

## SCIENCE TALENT WINNERS TOUR NIH



The forty winners of the Eleventh Annual Science Talent Search visited NIH on March 3. The contest is conducted by the Science Clubs of America and sponsored by the Westinghouse Educational Foundation.

After a word of greeting by Dr. W. H. Sebrell, the boys and girls were divided into two groups for an inspection tour of NIH laboratories. They were taken to the Biology Section of NCI, where Dr. Ruth Merwin demonstrated the transparent chamber technique, and Dr. Clifford Grobstein explained the work of the Developmental Physiology Unit.

Another stop on the tour was NIAMD's Laboratory of Physical Biology, where Dr. Heinz Specht gave a demonstration of breath velocity measurement in air and helium oxygen mixture. From Dr. Paul Altland the group learned the use of the high altitude chamber in physiological research.

Dr. Dorland Davis of NMI described the collection of laboratory data in the diagnosis of influenza in various parts of the country for the Influenza Information Center.

## WILSON HALL ROCKS AS HAMSTERS PRESENT THEIR THIRD HIT SHOW



*Back Row:* Rosalie Kasaba, Gil Baylis, Bill White, Jeanne Walton, Bob Freise, Charlie Brown, Erv Liljegren, Frank Schmehl, Ruth Gorin, Charlie Barley, Jim Monahan, Murray Getz as the Robot.  
*Front Row:* Zelda Schiffman, Helen Field, Ray Wilding, Marie Johnson, Bob Grant, Betty Wiehle, Joe Murphy, Betty O'Toole, Jack Beecher, Roy Perry, Clara Horton.  
*Kneeling:* Rose Wolitsky, Betty Johnson, Martha Landefeld, Annabel Glockler

The Hamsters have done it again! "Twice Upon A Time" lived up to its promise of being the zaniest Hamster production. Presented in Wilson Hall on March 12, 13, and 14, the hilarious show was a complete sell-out.

At all three performances, the cast and staff of "Twice Upon A Time" received well-deserved acclaim from enthusiastic audiences. Presented in two acts, the show poked good-natured fun at modern versus primitive life.

Scientists and cavemen cavorted through courtesy of a time machine, which carried Dr. Bigbrain (Erv Liljegren) 100,000 years into the past and into the arms of luscious Loo-loo (Ruth Gorin).

Even cavemen had their problems, and one of them was the Clinical Cave with facilities for treating as many as five patients.

Highspots from the show: the robot who attends official meetings (Murray Getz), the promotion board meeting, Dr. Bigbrain's and Loo-loo's love scenes, the Clinical Cave conference, the "Movies Song" (Betty Wiehle and Bob Freise), and Two Fangs' venture into the present (Roy Perry). The Gamster chorus was especially good in a "Blue Genes" number.

Stage settings, designed and executed by Dave Ichelson, were more elaborate and realistic than any done in the past, adding much to the flavor of the show.

"Twice Upon A Time" was produced by Jack Beecher; written by Zelda Schiffman and Phil Janus; directed by Rosalie Kasaba; and choreography by Hazel Rea and Rose Wolitsky. Music was stolen from everywhere and arranged by Clara Horton.

# Role of Hormones in Metabolism

No. 69 of a Series



Joseph Foley separates hexosamines from interfering substances by means of cation exchange columns.

The endocrine glands share with the nervous system the control of body processes, such as growth and metabolism, sexual function, and water balance. How far the hormones operate independently of the brain and to what degree they serve as chemical messengers for the nervous system are questions that concern the Section on Endocrinology of NIA MD.

The problem is as old as endocrinology itself. A hundred years ago Claude Bernard presented the concept of *fixité du milieu intérieur*--namely, that the mechanisms for maintenance of body temperature and of the composition of fluids bathing the tissues are controlled by the nervous system. Although much has been learned about neurohumoral mechanisms, the questions remain unanswered.

Again, does the nervous system act directly on viscera, such as the liver and kidney, or only through the endocrine glands? Granted that the pituitary is the master of the endocrine system, what controls the pituitary?

The Section on Endocrinology, headed by Dr. Evelyn Anderson, studies endocrine function, protein and carbohydrate metabolism, and electrolyte balance of animals deprived of certain areas of the central nervous system. The objective in these studies is to throw new light on such clinical problems as



Mrs. Phoebe Prentiss extracts steroids from urine of patients with adrenal dysfunction.

the pathogenesis of diabetes mellitus, acromegaly, Cushing's disease, and thyrotoxicosis. The Division of Neuropsychiatry, Army Medical Center, is collaborating on this project.

