. More research is needed to establish the optimum dosage and duration of treatment with cortisone.

DIABETES

(Continued from Page 5)

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 other anxieties, was predominant in 50 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 at 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 know whether the control of obesity during this phase would alter absolutely or delay the onset of symptomatic diabetes. There appears to be a need to observe the parous woman, heavy-weight, or mother of an infant.”

Dr. Walker echoed the opinion 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.”

LARGE POPULATION GROUP REPORTS INCIDENCE OF ORAL ULCERATED LESIONS

Hepres labialis (fever blisters) and aphthous stomatitis (canker sores) are both recurrent painful ulcerations of the mucous tissues of the mouth. A study of these disorders as they occur in a large population group has 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 lesions. Participants 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. Additionally, participating were nursing students at the Philadelphia General Hospital and the Presbyterian Hospital.

Cheeked 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 labialis while twenty percent had aphthous ulcers. On the other hand a significant sex difference was seen in the 57% of females and 52% of males that had aphthous ulcerations. In addition these prevalence levels were essentially the same as 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 point to an etiological difference between the two diseases.

These studies, reported in the Journal of Oral Surgery, Oral Medicine, and Oral Pathology, were under the direction of Dr. L. I. 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 volunteer 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 Brethren and Mennonite Church 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 1953 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 fluororadiograph, 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 11. The dates and hours of its scheduled appearance here are: March 2, 8 a.m. to 4 p.m.; March 3, 9 a.m. to 5 p.m.; March 20, 9 a.m. to 5 p.m.; and March 31, 8 a.m. to 4 p.m.

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 Washington 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, DRS (center). Dr. Williams adapted 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.

DRG Scientist Receives Honorary D.Sc. Degree From Michigan Univ.

Francis L. Schmehl, Chief of 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 1966.

"Annie" Dates Are Set for Middle of January

The nights of January 18, 19, 20, and 21 have been set by the R&W Hamsters 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.

Preceding the public performances, "Annie" will be presented for CC patients and their friends and relatives on January 17.

NIH 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 its allied sciences 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 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 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."
Sixteen NIH employees received incentive awards November 23, 15 of them at a joint ceremony in Wilson Hall (see the Record of Nov. 22) and one at a separate ceremony in the conference room of the new DBS Building (see story on this page). Pictured here are the 16 recipients and some of those who participated in the presentations. Top row, from left: Observing the Wilson Hall affair in armchair comfort are Dr. Harold P. Morris, CNI, Chairman of the NIH Board of Employee Awards, and Richard L.Seggel, NIH Executive Officer, who acted as master of ceremonies. Esther Kohn, a secretary in the Community Services Branch, NIMH, receives her award from Rod Mercker, Administrative Assistant of that branch; Pauline H. Woll, Information Specialist, NCI, receives hers from Dr. Kenneth M. Endicot, NCI Director; Rose B. Daniele, a secretary, and Christine Andronicus, Film Librarian, both of the Photographic Section, DRS, get their awards from Chris A. Hansen, DRS Chief; and Dorothy P. Horlander, Chief, Special Events Section, CC, receives award congratulations from Dr. Jack Masur, CC Director. Bottom row, from left: William J. Stalters, Assistant Administrative Officer, DBS, presents award check to Irma E. Strunk, Travel Clerk in the Office of the Director, DBS, at the special DBS ceremony. Recipients of a group award to members of the Arthritis and Metabolic Diseases Nursing Service, CC, are Mary Shea, Head Nurse, Unit B West; Marie Altman, Assistant Head Nurse, and Mary Mitchell, Head Nurse, both of Unit 9 East, with Dr. Masur who made the presentation. Following receipt of their group awards from Mr. Hansen (third from right) are members of the Drafting Unit, Medical Arts Section, DRS: Helen N. Smith, Unit Head; Martha B. Smith, Elva R. Sawyer, Kenneth G. Carmey, Marion L. Gundy, and Dorothy Forbury. Clifford F. Johnson, Chief of the Public Information Branch, ORI, receives his award from Lealon E. Martin, who at that time was Acting Chief, ORI.—Photos by Bob Pumphrey, except lower left, by Norman MacVicar.

Dr. E. L. May Named NIMD Section Chief

Dr. Everette L. May has been appointed Chief of the Section on Medicinal Chemistry (formerly the Section on Analogies) in NIMD’s Laboratory of Chemistry. He succeeds Dr. Nathan B. Eddy 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 wrapping 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)

sending a variety show, and the Scottish Rite Temple is providing an entertainment and dance. Each Institute is giving parties this week for the patients on its wards, with a Santa Claus for the children.

An 8-foot Christmas tree, trimmed in gold and white, stands in the CC 14th floor auditorium, a gift of the D.C.-Montgomery County Down-to-Earth Garden Club. The tree was previously on display at the Annual Christmas Greens Exhibition sponsored by the National Capital Garden Club League at the Botanic Garden.

Irma E. Strunk Wins Performance Award

At a special award ceremony November 23, Irma 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 159 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.