DR. R. E. DYER TO LEAVE NIH OCTOBER 1

WILL HEAD RESEARCH

EMORY UNIVERSITY

After 34 years as a commissioned officer of the Public Health Service—29 of which were with the National Institutes of Health, eight as its director—Dr. Rolla E. Dyer is retiring from Federal service. On October 2 he will become Director of Research at the Robert Winship Clinic of Emory University, Atlanta, Georgia.

To those who work closely with him, and to those who knew "the Chief" only as a distinguished, white-haired figure presiding at meetings or walking about NIH, Dr. Dyer's departure will be a source of deep regret.

Dr. Leonard Scheele, Surgeon General, expressed the feeling of the Service as a whole in this statement:

"A fine scientist and administrator, Dr. Dyer as Director of NIH has expanded the intramural research program to include substantial attacks on the growing problem of chronic, crippling, and killing diseases. He has also attacked those diseases through increased assistance to scientists and allied workers outside the Government. By his own scientific ability and his leadership, he has linked the great men and accomplishments of the past, present, and future of NIH, in one unbroken line of outstanding service to public health."

Dr. Dyer had a long and distinguished career as a scientist, climaxed by his appointment as Director of NIH and Assistant Surgeon General in 1942. He became a Commissioned Officer of the Service in 1916 upon graduation from the University of Texas Medical School. After field work on plague and influenza control and studies on pellagra, Dr. Dyer came to NIH—then known as the Hygienic Laboratory—in 1921, and was made Assistant Director a year later. He became Chief of the Division of Infectious Diseases in 1937.

Dr. Dyer has a world-wide reputation for his research on infectious diseases. His more important contributions include participation in the discovery that Rocky Mountain spotted fever is endemic in the eastern part of the U.S.; the discovery that a newly identified disease in this country was virtually identical to Australian Q fever; and the discovery that endemic typhus in this country is spread by fleas from rat to man.

But these are not the things that NIH people wanted to talk about when they learned of Dr. Dyer's retirement. Instead, they wanted to reminisce about a friend and associate they will miss.

They wanted to talk about Dr. Dyer's fondness for gardening and historical reading; of the gentle warmth and neighborliness of Mrs. Dyer; and of how the Dyer children used to visit the laboratories.

They remembered, sometimes a little wryly, that the Chief harbored a real sense of humor—gentle or ironical as the occasion demanded. Dr. R. D. Lillie recalled the staff meeting when Dr. Dyer suggested a "fleacum cleaner" to simplify the task of gathering from uncooperative wild rats the fleas needed for research. Accordingly, a vacuum system was hooked up, using rubber and glass tubes. It worked fine.

Our Director's honors have been many. In 1948 he received the Lasker Award for "contributions to our knowledge in the field of rickettsial diseases, for administration of the National Institutes of Health during the war and postwar years, and for the development and organization of the Research Grants Division of NIH."

Dr. Dyer also received the Carlos J. Finlay Medal in 1944, the U.S.A. Typhus Commission Medal the same year, and the War Department Certificate of Merit, Joint U.S.-Canadian Commission Work, in 1946. He was director of the Rockefeller Foundation's International Health Division Scientific Board and the Gorgas Memorial Institute. He is a former president of the American Society of Tropical Medicine and of the American Epidemiological Society, and he served on the Committee on Medical Research of the Office of Scientific Research and Development from 1942 to 1947. He is a visiting lecturer of the Harvard University School of Public Health.

(See Dr. Dyer Retires, Page 2)
No. 31 in a Series

From Mitochondria to Cancer

The "fundamental unit" of life is the cell. But within the cell cytoplasm are minute protein-containing particles, the mitochondria, which carry the enzymes of cellular respiration, enabling the cell to breathe and hence to live. The structure, chemistry, and metabolism of mitochondria now constitute a major subject of study in the Cytochemistry Unit, Biochemistry Section of NCI.

Headed by Dr. Dean Burk, the Unit has shown that mitochondria are self-reproducing and capable of mutation. The mutations are associated with enzyme derangements and cellular disease.

