DR. DEAN RECEIVES THE GORGAS AWARD

Dr. H. Trendley Dean, Director of the National Institute of Dental Research, was presented with the Gorgas Award at the recent annual meeting of the Association of Military Surgeons of the U.S.

The parchment scroll accompanying the medal reads as follows:

"For distinguished service to our military forces in furthering the recognition of the fluorides as agents in the causation and in the treatment of dental maladies.

"Dr. Dean, an outstanding leader in dental research, developed a method for the quantitative measurement of enamel fluorides and thus made possible the establishment of a minimal threshold of dental fluorosis.

"This research led to the fruitful study of the relation between the fluoride content of water supplies and the prevalence of dental caries, a study that promises a measure of control of this commonest of dental diseases."

DR. HUEBNER GETS THE ASHFORD AWARD

Dr. Robert J. Huebner, chief of the Virus and Rickettsial Section in the Laboratory of Infectious Diseases, Microbiological Institute, has received the Bailey K. Ashford Award for his outstanding research on rickettsial pox and Q fever.

The honor was bestowed on Dr. Huebner at the recent joint annual meeting of the American Society of Tropical Medicine, the American Academy of Tropical Medicine, and the National Malaria Society.

ARMY AND PHS PRESENT DIAGNOSTIC EXHIBIT

A virus and rickettsial exhibit, depicting diagnostic laboratory services available to practicing physicians, will be displayed by the National Institutes of Health, the Army Medical Center, and the Communicable Disease Center at the mid-winter session of the American Medical Association Dec 6-9 at National Guard Armory, 2000 E. Capitol Street.

(See Diagnostic Exhibit, Page 2)

CANCER FILM WINS WORLDWIDE PRIZE BEST OF ITS CLASS AT VENICE EXHIBIT

A silver medal was awarded on November 21 to "Cancer: The Problem of Early Diagnosis," a film produced jointly by the National Cancer Institute and the American Cancer Society.

This film won top honors among films of its class at the 10th International Exhibit of Cinematographic Art in Venice this summer. At this annual exhibit, films of various types from many countries compete for international "Oscars."

Dr. John R. Heller, Director of the National Cancer Institute, and Dr. Charles S. Cameron of the American Cancer Society received the medal from Lt. Col. Umberto De Martino, Italian military attaché in a ceremony at the State Department.

Commended for their parts in producing the film were Dr. Austin V. Deibert, Chief of the NCI Cancer Control Branch; Miss Dallas Johnson, Chief of the NCI Cancer Reports Section; Mr. Bernard V. Dryer, film consultant to the National Cancer Institute and Miss Adelaide Brewster, film consultant to the American Cancer Society.

The film, released last winter, is first in a series of six films on cancer diagnosis. It opens with a scene showing the first successful operation for stomach cancer. In 1881, Dr. Theodor Billroth of
Science Elsewhere

Detecting Infections

Radioactive silver may be of use in the detection of obscure or hidden infections, according to Dr. H. D. West, Mr. A. P. Johnson, and Mr. C. W. Johnson of Meharry Medical College, Tennessee.

Reported in the October issue of the Journal of Laboratory and Clinical Medicine, studies of these scientists on rats show that radioactive silver isotope (AgI11) concentrates in areas of infection.

Studies are being extended to animals with tumors.

Sound Waves Aid Tests

Using sonic vibrations to kill microorganisms (leptospirae), scientists of the Army Medical Center have produced an antigen of considerable specificity and sensitivity for use in a complement fixation test used by the authors is a standard test used in many laboratories.

Dr. R. Randall, Mr. P. W. Wetmore, and Mr. A. R. Warner report these studies in the October issue of the Journal of Laboratory and Clinical Medicine.

SIR PHILIP MANSON-BAHR CONDUCTS SEMINAR HERÉ

Sir Philip Manson-Bahr, British authority on tropical diseases, conducted a seminar on "Problems of Filariasis" December 1 in Wilson Hall.

