Dr. William T. S. Thorp, now serving as Chief of the Laboratory Aids Branch, has been named dean and director of the School of Veterinary Medicine at the University of Minnesota. He will leave NIH August 6.

Dr. Thorp was born in Canada and spent his youth in Michigan. He received his Doctor of Veterinary Medicine degree in 1935 and his master's degree in animal pathology two years later. Both degrees were earned at Michigan State College, East Lansing, where he became instructor of animal pathology in 1937.

In 1938, Dr. Thorp joined the staff of Pennsylvania State College. There, in addition to carrying out his own research in animal diseases, he was responsible for developing the animal disease research program at the college experiment station.

In 1948, he was commissioned as a Veterinary Director in the Public Health Service. In addition to his duties as Chief of the Laboratory

A pilot study on the control of schistosomiasis by the use of a molluscicide developed by the NMI Laboratory of Tropical Diseases has recently been undertaken in Egypt. Dr. Elmer G. Berry of LTD is directing the study, which is jointly sponsored by the Foreign Operations Administration, the Egyptian Government, and NMI.

Schistosomiasis has long been recognized as Egypt's most debilitating disease. At the present time, the most practical method of combating the disease is through the extermination of the two species of snails, Bulinus contortus and Biomphalaria boissyi, which serve as the intermediate hosts of the parasite.

The National Institutes of Health has received as a gift the most powerful electron accelerator of its kind. Donated by the Liggett and Myers Tobacco Company, the machine is a 3,000,000-volt Van de Graaff generator constructed in 1950 by the High Voltage Engineering Corporation of Cambridge, Mass., for an experimental program of the tobacco firm. It produces high-voltage electron energy 25 times more powerful than that from any other commercially available electron generator.

The 30-ton apparatus is now being installed in the radiation wing of the Clinical Center, where it will be used in research on the biological effects of high-energy radiation. It will also be made available for use by other Federal agencies.
Studies of the Amino Acids
No. 121 in a Series

Intermediate Steps in the Biosynthesis of Threonine

\[
\begin{align*}
1. & \quad \text{ATP} + \text{HOOC} - \text{CH} - \text{CH}_2 - \text{COOH} \xrightarrow{\text{Aspartate}} \text{NH}_2 \\
& \quad \text{HOOCC} - \text{CH} - \text{CH}_2 - \text{COOH} \\
2. & \quad \text{ADP} + \text{TPNH} \xrightarrow{\text{β-Aspartyl phosphate}} \text{NH}_2 \\
& \quad \text{HOOCC} - \text{CH} - \text{CH}_2 - \text{COOH} \\
3. & \quad \text{TPN}^+ + \text{DPNH} \xrightarrow{\text{Aspartic β-semialdehyde}} \text{NH}_2 \\
& \quad \text{HOOCC} - \text{CH} - \text{CH}_2 - \text{CHO} \\
4. & \quad \text{TPN}^+ + \text{DPN}^+ \xrightarrow{\text{Homoserine}} \text{NH}_2 \\
& \quad \text{HOOCC} - \text{CH} - \text{CH}_2 - \text{CH}_3 \\
\end{align*}
\]

Intermediate steps in the biosynthesis of threonine.

Two substances that occur as intermediates in Nature’s production of threonine—a nutrient essential to man—have been discovered by Dr. Simon Black and Mrs. Nancy G. Wright of NIAMD’s Laboratory of Intermediate in Nature’s production to man—have been discovered by produced in the body but is synthesized by other organisms, particularly those of threonine—a nutrient essential to biochemists because it is one of the “high energy” compounds which are especially suited for use by the living cell in the synthesis of larger and more complex compounds. Very few amino acid derivatives of this type are known, although their existence is suspected and they are the subject of intensive scientific search.

In the step-by-step process by which threonine is synthesized in living cells, the newly discovered compounds appear as intermediates, as shown in the above chart, which the two NIAMD scientists were able to synthesize for the first time. The newly discovered substances are also precursors of homoserine, another amino acid. The latter is not known to occur in proteins but is an important intermediate in the biosynthesis of several amino acids other than threonine, such as methionine and isoleucine, which occur in body proteins.

When Dr. Black and Mrs. Wright began their studies of aspartic acid, one of the 20-odd amino acids that constitute the bulk of the body’s proteins, they had no clue where the search would lead. They plan to continue studying the enzymatic reactions of these and other amino acids, seeking more knowledge of Nature’s machinery for building proteins, probably the most important of the substances of which living matter is composed.
The four tennis courts at the Glenbrook Club are ready for use by R & W tennis club members, their guests, and Clinical Center patients. Lessons will soon be arranged for club members.

Memberships in the club are still available. Call Peg Badger, ext. 3137, or Cal Baldwin, ext. 3545, for applications and further information.

If you are interested in taking golf instructions, call Bob Miche-litch on ext. 2188. The lessons at Glenbrook Club have proved so popular that more evening classes are being planned.

The NIH softball team is leading both leagues in which it competes. The team is unbeaten in the D. C. Recreation League, and has only three losses in the Maryland League. If you would like to see the team in action, games are scheduled at NIH at 6:00 p.m. on July 20 and 22.

The R & W Association has purchased six new picnic tables for use by NIH employees who enjoy eating their lunches on the grounds. Two of the tables are at Top Cottage, two are near Building T-6, and the remaining two are near the woods adjoining Building 6.

