

NIH



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NIH TEAM TAKES SOFTBALL CHAMPIONSHIP



Members of the winning NIH softball team (left to right), Marshall Lyles, Sidney Murphy, and Gustaf Bengtson, discuss strategy before the final game.

The hard-hitting NIH softball team came through to win the Montgomery County Softball title last week for the third consecutive year.

The NIH team slugged its way to a 6-1 victory Monday night and followed up with a 7-1 clincher Wednesday, defeating a team from Myers & Quigg, Inc., in two straight games of a three-game playoff.

A sizable crowd, including many loyal supporters from NIH, saw the NIH'ers rout their opponents with a barrage of 25 hits and an airtight defense.

Outstanding in both games were the teamwork and alert playing of the winners. The fastball pitching of Thomas South and expert fielding of shortstop Clarence Isreal were features of the series.

Elwood Lyles, who has led in home runs all season, walloped a three-run homer in the 6th inning to highlight Wednesday's game.

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NIH Budget for 1958 Increased 15 Percent

The NIH appropriations totaling \$211,183,000 for the fiscal year 1958 have been passed by Congress and approved by the President. This is an increase of \$28,176,000 over last year's budget.

The appropriations provided for each Institute are as follows: NCI, \$56,402,000 (16.5 percent increase); NIMH, \$39,217,000 (11.4 percent increase); NHI, \$35,936,000 (7.6 percent increase); NINDB, \$21,387,000 (14.7 percent increase); NIAMD, \$20,385,000 (28.3 percent increase); NIAID, \$17,400,000 (30.8 percent increase); and NIDR, \$6,430,000 (6.7 percent increase).

An allocation of \$14,026,000 (15.7 percent increase) was also made for NIH general research and services.

Funds constituting the major portion of the budget are allocated as follows: research projects grants,

DESERVING EMPLOYEES RECEIVE CASH AWARDS AT NIH CEREMONIES

Cash awards for superior performance and suggestions, approved by the NIH Director, were presented to groups and individuals recently at ceremonies at NIH.

Thirteen members of the Medical Arts Section, DRS, received a group award of \$870 for superior performance on July 18. At the presentation Dr. Harold Morris of the Awards Board commended the Section for "imagination and creativeness in furnishing exceptionally high quality illustrative material to NIH scientists, thus enhancing the national and international reputation of NIH."

Over 5,000 separate assignments were completed by the Medical Arts Section during 1956.

At the same ceremony, Philip R. Joram, biologist in Medical Arts, received \$100 for developing a disposable plastic tray for paraffin embedding of tissues.

Kenneth E. Goodger, supply officer in the Supply Management Branch, DBO, was honored July 31 for superior work performance. Mr. Goodger was awarded \$500 for launching a program of supply control and reorganization that has

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\$99,345,000; NIH research, \$37,917,000; training grants, \$32,932,000; professional and technical assistance, \$16,254,000; control grants to States, \$8,375,000; research fellowships, \$6,440,000; Biologics Standards, \$2,105,000; field investigations, \$1,900,000; and other programs, \$5,915,000.

In addition to the Institutes' regular appropriations, \$30 million was provided for grants for construction of research facilities, the same amount provided for this purpose in 1957.

Improved Test Found for Rheumatoid Arthritis

No. 190 in a Series



Stanley Ward, research technician, NIAID, adds sensitized Bentonite particles to dilutions of blood serum of patient suspected of rheumatoid arthritis. Most of the materials for conducting the flocculation test are shown here.

A simple and rapid diagnostic test for rheumatoid arthritis has been developed by the combined efforts of NIAID and NIAMD scientists.

A painful and crippling joint disease, rheumatoid arthritis can result in joint deformity and complete disability. Early diagnosis is therefore essential for effective treatment.

Other diagnostic tests for this disease are time-consuming and require an elaborate procedure, extensive laboratory equipment, and highly trained personnel.

The new procedure is called the Bentonite flocculation test (BFT). It can be performed in a few minutes, rather than days, and requires only simple materials and equipment. The simplicity of the new test will make it possible for the average medical technician or physician's assistant to perform 100 or more such tests a day.

The new test utilizes a colloidal clay (Bentonite) that is used widely in industry. Patients with active rheumatoid arthritis have in their blood a "rheumatoid factor," and Bentonite is used to seek it out.

This is done by mixing, or sensitizing, Bentonite with normal human

gamma globulin. This mixture is placed on a slide, and a drop of blood serum from the person being tested is added to it. If the test is positive, the Bentonite particles will clump (flocculate) within a few minutes. The tiny clumps can be detected under the microscope.