The distinguished Harley Street, London, consultant is passing through the United States on his way to Fiji where he will join his son, also a specialist in tropical diseases, in further studies of filariats. It was in Fiji, 40 years ago, that he had his first experience with field research, as Director of the Stanley Research Expedition.

NO. 14 IN A SERIES

Studies on Hemophilus

Bacteria that belong to the genus Hemophilus are responsible for a variety of diseases. Dr. Margaret Pittman, head of a bacteriological unit in the Biologics Control Laboratory, Microbiological Institute, has carried out extensive investigations on the Hemophilus bacteria that cause meningitis, respiratory infections, conjunctivitis, and whooping cough (pertussis). Assisting her are Mr. James F. Marshall and Miss Lois Simonton, who has recently joined the unit.

A mouse protection test to determine the potency of pertussis vaccine has been developed in this laboratory. Since January 1949, all commercial pertussis vaccines have been required to meet a standard of potency as determined by this test. Uniformly potent vaccine should result. Studies now in progress are aimed at (1) purifying the vaccine so that better immunization can be obtained with even fewer reactions, and (2) developing a standard of potency for anti-pertussis serum which is given prophylactically to children exposed to whooping cough and is used to treat severe infections.

Early this year, in collaboration with Drs. Joseph A. Bell and Byron J. Olson, Dr. Pittman reported that aureomycin was effective in treating pertussis infections in mice. Subsequent use of aureomycin in a clinical trial by Dr. Bell suggests that it is effective in shortening the course of the infection in children.

In the southern part of the United States there occurs endemically a form of acute conjunctivitis, especially prevalent among children. Dr. Pittman, because of her many years of experience with Hemophilus, was invited by Dr. Dorland J. Davis to collaborate in an investigation. It was found that the Koch-Weeks bacillus was the main cause of the infection. Means of differentiating it from H. influenzae have been developed for the first time. Further studies are in progress.

While at the Rockefeller Institute, Dr. Pittman showed that some H. influenzae cultures were encapsulated and that it was the encapsulated form that caused an often fatal form of meningitis in children. This finding enabled other scientists to produce a potent therapeutic serum in rabbits. With this serum and specific drugs, the mortality rate among children has dropped from near 100% to 25% or lower.

At the NIH, Dr. Pittman developed the standard potency test for this serum. She was among the first to study the effects of sulfa drugs, penicillin, and streptomycin on H. influenzae.

During the war, Dr. Pittman revised the formula for the sterility test medium used for testing biological products for the presence of bacterial contaminants. A study of the pyrogenicity (fever-producing effects) of bacterial contaminants in plasma was carried out in collaboration with Mr. Thomas F. Proby.

In addition to her laboratory work, Dr. Pittman serves as a consultant both nationally and internationally on the classification and identification of hemophilic bacteria. She is now president of the Washington Branch of the Society of American Bacteriologists and vice-president of the Washington Academy of Sciences.

DR. EDDY TO LECTURE AT YALE MED SCHOOL

Dr. Nathan B. Eddy of the Laboratory of Chemistry and Chemothrapy, EBMI, will speak December 13 on the "Relationship of Chemical Structure to Analgesic Action" to a graduate group at Yale Medical School.

EXHIBITS cont’d

The exhibit will feature demonstrations of laboratory techniques and will serve to guide practicing physicians in the collection, handling, and shipment of clinical specimens. The demonstrations will be given at 1:30 p.m. and 3:30 p.m.

2 December 1949
NIH Record
DR. SZENT-GYORGI ON MUSCLE SUBSTANCE

Dr. Albert Szent-Gyorgyi, special research fellow in the Laboratory of Physical Biology, Experimental Biology and Medicine Institute, reports that he has succeeded in devising a method for the large-scale production of adenosine phosphate (ATP), which he describes as the master substance of muscle.

ATP activates a protein complex, actomysin, discovered by Dr. Szent-Gyorgyi, which constitutes the basic contractile mechanism of muscle.

