

THE FOURTH SESSION OF THE SCHOOL OF TROPICAL MEDICINE OF THE UNIVERSITY OF PORTO RICO UNDER THE AUSPICES OF COLUMBIA UNIVERSITY. 1929-1930

The Announcement of the Fourth Session of the School of Tropical Medicine of the University of Porto Rico has just been issued by its Director.

The Department Statements are as follows:

The various courses which appear under the different departmental statements are planned for the graduate student having had previous satisfactory training in the biological sciences and for graduates in medicine and public health. Elementary instruction in these sciences will not be offered. Candidates presenting themselves as applicants for graduate instruction will be required to satisfy the instructor in the course or courses in which he desires to enroll that he is prepared to go on with graduate work.

Individual instruction is offered by the experimental method as well as through assigned reading, practical field work and personal contact with the instructor. In special courses the formal lecture method of instruction will be employed.

BACTERIOLOGY

Professor: EARL B. MCKINLEY.

Associate: PABLO MORALES OTERO.

Associate: MELVILLE T. COOK.

Instructor: ARTURO L. CARRIÓN.

TM—1. Tropical Bacteriology and Immunology:

Individual instruction by experimental method, assigned reading, seminars and practical work in the bacteriology of tropical diseases. Students must have had a course in general medical bacteriology.

Prof. McKinley, Dr. Morales Otero and Dr. Carrión.

First term, 6 points.

TM—2. Filterable Virus and Rickettsia Diseases:

Individual instruction by experimental method, assigned reading and seminars.

Prof. McKinley and Dr. Melville T. Cook.

Second term, 4 points.

TM—3. Research in Bacteriology and Immunology:

Prof. McKinley and staff.

First and second terms, 2 to 6 points.

The number of students for courses in bacteriology and immunology will be limited and preference will be given those students having had the best previous training for research in this field.

MYCOLOGY

Professor: BAILEY K. ASHFORD.

Assistant: MISS LUZ MARÍA DALMAU.

TM—4. Tropical Mycology:

Laboratory exercises, assigned reading and case demonstration of infection by pathogenic fungi.

Prof. Ashford and Miss Dalmau.

First term, 2 points.

TM—4a. Research in Tropical Mycology:

Prof. Ashford.

Second term, 2 to 6 points.

PATHOLOGY

Assistant Professor: HANS SMETANA.

Instructor: ENRIQUE KOPPISCH.

TM—5. Tropical Pathology:

Individual instruction through conferences, laboratory exercises and autopsies. Emphasis is placed on the commoner infections of the tropics. Courses are correlated with clinical studies. Only students with medical training are admitted.

Prof. Smetana and Dr. Koppisch.

First and second terms, 3 points per term.

TM—6. Clinico-Pathological Conferences:

Case studies with correlation of clinical and autopsy findings. Demonstration of gross and microscopic sections of autopsy and surgical specimens.

Prof. Smetana and members of the clinical staff.

First and second terms, 1 point per term.

TM—7. Research in Pathology:

Prof. Smetana.

First and second terms, 2 to 6 points.

CHEMISTRY

Associate Professor: DONALD H. COOK.

Instructor: L. G. HERNÁNDEZ.

Assistant: MISS TRINITA RIVERA.

The various courses offered in chemistry are planned for the graduate student and for graduates in medicine and public health. They presuppose a good fundamental training in organic, quantitative and biological chemistry. No student will be accepted for these courses without this basic training.

TM—8. Food and Nutrition:

Special reference is given to tropical foods. Individual instruction through conferences and laboratory exercises.

Prof. Cook and Miss Rivera.

Second term, 3 points.

TM—9. Methods of Food Investigation:

Special emphasis on biological methods for vitamins. Individual instruction through conferences, assigned reading and laboratory exercises.

Prof. Cook and Miss Rivera.

Second term, 3 points.

TM—10. Biochemical Methods:

Newer methods of analysis of the blood, urine and other body fluids.

Mr. Hernández.

First and second terms, 3 points.

TM—11. Research in Chemistry:

Students having passed satisfactorily TM-8 and TM-9 or their equivalents may be accepted for research in chemistry after conference with the instructor in charge.

Prof. Cook.

First and second terms, 2 to 6 points.

MEDICAL ZOOLOGY

Professor: WILLIAM H. TALIAFERRO (Visiting professor).

Associate Professor: GEORGE W. BACHMAN.

Assistant Professor: WILLIAM H. HOFFMAN.

TM—12. Helminthology:

Conferences and practical exercises in laboratory and field covering the parasitic worms of man, commonly found in the tropics.

Prof. Hoffman.

First term, 2 points.

TM—13. Immunology of Parasites:

Conferences and practical exercises in the laboratory.

Prof. Taliaferro.

Second term, 2 points.

TM—14. Medical Entomology:

Conferences and demonstrations covering the important vectors concerned in the transmission of human diseases.

Prof. Hoffman.

Second term, 2 points.

TM—15. Field Studies in Entomology:

A practical course aimed at teaching methods of study and to familiarize the student with the commoner disease-carrying insects in Porto Rico.

Prof. Hoffman.

Second term, 2 points.