The test was performed on 25 patients with typical rheumatoid arthritis. In 20 patients, or 80 percent, the tests were positive. Applied to 163 control patients with other types of rheumatic disease as well as a wide variety of other disorders, only three, or 1.8 percent, resulted in false positive reactions.

The investigators emphasize that this is a preliminary report and that the findings have not yet been confirmed in other research laboratories.

The new test was developed by Drs. John Bozicevich and Jules Freund, NIAID, in collaboration with Dr. Joseph Bunim, NIAMD. It is based on a flocculation test for trichinosis that was developed in 1951 by Dr. Bozicevich in collaboration with Dr. John E. Tobie and Stanley B. Ward, all of NIAID.

Publication Preview

The following manuscripts were received by SRB Editorial Section between June 24 and July 5.

Adams, S. Problems in communicating Russian science.

Allen, A. M., et al. Primary cutaneous inoculation tuberculosis in the *Macaca mulatta* monkey.

Altland, P. D., et al. Effects of exposure of obese rats to simulated high altitudes.

Axelrod, J. The O-methylation of epinephrine and other catechols, *in vitro* and *in vivo*.

Baker, R., et al. The localization of left-to-right cardiac shunts: An experimental study of indicator dilution curves following left heart and aortic injections.

Ball, W. C., et al. Failure of chronic adrenal venous congestion to produce sodium retention and increased aldosterone excretion in the dog.

Belleville, R. E., et al. Use of differential lever pressing rates for screening analgesic drugs. II. Comparative effects of methadone, meperidine, and morphine.

Bondareff, W. Morphology of aging in neurons. Brady, R. O. Sphingosine.

Branham, S. E. Reference strains for the serologic groups of meningococcus.

Brodie, B. B., et al. Storage and release of serotonin—possible significance in chemical mediation in brain.

Burk, D., et al. A rationale of cancer chemotherapy based on primary inhibitions of glucose phosphorylation (hexokinase reaction) at substrate, coenzyme, and enzyme levels.

Burns, J. J. Missing step for the biosynthesis of L-ascorbic acid in man, monkey, and guinea pig.

Cohen, L. A. Electronic control of steric hindrance in hindered phenols.

Cohen, R. A. Introduction to sociology issue of psychiatry.

Cornfield, J., et al. Biomathematical models for the interpretation of medical experiments using isotopically labelled tracer compounds.

Cotlove, E., et al. An instrument and method for automatic, rapid, accurate, and sensitive titration of chloride in biological samples.

Cotten, M. deV., et al. A comparison of the effectiveness of adrenergic blocking drugs in inhibiting the cardiac actions of sympathomimetic amines.

Dissanaike, G. A., et al. Radioactive tagging of hookworm larvae (*Necator americanus*) with p^{32} .

Eddy, N. B. Structures related to morphine. IX. Extension of the Grawe morphinan synthesis in the benzomorphan series and pharmacology of some benzmorphans.

Evarts, E. V. Contributions of neuropharmacological studies to our present concept of a possible chemical basis for psychosis.

Eyles, D. E., et al. Laboratory aids in the diagnosis of toxoplasmosis.

Field, J. B., et al. Further characterization of an insulin antagonist in the serum of patients in diabetic acidosis.

Field, J. B., et al. Urinary excretion patterns of some B-vitamins in diabetics with and without degenerative complications.

Folk, J. E., et al. Carboxypeptidase-B. I. Purification of the zymogen, and specificity of the enzyme.

Fredrickson, D. S., et al. An improved technique for assay of $C^{14}O_2$ in expired air using the liquid scintillation counter.

Gilliam, A. G., et al. The role of Federal Government in cytologic investigations.

Guth, L. Taste buds on the cat's circumvallate papilla after reinnervation by glossopharyngeal, vagus, and hypoglossal nerves.

Hayaishi, O. Studies on oxygenases.

Hayes, R. L., et al. Procedures for computing the mean age of eruption and associated statistics for populations.

Hollister, W. G. Fostering physical and mental health as we work with children.

Hueper, W. C. Relation of specific environmental factors to causation, precipitation, and aggravation of cancer.

Jakoby, W. B. Aldehyde oxidation. I. Dehydrogenase from *Pseudomonas* fluorescence.

Kayhoe, D. E., et al. Acquired toxoplasmosis: Observations on two parasitologically proved cases treated with pyrimethamine and triple sulfonamides.