In his report in the October 21 issue of Science, Dr. Szent-Gyorgyi urges a continuous and coordinated attack on the mechanism of muscular activity through such fields as electron microscopy, colloid chemistry, enzymology, physiology, and even quantum mechanics.

Says Dr. Szent-Gyorgyi: "Cardiovascular diseases, which take such a horrid toll, are mostly diseases of muscle, be it the heart muscle itself or muscle cells of the artery wall ... It is imperative to try its (ATP's) clinical application also in degenerative diseases like arthritis, where the basic biomolecular architecture seems to be impaired.

PENICILLIN'S TOXIC EFFECTS ON BACTERIA

Some bacterial species exposed to penicillin treatment remain highly susceptible to the body's defenses for hours after the penicillin itself has fallen to wholly ineffective concentrations; and such strains as are not rendered susceptible remain dormant for many hours.

This therapeutic concept, based on studies which determined the recovery rate of bacteria from the toxic effects of penicillin in the body and in the test tube, is reported by Dr. Harry Eagle and Mrs. Arlyne D. Musselman of the Section on Experimental Therapeutics of the Microbiological Institute in the October issue of the Journal of Bacteriology.

MR. DONALD L. SNOW DEBUGS NAVY PLANES

Did you know that our Mr. Donald L. Snow, sanitary engineer in the office of Research Facilities Planning Committee, is an expert debugger when it comes to eradicating pests aboard planes flying between the United States and foreign countries?

In cooperation with Lt. Clayton S. White of the Navy Medical Corps, Mr. Snow has developed a highly efficient automatic system for killing insects in all parts of a plane likely to harbor mosquitoes, flies, cockroaches, and other pests whose transfer from one country to another is undesirable.

A detailed description of this spraying device and its use to eliminate insect "stowaways" is given in the November issue of Naval Aviation News.

SKUNKS AS WELL AS RATS CARRY HISTOPLASMSOSIS

Histoplasmosis, a fungus disease, was observed last year by Drs. Chester W. Emmons, Joseph A. Bell, and Byron J. Olson in wild rats trapped in Virginia. This year Histoplasmosis capsulatum, the fungus producing the disease, was recovered from skunks as well as rats in Georgia.

Although no significant relationship between human and animal histoplasmosis has been observed and no human cases of histoplasmosis have yet been found in Georgia, the isolation of H. capsulatum from animals proves conclusively that this organism is present in that area as a potential hazard.

This epidemiological finding is reported in the November 11 issue of Public Health Reports by Dr. Emmons, mycologist, in the Laboratory of Infectious Diseases, Microbiological Institute.

Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting</th>
<th>Time</th>
<th>Place</th>
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<tbody>
<tr>
<td>Dec. 9</td>
<td>NCI Staff Lecture - &quot;Pigment Spread in the Guinea Pig and Its Relation to the Cancer Problem.&quot; Dr. P. B. Medawar of Birmingham University, England. *</td>
<td>3:30 p.m.</td>
<td>Wilson Hall</td>
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<td>Dec. 12-13</td>
<td>National Advisory Mental Health 10:00 a.m. 5140 FSA North Council.</td>
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<td>Dec. 14</td>
<td>NCI Biology Discussion Group - &quot;Problems in Regeneration.&quot; Dr. Alexander Karczmar of Georgetown University. *</td>
<td>3:00 p.m.</td>
<td>Top Cottage</td>
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*Open Meeting
CANCER FILM cont'd

Dr. John R. Heller, Jr., Director of the National Cancer Institute, shows Miss Cornelia Patten of the Cancer Reports Section the silver medal awarded by the Italian government for the film "Cancer: The Problem of Early Diagnosis."

Vienna, "the father of visceral surgery," performed this pioneer feat in an operating room very similar to the disused operating theater in the old Memorial Hospital in New York City, where the opening sequence was filmed. From there, the movie goes on to demonstrate--through examination scenes, clever use of animation in charts and diagrams, and actual surgical operation scenes, -- the vital importance of early diagnosis in cancer.