Another problem under consideration is the influence of hormones on the metabolism of the mucopolysaccharides, tissue components with characteristics of both carbohydrates and proteins. Mucopolysaccharides increase in certain tissues in the so-called collagen diseases, such as rheumatic fever, rheumatoid arthritis, and disseminated lupus erythematosus. Changes in the amount of mucopolysaccharides in the tissues are measured by a quantitative determination of hexosamine.

The Section is also interested in the assay of hormones in blood and urine. At present, assay methods for insulin and cortisone are being studied. A bioassay for cortisone has been worked out which detects less than a millionth of a gram. Either the crude urine or extracts of urine of patients are injected into adrenalectomized mice, and changes produced in the level of the eosinophile cells in the blood of the mice give an index of the amount of cortical steroid present in the urine.

These studies are expected to give information as to the capacity of the adrenal glands to secrete hormones.

# Here and There

## Letter of Thanks

Dr. Sebrell received the following letter recently:

"Again may I thank you on behalf of the Montgomery County Chapter of the American Red Cross for permitting the Bloodmobile to come to the National Institutes of Health on Wednesday, February 27th.

Miss Bertha and Mrs. Amos did their usual fine job of recruiting for us. It is always a grand set-up and we appreciate the assistance given us by your staff.

Most of all, however, we appreciate the generosity of the donors which made possible the success of the day.

With our thanks to you and to all who contributed."

Chairman, Blood Donor Program

## Candy Sale

The Easter candy sale, sponsored by the Recreation and Welfare Association for its members, will continue through March 31. The candy is on display in the cafeteria in Building 1 and may be purchased at substantial discounts. Orders must be in by April 1, paid for in advance, and will be delivered in one week. The bulletin board in each building contains the name of the person accepting orders.

## Operations Committee

NIA MD has recently formed a small advisory committee on operational problems, including safety and safe practices, within the laboratory buildings housing its research operations. Serving on the committee are W. G. Baylis, chairman, and Theodore D. Perrine, Howard F. Brubach, Dr. Milton Silverman and George A. Brandner.

## Red Cross Drive

NIH has been assigned a quota of \$6,200 for the 1952 Red Cross Drive which terminates here March 27. According to Chairman Lyman Moore of NIMH, a total of about \$1,100 has been collected by key-men from 478 contributors during the first two weeks of the drive.

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## ACCOUNTS ARE CURRENT IN NIH FINANCES

Recalling your recent income tax struggle will make you appreciate why the Accounting and Auditing Section has a machine which is 42 adding machines rolled into one. This section of the Financial Management Branch under John Beglin has found that machine accounting is an answer to handling increases in workload without corresponding increase in staff.

The Section's 42 employees are housed in T-6. Its work has expanded greatly since 1946 when the Public Health Service began to decentralize its fiscal work. Payrolls were the first to be taken over. Payment of bills was decentralized in 1948 and the responsibility for keeping official records of financial transactions was assigned to NIH July 1, 1950.

This action and the great expansion at NIH placed heavy responsibilities on the Section, but paved the way for preparing financial information geared to NIH needs. Accounting personnel cooperate with budget analysts and administrative officers in making financial projections and supply information needed for the budget. Monthly project and other reports, showing what is spent for what, assist those in charge of NIH programs in determining future plans.

Mechanization of work and improved procedures have prepared the Section for taking on a doubled volume when the Clinical Center opens. The Section's staff has been recently strengthened by the addition of Mr. Joe Gibala, who will concentrate on internal operations. This will enable Mr. Beglin to spend most of his time spearheading the work of developing accounting procedures for the Clinical Center.

The recent pay raise was good news to us, but the payroll unit must have had mixed feelings about it. The pay bill hit the unit along with two changes in leave laws which required adjustment of all employee records. Moreover, it happened at the end of the year, when reports had to be submitted to employees and to the Bureau of Internal Revenue on tax withholdings, and when retirement and Social Se-

## CAPTAIN JOHNSON TO RETIRE ON MARCH 31

Laurence M. Johnson, Captain of the Guard and Treasurer of the Credit Union, will retire on March 31.

