

# NIH Through the Years



# SCIENCE

FRIDAY, JULY 13, 1888.

NO SCIENTIFIC REPORT published by the government this year has been more important than that just made by Dr. J. J. Kinyoun, assistant surgeon in the Marine Hospital Service, upon the germicidal powers of the different methods of disinfection practised under the direction of the Louisiana Board of Health at the quarantine station below New Orleans. The report is important, not only be-



**Joseph J. Kinyoun (1860–1919).**  
Founder and director of the Hygienic Laboratory of the Marine Hospital Service from 1887 to 1899.



**U.S. Marine Hospital, Stapleton, Staten Island, NY, first location of the Hygienic Laboratory (forerunner of the National Institutes of Health).**

(Left to right) Mrs. Eleanor Roosevelt, Mrs. Luke I. Wilson, and Rolla Eugene Dyer, director of National Institutes of Health. Mrs. Wilson made gifts of land totaling 92 acres to NIH. This was the nucleus of the present 306.4-acre reservation.



#### Photo Credits:

**Page 861:** Aerial view of campus of National Institutes of Health—National Institutes of Health. **Page 862:** Marine Hospital, Joseph Kinyoun, Mrs. Eleanor Roosevelt—National Library of Medicine; clipping from *Science*. **Page 863:** Newspaper clipping, U.S. Public Health Service Laboratory, Disinfecting barge—National Library of Medicine; mosquito, *Science*. **Page 864:** Titles from *Science*; electron microscope—Carl Zeiss, Inc.; AIDS virus, interferon sample—National Institutes of Health; children—Joe DiDio, National Education Association.

### BATTLE AGAINST DISEASE

The Public Health is Guarded by Efficient Officials.

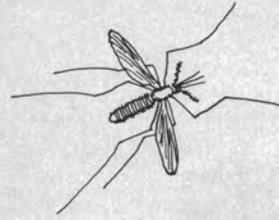
#### MOSQUITO OBJECT OF ATTACK

Authorities Now Brand the Little Insect as the Arch Enemy of Mankind and He is Being Hunted From His Old Haunts.

The condition of the national health is... The mosquito is the arch enemy of mankind and he is being hunted from his old haunts.