CONGRESS VOTES 1955
NIH BUDGET INCREASE

The Senate and House gave their final approval June 30 to a budget exceeding $1-1/2 billion for the Department of Health, Education, and Welfare for fiscal year 1955. The total, as sent to the White House for the President's signature, is nearly eleven million more than the administration had requested. Nearly all of the increases voted involve medical programs.

Six Institutes figured prominently in the additional funds appropriated by Congress--NCI, $21,737,000, an increase of $2,007,000; NIMH, $14,147,500, an increase of $1,687,500; NIH, $16,668,000, an increase of $2,098,000; NIAMD, $8,270,000, an increase of $1,000,000; NMI, $6,180,000, an increase of $250,000; and NINDB, $7,600,500, an increase of $2,837,500.

LOST AND FOUND

The following items have been found at NIH:
- Fountain pen
- Tobacco pouch
- Screwdriver

The above articles may be seen in the Guard Office, Room 119, Building 1, and those listed below in the Guard Office, Room 1A06, Building 10.
- Lady's gloves
- Notebook
- Sweat shirt
- Thermos bottle
- Boy's jacket

SAFE HANDLING OF INFECTIOUS MATERIAL

During intranasal inoculation of pathogenic agents, wear a face shield, or, if possible, work under a hood.

When handling infectious material, it is good practice to place the needle end of the syringe in an empty test tube.

GENERATOR Cont'd

The generator will be used at the Clinical Center primarily as a powerful and accurate instrument for research on the radio-chemical and biological effects of X-rays and electron energy. It can be modified for use in the production of short-lived, radioactive isotopes for a variety of medical research purposes.

It operates under high pressure inside a steel tank and is capable of delivering more than 12 kilowatts of electrical energy, thus enabling scientists to study the effects of radiation delivered at dose rates not heretofore achieved in the laboratory.

The Van de Graaff was accepted for the Federal Government on March 16, by Secretary Oveta Culp Hobby of DHEW.
ADDITIONAL OUTLET FOR
SCIENTIFIC WRITINGS

The dissemination of scientific
information is equally as important
as the conduct of research. Scien-
tists are frequently faced with the
problem of finding outlets for their
writings. The problem is magnified
sometimes by the volume of illus-
trations and charts that are neces-
sary to document the research. In
many instances, however, journal
editors are able to publish only an
extract of the paper.

A partial solution to this problem
is offered by the American Docu-
mentation Institute, through its aux-
iliary publication service, which is
administered by the Library of
Congress. The Institute accepts de-
posits of material supplementing and
documenting published papers in
journals. Copies of such material,
in either photostat or microfilm
form, are furnished at nominal cost
to any one ordering them. A footnote
is placed in the published article
stating that the material has been
deposited and giving the accession
number and price for ordering. The
material, in microfilm form, is kept
permanently on deposit.

Additional information on this
service may be obtained from Mr.
Scott Adams, NIH Librarian.

NMI STUDY Cont'd

Since 1947, the Laboratory of Tropi-
cal Diseases has screened more than
2,000 chemicals in search of a satis-
factory molluscacide. One of the
compounds, sodium pentachloro-
phenate, has been demonstrated to be
particularly effective in destroying
both snails and snail eggs.

The region selected for the first
large-scale testing of sodium penta-
chlorophenate is Waraq El-Arab,
situated in a farm district about ten
kilometers northwest of Cairo. It
contains six villages with a total pop-
ulation of about 33,000. Field tests
made by LTD scientists in De-

SURGICAL NURSING TEAM ASSISTS CC SURGEONS

Miss Doris Pagano and Miss Dorothy Bigelow prepare the operating
room for surgery.

Surgical nursing in the Clinical
Center presents a challenge to
the operating room nurse. She must be
able to handle specially designed
equipment, to assist with the elabo-
rate surgical procedures necessary
in research medicine, and she must
learn to work with a number of sur-
gical teams from the various Institu-
tes.

The surgical nurse works closely
with the surgeon. She confers with
him before the operation so that she
may give him expert assistance
during the procedure. She visits the
patient before he is brought to the
operating room. She answers his
questions, explains the operating
room procedure to him, and tells
him what he may expect. She at-
ttempts to allay any fears he may
have. She remains with the patient
during the operation and visits him
afterwards.

Before surgery, proper instru-
ments are selected, equipment is
assembled and sterilized, compli-
cated devices are tested for accu-

DR. THORP Cont'd

Aids Branch, which includes the ani-
mal hospital and production sec-
tions, he has been in charge of the
Comparative Pathology and Hema-
tology Section of NIAMD.

of the Center. Six spacious major
operating rooms, each having adja-
cent scrub rooms and anesthesia
rooms, are located on the north and
south corridors of the surgical suite,
while four minor operating rooms
occupy the space in the rest of the
north corridor. Recording rooms,
equipped with intercommunicating
speakers and receivers, are avail-
able for neurosurgery and cardiac
surgery. High speed and standard
sterilizers are located between each
two rooms. All general instruments
are kept in a central instrument
room and special instruments are
stored in or near the area where
they are used. Inside each room are
built-in wall cabinets, stop clocks,
emergency call bells and lights, and
central suction. The entire suite is
planned and equipped for the most
efficient functioning and safety for
the patient.

The Surgical Nursing Service,
under the direction of Miss Janet
Fitzwater, has found that many of
the problems encountered in oper-
ating room nursing can be solved
through weekly staff conferences
and intensive training in the Nursing
Department. There are now ten
people in the Surgical Nursing Serv-
ce, including the chief nurse, a
head nurse, staff nurses and attend-
ants, and a secretary.