The film has been shown widely throughout the United States, before medical societies, hospital staffs, and medical conventions. Twenty prints have been procured by the State Department to be sent abroad where they will be distributed through the U. S. Information Service Film Libraries in principal cities of the world for professional medical education.

The second film in this cancer diagnosis series, entitled "Breast Cancer: A Problem in Early Diagnosis," will have its premiere on Monday December 5, 2:30 p.m. in the South American room of the Statler Hotel. It will be shown throughout the rest of the week at the Armory where the American Medical Association is holding part of its annual Clinical Session.

The second film in this cancer diagnosis series, entitled "Breast Cancer: A Problem in Early Diagnosis," will have its premiere on Monday December 5, 2:30 p.m. in the South American room of the Statler Hotel. It will be shown throughout the rest of the week at the Armory where the American Medical Association is holding part of its annual Clinical Session.

Four additional films in this series will cover diagnostic problems in cancer of the skin and oral cavity, gastro-intestinal tract, lung and esophagus, and uterus.

GET YOUR TICKETS NOW FOR THE BIG SHOW

Hurry, hurry, get your tickets now for that stupendous drama, "Life at NIH," to be given by the Hamsters on December 15 and 16 at 8:30 p.m. in Wilson Hall.

Names of ticket sellers will be posted in the lobbies of all the buildings. If tickets are not available for any reason, they may be bought from Miss Zelda Schiffman, 137 Administration Bldg. Your contribution of 50¢ will be used to defray expenses.

The cast includes:
Iola Alderson, NHI
Charles Barley, RG&F
Jack Beecher, EO, MA
John Cook, NHI
Louise Dauberman, NHI
Irene Dixson, RFPC
Edith Edwards, MI
Murray Getz, RFPC
Ernestine Gibbons, RG&F
Annabel Glockler, RG&F
Judson Hardy, SRB
Betty Hughes, NHI
Betty Johnson, NC
Captain Johnson, GF
Celi Kennedy, NHI
Manley Kilgore, RG&F
James Monahan, NCI
Robert Motley, NHI
Joseph Murphy, NIDR
Katherine Parent, RG&F
Roy Perry, SRB
Sidney Roman, P&S
Francis Schmehl, RG&F
Dr. Gordon Seger, RG&F
Sonia Sperling, RG&F
Jane Sunderlof, EO-Per.
Betty Wiehle, RG&F

EXAMS FOR SCIENTISTS AND FOR SANITARIANS

Examinations for scientists and sanitarians (chemists and biochemists) in the USPHS Commissioned Corps will be held January 9-11.

Requests for applications and additional information should be directed to the Division of Commissioned Officers, USPHS, downtown. Completed applications must be submitted no later than December 12, 1949.

YOUR CHANCE TO JOIN SYMPHONY ORCHESTRA

Anyone at NIH who plays an instrument is welcome to join the Montgomery County Symphony Orchestra, which rehearses every Monday at 8:00 p.m. at Montgomery College.

For information on joining the orchestra, call Mr. Donald R. Reed on Ext. 395. Mr. Reed, Chief of the Color Reproduction Section, Scientific Reports Branch, is a cellist who has played with the orchestra for several seasons.

Positions Now Open

For information on the following positions, call the Personnel Office, Ext. 445 or 536.

*Bacteriologist GS-7
*Bacteriologist GS-9
*Biochemist GS-9
*Chemist (Biochemistry) GS-5
*Chemist (Physical) GS-11
*Information and GS-7 & Editorial Specialist GS-9
*Public Health Research Analyst (Morphology and Genetics) GS-13

*Civil Service Status Necessary

Selected Reading

Recent additions to the Library:

Alexander, Albert E.
Barr, William E.
Behrens, Charles F.
Atomic medicine... N. Y., Nelson 1949.
Eddy, Walter H.

2 December 1949

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