Keitel, H. G. The concentration of inorganic phosphate and glucose in plasma of prepubertal children.

Koegel, R. J., et al. The solid state infrared absorption of the optically-active and racemic straight chain α -amino acids.

Lane, M., et al. The comparative pharmacology in man and the rat of the riboflavin analogue U-2112.

Liddel, U., et al. Infrared spectroscopic studies of hydrogen bonding in methanol, ethanol, and *t*-butanol.

MacKenzie, M. Addendum to a collagen-like compound isolated from bovine spinal cord-I.

Masur, J. A look around the corner--implications for medical care.

Mihalyi, E., et al. Some physical and chemical properties of the ribonucleic acid contaminant of rabbit muscle myosin preparations.

Moore, J. W. Reduction and processing of biological data.

Phillip, C. B. A new genus and species of *Tabanidae* (Diptera) representing the first recognized diachlorine horsefly from the interior of China.

Phillips, B. P. The pathogenic mechanisms in amoebiasis.

Roboz, E. A collagen-like compound isolated from bovine spinal cord-I.

Roethel, S. B., et al. Dermal lactic acid content and the development of the local Shwartzman reaction.

Sargent, L. J. The structure of *x*- ω -Bromoacetyl-*n*-acetyl-9, 10-dihydroacridine.

Schmid, R. Neuere Gesichtspunkte auf dem Gebiete des Gallenfarbstoffwechsels.

Shore, P. A., et al. Influence of various drugs on serotonin and norepinephrine in the brain.

Silverman, M., et al. A simple method for the detection of N-formiminoglutamic acid in human urine.

Simpson, R. B., et al. Decrease of sulfhydryl titer in serum albumin.

Spicer, S. S., et al. Histological localization of urinary and pulmonary tract glycogen.

Steinberg, D., et al. Preparation of tritiated proteins by the Wilzbach method.

Streicher, E., et al. The Neurobiological research program of the Section on Aging of the National Institute of Mental Health.

Vaughan, M., et al. Liquid scintillation counting of C^{14} and H^3 -labeled amino acids and proteins.

Watkin, D. M. Clinical, chemical, hematologic, and anatomic changes accompanying the repeated intravenous administration of fat emulsion to man.

Watkin, D. M. Reactions after repeated administration of "Lipomul I. V."

Welch, G. H., et al. The effect of mephen-termine sulfate (wyamine) on myocardial oxygen consumption, myocardial efficiency, and peripheral vascular resistance.

Williams, R. H. The changing matrix of American culture and problems of aging.

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DR. HEPPEL APPOINTED NIAMD SECTION CHIEF

Dr. Leon A. Heppel has been appointed Chief of the Section on Enzymes and Cellular Biochemistry, NIAMD. He replaces Dr. Bernard L. Horecker, who will continue as Chief of the Laboratory of Biochemistry and Metabolism.

Since joining NIH in 1942, Dr. Heppel has participated in research on toxicology and enzymology. In 1953 he was awarded a Guggenheim Fellowship and worked in the Molteno Institute, University of Cambridge, England. While there, he studied ribonucleic acid structure and polynucleotide synthesis by transfer reactions, a field in which he is actively engaged.

Dr. Heppel received a B.S. degree in chemistry and Ph.D. in biochemistry from the University of California, and his M.D. degree from the University of Rochester. He is a native of Granger, Utah.

New Hours in Effect At CC Snack Bar

The snack bar on the B1 level of the Clinical Center is now open from 7:00 p.m. until 5:30 a.m. for the use of night employees.

A take-out service is being provided on a trial basis from 9:00 a.m. to 11:15 a.m. Coffee, milk, sweet rolls, doughnuts, fruit juices, and hot chocolate will be sold. Sandwiches will be available between 10:30 a.m. and 11:15 a.m.

Employees are requested to use this service for take-out items during these hours.

BASEBALL Contd.

At a ceremony after the deciding game, Forest Gustafson, head of the Montgomery County Recreation Department, presented the championship trophy to the team and individual trophies to team members.

NIH's team, under the able management of Britton Smith and George DuVall, will now represent Montgomery County in the American Softball Association playoffs at Taft Playground, 18th and Perry Sts. NW. Beginning on August 15, the county champions will compete against 16 other teams from the D. C. area.

NIH is now tied for first in the D. C. Amateur Softball League "A" Series, with nine wins and one defeat. On August 13 NIH will play a deciding game against a team from the University of Maryland.