Since cancer requires a reproducible continuing factor and is characterized by disturbed enzyme patterns, the reason for interest in mutant mitochondria is evident. And discovery of subtle differences in cell particles may yet make the cancer cell selectively vulnerable to chemical or other attack.

Some of the Unit's viewpoint derives from studies of plant plastids, the specialized mitochondria that give plants their green look and are the centers of starch manufacture. In collaboration with the University of Maryland, Drs. Mark W. Woods (NCI) and Herman G. duBuy (EBMI) have shown that mutated plastids, which in varying degrees have lost their verdure, are responsible for plant variegation diseases showing enzyme derangements and disturbances in growth.

Scientific observation has often progressed from plants to animals. The linkage of mitochondrial plant pathology to animal cancer may repeat the classic pattern. Like normal and mutant plastids in variegated plants, cytoplasmic particles in at least one type of cancer--melanoma--can be followed with comparative ease, for they are differentially color-tagged. Study of such material in three strains of mouse melanoma provides evidence for the mitochondrial nature of the melanized and nonmelanized granules.

NCI PROMINENT AT GORDON CONFERENCE

NCI researchers were among the 100 or so scientists who met in the New Hampshire hills, August 28--September 1, to exchange facts about cancer. At Colby Junior College, New London, they attended the Gordon Research Cancer Conference, last of a series sponsored by the American Association for the Advancement of Science.

Dr. W. U. Gardner of Yale University was program chairman; Dr. M. J. Shear of NCI, vice-chairman. A session on cancer diagnostic tests and one on environmental cancer were led, respectively, by Drs. J. E. Dunn and W. C. Hueper of NCI.

Drs. J. White and Max Berenbom, NCI, reported studies with N16.

DR. DYER RETIRES Cont'd

The son of an Ohio clergyman, Dr. Dyer was born in 1886. Before attending medical school, he received his B.A. degree from Kenyon College in Ohio. He is married to the former Esther Gibney, and has two daughters and a son--Sarah, Esther, Mary, and William Eugene.

During Dr. Dyer's administration, NIH has made giant strides. Five new Institutes have been authorized by Congress, and his ideas and scientific wisdom have gone into the planning of the Clinical Center. In the main, it was Dr. Dyer who translated a Congressional authorization into a major program of research grants and fellowships totaling $15,200,000 a year.

In all phases of this program, Dr. Dyer has insisted upon freedom of scientific disciplines "without bureaucratic control."

His retirement from the Public Health Service takes from us a competent administrator, an able scientist, and a good friend.
Charles H. Knauff, research technician at the Laboratory of Infectious Diseases, MI, works mainly with viruses and Rickettsia. At present, he is in charge of isolating viruses and preparing them for injection. His unit is studying the Coxsacki virus, which causes a paralysis like that of polio.

Between 1930 and 1942, Charley Knauff was Dr. Dyer's lab assistant. Knauff had asked for the job because he felt he would like to work for Dr. Dyer. He has never regretted his choice.

Dr. Robert H. Felix, Director, NIMH, and Alanson W. Willcox, FSA General Counsel, commented, "Although some States have hospitalization laws that are both medically and legally sound, there is often too little in the statutes by way of assistance or protection of the mentally ill. We hope this model law will be widely discussed and will prove useful as an aid to State action."

Dr. Isbell and his staff have described the effects of continual use of barbiturates such as barbital, pentobarbital, and phenobarbital. Five former drug addicts served as volunteer subjects.

Withdrawal psychoses followed chronic intoxication with sleeping pills. When the volunteers were denied barbiturates, they became confused, hostile, even violent. This condition lasted for several days.

Abuse of sleeping pills has become an increasing problem. In the United States in 1948, production of barbiturates reached 672,000 pounds. They cause more deaths than any other poison.

These facts were brought out in articles issued July 1950 in the Annals of Internal Medicine and the Archives of Neurology and Psychiatry.

PROPOSED LAW WOULD PROTECT MENTALLY ILL

In response to inquiries and requests from State officials, judges, lawyers, and physicians, a model State law for hospitalization of the mentally ill has been prepared by two FSA units--the National Institute of Mental Health and the Office of the General Counsel, in consultation with the National Advisory Mental Health Council.