Captain Johnson has been with NIH for 14 years. During those years his kindness, efficiency, and sense of humor have endeared him to all NIH employees.

Actually this is Captain Johnson's second retirement. He came to NIH after retiring from his travel business in New York City.

"I went to work again because I couldn't stand being idle," says Captain Johnson. "This retirement? Well, I guess I'll spend some time traveling. I'd really like to see the West. After that I'll just have to learn to loaf."

We wish Captain Johnson happiness in his travels and hope that his itinerary will include many stops at NIH.

curity reports are called for. Yet, back salary was paid ahead of schedule, tax withholding statements were distributed in record time and other reports were filed promptly. Special precautions are taken to protect retirement records. A fireproof safe protects one set of records and microfilmed copies are stored in a separate location. The retirement of NIH employees, incidentally, is now covered by three separate systems.

Paying of millions of dollars in bills at NIH is pretty apt to go unnoticed -- unless we are concerned over our travel check. (Incidentally, unless really complicated, your voucher is audited, recorded, and sent to the Treasury in 4 days after receipt.) The audit unit must be familiar with laws and Comptroller General decisions and be sure that all requirements are met before clearing bills for payment. In a tight market, it is important that the people who sell to us get paid promptly if we are to get the material we need to carry on research. The unit is proud of its efforts in speeding up payments. At a time when the volume of vouchers is at an all-time high, and constantly increasing, vouchers are being paid promptly on receipt -- backlogs are nonexistent.

## NIH Spotlight



Ann McHugh

It's up to attractive Ann McHugh to see that supplies keep rolling in to NIDR offices and laboratories. As purchase clerk in NIDR's administrative office, Mrs. McHugh is responsible for writing and checking purchase orders for all equipment used at NIDR and its three field stations in Grand Rapids, Mich., Rochester and Staten Island, N. Y.

"Keeping track of orders for everything from mouse cages to scotch tape can be complicated," Ann says, "but we have a good system worked out so things don't get mixed up."

Ann hails from Jacksonville, Florida. Her family moved to Washington when Ann was a teenager, and she attended Central High School and Washington School for Secretaries.

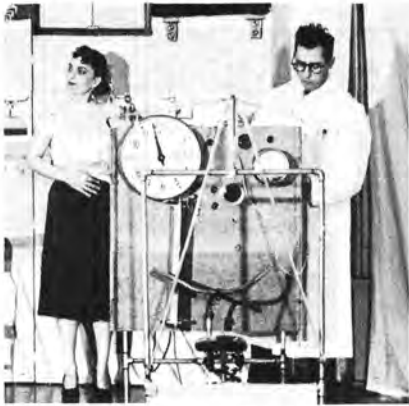
In 1940, Ann started her Government career with a job in the War Department. When she moved to Bethesda, Ann transferred to Bldg. T-6 where she worked in the PHS Appointment Section. During World War II, Ann went back to Florida while her husband was in the Army.

Three years ago, she returned to PHS and NIDR as a secretary in Dr. Dean's office. She became a purchase clerk last July. Ann likes the job because it offers a variety of tasks. In addition to her routine duties, she types manuscripts for NIDR scientists, handles commissioned officers' and Civil Service leave records, takes dictation, and writes letters.

Ann's spare time is taken up with three lively children: Richard, 8, Sharon, 10, and Vincent, 12. She is also a member of the Mother's Club of St. Mary's church in Rockville.



# SCENES FROM THIRD HAMSTER SHOW, "TWICE UPON A TIME"



Swanhilda (Betty Wiehle) ignores Dr. Bigbrain and his time machine. He has refused to submit a travel request.



"We're poor blue genes." Left to right: Rose Wolitsky, Betty Johnson, Martha Landefeld, and Annabel Glockler.



First specimen for the Clinical Cave? Loo-Loo (Ruth Gorin) and Lark (Marie Johnson) fight over Dr. Bigbrain (Erv Liljegren). Fishbones (Jack Beecher) looks on approvingly.



Meeting-attending robot (Murray Getz) is adjusted by Bill White while Helen Field watches.



"Say, you're not Dr. Bigbrain's bride, are you?" inquires Dr. Addlebert (Bob Freise). No comment from Two Fangs (Roy Perry).



"Primitive clinical men are we," sings the Clinical Cortet. Left to right are Charlie Brown, Ray Wilding, Gil Baylis, and Charlie Barley.