EMPLOYEE HEALTH NOTES

Americans traveling abroad must guard against diseases that are no longer a health problem in the United States.

Many immunization rules are standardized by agreements between governments. Other immunizations are recommended for the traveler's protection.

The United States has no immunization requirements for persons leaving the country. However, a traveler must be vaccinated against smallpox no longer than three years before he expects to return. Vaccinations against cholera and yellow fever are also required of persons arriving from infected areas.

Most foreign countries, except those of Western Europe, require proof of a smallpox vaccination, which should be repeated oftener than three years if a person travels to a part of the world where smallpox is prevalent.

Vaccination against yellow fever is recommended, and sometimes required, for visitors to Central or South America, Africa, and the Pacific area. In some cases, typhus, cholera, and influenza inoculations may also be advisable.

All travelers should be inoculated against typhoid fever and tetanus. Both of these require a series of three shots over an interval of time. All children should receive diphtheria shots, which are usually given at monthly intervals in combination with whooping cough and tetanus vaccine.

These immunizations, with the exception of yellow fever, may be obtained from a private physician, and must be recorded on an international vaccination certificate.

Vaccinations should be obtained several weeks before leaving the United States, as it takes time to develop immunity. The Public Health Service provides immunizations to Government employees and their dependents traveling under official orders.

Consult your Employee Health Service if you have further questions regarding immunizations.

EMPLOYEES CITED AT AWARDS CEREMONIES



Award-winning members of the Medical Arts Section are (top row) Doris Marshall, Dorothy Potberry, Walter Ashe, Eleanor Landreau, William E. Loechel, and Marian Gundy; (bottom row) Helen T. Grogan, Ariel Smith, Inez M. Demonet, Alice Brooks, Philip Joram, George Marsden, and Helen Smith.

AWARDS Contd.

saved over \$15,000 in operating expenses in the past 10 months. Within that time he initiated 34 projects resulting in tangible savings and gains in operating efficiency.

At the awards ceremony where four employees of the Supply Management Branch, DBO, were cited, Mr. Albert F. Siefert, NIH Executive Officer, expressed his satisfaction with the open-minded, imaginative approach of the branch. The attitude of the supervisors and employees in SMB, he said, is reflected in the efficiency of their operation and has resulted in one of the highest rates of participation in the awards program.

A \$150 group award was presented to David S. Smith and Frederick M. Johns of the Supply Management Branch, DBO, on July 31. By comparing shipping rates and obtaining the most economical facility possible, they have reduced transportation costs in the Supply Unit by more than \$3,000 in the past year.

Martha R. W. Apperson, procurement analyst in the Supply Management Branch, received \$135 July 31 for superior work performance. Her outstanding skill, sincerity, and attention to detail have resulted in many improvements to procurement service, and more effective coordination between the Supply Management Branch, the Institutes' ordering offices, and other Government activities.



Award-winners Frederick M. Johns (left) and David S. Smith check shipping rates in the Supply Management Branch.



Kenneth E. Goodger (2d from left) explains his improved system of supply storage to (left to right) James B. Davis and Theodore A. Gates, of the Supply Management Branch, and Albert F. Siefert, NIH Executive Officer.

PFC. RUSH CHOSEN GUARD OF THE MONTH

For consistently performing his duties as an NIH Guard with courtesy and efficiency, Pfc. Floyd D. Rush was chosen Guard of the Month for July. Recently Pfc. Rush was commended for his part in the recovery of two valuable diamond rings.

Pfc. Rush was born in Rolla, N. Dak. Before joining the NIH Guard Force, he served for seven years as a 1st Class Gunner's Mate in the U. S. Navy. While in the Navy, he was stationed in China, Guam, and Japan.

Obituary

Rebecca Troth Dunlop, supervisory grants clerk, DRG, died in the Clinical Center on July 17 after a long illness. A native of the Bethesda-Chevy Chase area, she attended Central High School and the Washington School for Secretaries. She came to NIH in 1950 as a clerk-typist in DRG.

Mrs. Dunlop was an active member of the Chevy Chase Senior Woman's Club, the Order of the Eastern Star and the Daughters of the American Revolution. She had been president of the Chevy Chase Junior Woman's Club.

Besides her husband, Mrs. Dunlop is survived by two sons, Robert Dunlop and James Laird Dunlop; four brothers, Edward, Robert, John, and Horace Troth; and a sister, Mrs. Elizabeth Onstot.