The purpose of this model law is to aid States in which modifications of commitment statutes are being considered. It provides for either voluntary or involuntary hospitalization, post-admission examinations, release and discharge of patients, and protection of civil and personal rights.

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SLEEPING PILL HABIT MAY LEAD TO ADDICTION

"Barbiturates are addiction-forming," states Dr. Harris Isbell of NIMH, Director of Research at the PHS Hospital in Lexington, Ky. "In some respects addiction to barbiturates is more dangerous and undesirable than addiction to morpine."

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Calendar Of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Study Section Meeting</th>
<th>Time</th>
<th>Place</th>
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<tbody>
<tr>
<td>Sept. 15</td>
<td>Dental</td>
<td>10:00 a.m.</td>
<td>Room 1057, T-6</td>
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<td>Sept. 16</td>
<td>Surgery</td>
<td>10:00 a.m.</td>
<td>Room 1057, T-6</td>
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<td>Sept. 16</td>
<td>Tropical Medicine</td>
<td>9:30 a.m.</td>
<td>Room 2025, T-6</td>
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<td>Sept. 16-17</td>
<td>Arthritis and Rheumatism</td>
<td>9:30 a.m.</td>
<td>Mayflower Hotel</td>
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<td>Sept. 17</td>
<td>Physiology</td>
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<td>Room 2025, T-6</td>
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<td>Sept. 17-18</td>
<td>Metabolism and Endocrinology</td>
<td>10:00 a.m.</td>
<td>Room 1057, T-6</td>
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<td>Sept. 18</td>
<td>Public Health</td>
<td>10:00 a.m.</td>
<td>Room 2025, T-6</td>
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<td>Sept. 21</td>
<td>Hematology</td>
<td>10:00 a.m.</td>
<td>Room 2025, T-6</td>
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<tr>
<td>Sept. 21</td>
<td>Microbiology and Immunology</td>
<td>9:30 a.m.</td>
<td>Room 1057, T-6</td>
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<td>Sept. 22-23</td>
<td>Biochemistry and Nutrition</td>
<td>9:00 a.m.</td>
<td>Room 1057, T-6</td>
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<td>Sept. 22-23</td>
<td>Cardiovascular</td>
<td>9:30 a.m.</td>
<td>Room 2025, T-6</td>
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<td>Sept. 25</td>
<td>Experimental Therapeutics</td>
<td>9:30 a.m.</td>
<td>Room 1057, T-6</td>
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Note: Above meetings are all closed.
OVER THE YEARS, SOME FAMILIAR VIEWS OF DR. DYER....

Dr. Dyer, daughter Sarah, Mrs. Dyer, and Admiral Sir John Jellicoe during World War I

Dr. Dyer with Institute Directors and administrative staff. Front, left to right: C. V. Kidd, Dr. Jack Nasur, Dr. Dyer, Dr. Norman Topping, A. H. Siepert. Rear, left to right: Mrs. W. H. Felix, J. R. Weller, C. J. Van Slyke, W. T. Dean, V. R. Haas, and W. W. Sebrell.

Dr. Dyer attends a meeting at Top Cottage to plan a training course for State Health Chairmen of the General Federation of Women's Clubs. Left to right: Dr. L. P. Thompson, former NIH Director, Mrs. Eleanor Roosevelt, Dr. W. T. Bright, Jr., Mrs. Luke Wilson, Dr. L. L. Williams Jr., and Dr. Dyer.

Senior Surgeon P. E. Dyer, assisted by technical attendant R. C. Baken, examines a guinea pig for evidence of infection with typhus.

Dr. Dyer as Assistant Director of NIH and Chief of Infectious Diseases Division, 1937.

The Clinical Center Planning Conference. Left to right: Dr. Norman Topping, Dr. R. E. Dyer, Dr. Allen Fischenbrenner, Albert Siepert, Dr. Thomas Parran, Dr. N. P. Thompson, Dr. Leonard A. Scheele, Mark Hollis, and Dr. R. H. Felix.

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