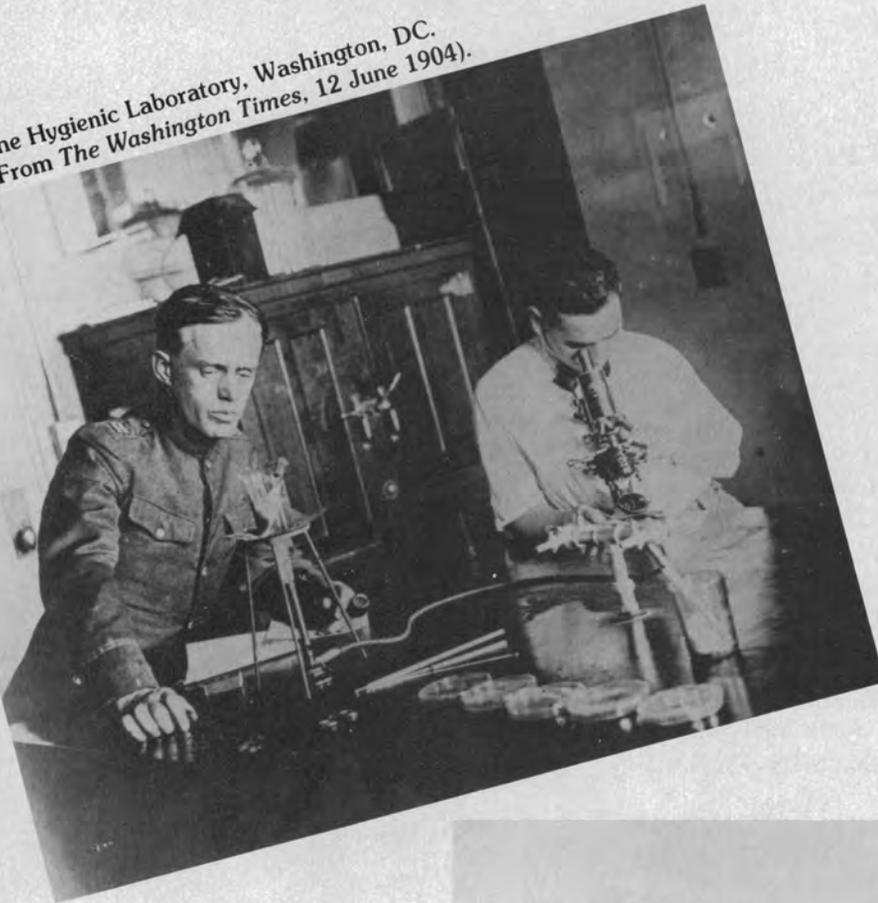


PUBLIC HEALTH OFFICERS AND MEN, FEEDY ISLAND QUARANTINE, DELAWARE



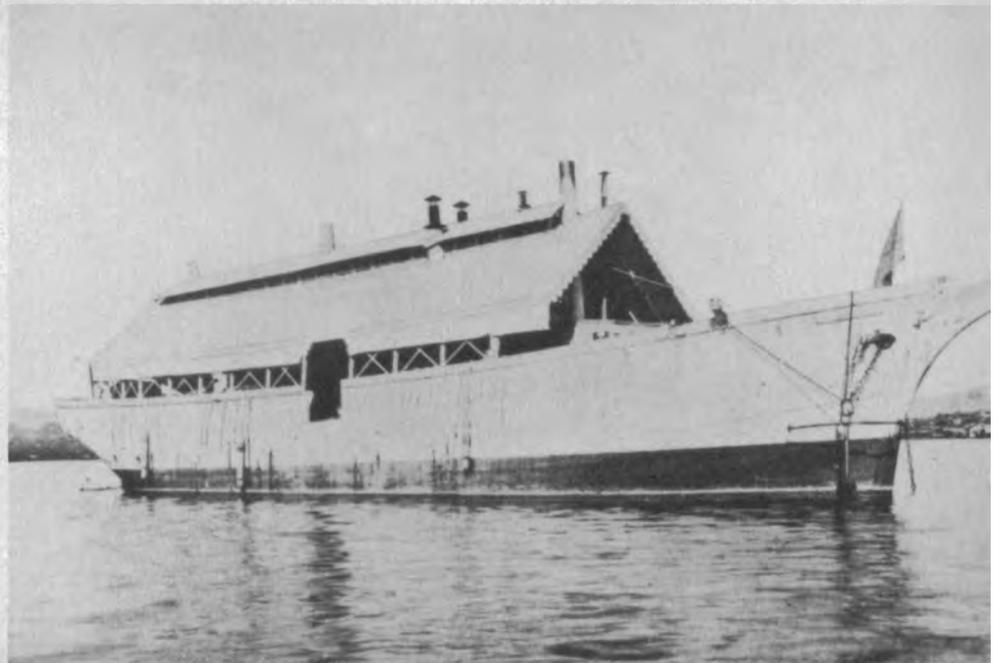
Anopheles mosquito— "archenemy of mankind"

The Hygienic Laboratory, Washington, DC. (From The Washington Times, 12 June 1904).



Joseph Goldberger (1874-1929), whose research on the prevention and cure for pellagra began at the Hygienic Laboratory in 1914. At that time, the disease was a major cause of death in the southern states, especially among children. His research revealed that the disease was not infectious but was caused by a dietary deficiency of the B vitamin nicotinamide. In 1922 he became head of the U.S. Public Health Service section on nutritional diseases.

Disinfecting barge, Puerto Rico, 1900. The barge consisted of disinfecting machinery aboard a floating platform. Thus, the spread of disease from foreign ports could be controlled. Also, such mobile barges could handle more vessels than could stationary or dockside disinfecting plants.

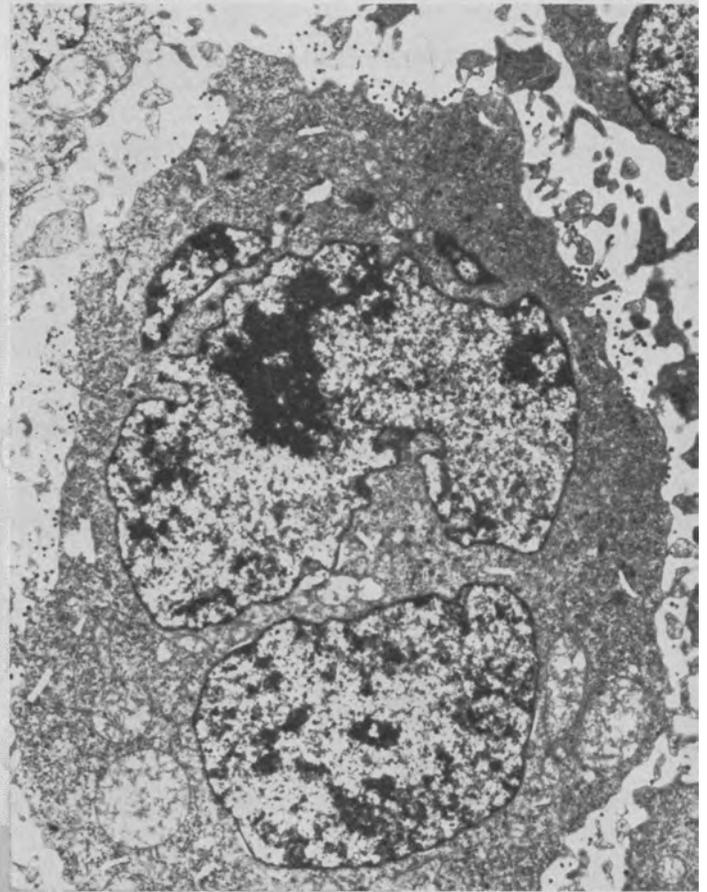


# RNA Codewords and Protein Synthesis

The Effect of Trinucleotides upon the Binding of sRNA to Ribosomes

Marshall Nirenberg and Philip Leder

Although many properties of the RNA code and protein synthesis have been clarified with the use of synthetic polynucleotides containing randomly ordered bases, a more comprehensive understanding of certain aspects of the code clearly requires investigation with nucleic acid templates of demonstrated structure. Since oligonucleotides of known base sequence are readily prepared and characterized, we have tried, in many ways, to use defined oligonucleotides as templates. The transfer enzyme was shown to be required for peptide bond formation (6, 7). To determine the minimum chain length of mRNA required for codeword recognition and to test the ability of chemically defined oligonucleotides to induce C<sup>14</sup>-aminoacyl-sRNA binding to ribosomes, we have devised a rapid method of detecting this interaction and have found that trinucleotides are active as templates.



AIDS virus

Healthy and happy children is the goal of research at the National Institute of Child Health and Human Development. Its mission is to conduct and support research on the reproductive, developmental, and behavioral processes that determine the health of children, adults, families, and populations.



Interferon sample