TM—16. Protozoology:

Conferences and laboratory exercises. Emphasis on the human pathogenic protozoa. Course correlated with entomology.

Prof. Bachman.

Second term, 2 points. (May not be offered in 1930.)

- TM—17. Research in Protozoology, Helminthology and Entomology:**
With opportunity for field investigations.
Professors Bachman and Hoffman.

TROPICAL MEDICINE AND SURGERY

Professors: JOSÉ S. BELAVAL, JORGE DEL TORO, WILLIAM R. GALBREATH,
BAILEY K. ASHFORD.

Associate Professor: WILLIAM R. TORGERSON.

Assistant Professor: RAMÓN M. SUÁREZ.

Instructors: AMÉRICO SERRA and JENARO SUÁREZ.

- TM—18. Clinics in Tropical Medicine:**
Clinical conferences and demonstrations covering the commoner diseases of the tropics.
By department staff.
First and second terms, 1 point per term.

- TM—19. Bedside Instruction in Tropical Diseases:**
Wards of the District Hospital, San Juan.
Professors Belaval, Ashford, Toro, Suárez and others.
Wards of the Presbyterian Hospital, Santurce.
Professors Galbreath and Torgerson.
First and second terms, 2 to 4 points.

- TM—20. Dispensary Service and Out-patient Clinics:**
District Hospital, San Juan, Presbyterian Hospital, Santurce and Department of Health.
By department staff.
First and second terms, 2 to 4 points.

- TM—21. Research in Tropical Medicine and Surgery:**
Clinical and laboratory facilities are offered in the District Hospital, Presbyterian Hospital and other cooperating hospitals under the direction of the staffs of the respective institutions.
First and second terms, 2 to 6 points.

- TM—22. Seminars and Clinics:**
Weekly evening meetings for progress reports by staff and students, reviews of current literature and presentation of clinics.
Professors McKinley, Belaval and staff.
First and second terms, 1 point per term.

PUBLIC HEALTH AND COMMUNICABLE DISEASES

Professor: PEDRO N. ORTIZ.

Associate Professor: ANTONIO FERNÓS ISERN.

Assistant Professor: MARTÍN O. DE LA ROSA.

Instructors: ANTONIO ARBONA, JUAN G. BAJANDAS, OSCAR G. COSTA MANDRY, JORGE V. DÁVILA, WALTER C. EARLE, EDUARDO GARRIDO MORALES, and GEORGE C. PAYNE.

TM—23. Public-Health Administration:

Course includes lectures, conferences and tours of inspection. Emphasis placed on problems associated with tropical living conditions.

Prof. Ortiz, Prof. Fernós, and staff.

First term, 2 points.

TM—24. Public-Health Engineering:

Lectures, demonstrations, tours of inspection, with special reference to problems of water supply, and purification, sewage and garbage disposal, milk supply, etc.

Mr. Dávila.

Second term, 2 points.

TM—25. Public-Health Laboratory Methods:

Systematic instruction and practical training in the commoner tests used in the tropics.

Dr. Costa Mandry.

Second term, 2 points.

TM—26. Communicable Diseases:

Lectures and field demonstrations upon the commoner communicable diseases of the tropics, including malaria, leprosy, plague, yaws, and tuberculosis, with emphasis upon preventive measures.

Prof. Ortiz, Prof. de la Rosa and staff.

Second term, 2 points.

TM—27. Rural Sanitation with Reference to Uncinariasis:

Practical work in field and laboratory with opportunity to follow methods and results of intensive campaign against uncinariasis.

Dr. Payne and Dr. Bajandas.

First and second terms, 1 to 2 points per term.

TM—28. Malaria and Malaria Prevention:

Surveys, field demonstrations of preventive measures, and laboratory exercises including study of mosquitoes.

Dr. Earle and Dr. Arbona.

First and second terms, 1 to 2 points per term.

TM—29. Tropical Epidemiology:

Lectures with demonstrations in Health Units, and in the field.

Dr. E. Garrido Morales.

First term, 2 points.

TM—30. Research in Public Health and Communicable Diseases:

Special opportunities for field studies.

Prof. Ortiz and staff.

Two to six points per term.

For further information apply to

DIRECTOR,

SCHOOL OF TROPICAL MEDICINE,

San Juan, Porto Rico.

The opening of the District Hospital is also announced. It has been planned in order to provide a teaching hospital and research clinic. It contains forty beds and an out-patient department, and it has been constructed by the Government of Porto Rico on ground immediately adjoining the School of Tropical Medicine. The hospital will be operated by the Department of Health under a plan of affiliation with the School. It will be opened in September 22, 1929.

The School has well equipped laboratories of bacteriology, chemistry, mycology, pathology and parasitology. Field work is facilitated by the assured cooperation of the Department of Health. Regarding this the Announcement makes the following statement:

"During the session of 1929-30 classes will spend periods of one to two weeks in one of the districts (30 minutes from San Juan) in which intensive campaigns against uncinariasis are being carried on, and a similar period in another district (an hour and a half from San Juan) where a demonstration of malaria-prevention measures has been in progress for three years. In both districts the work is being carried on in cooperation with the International Health Division of the Rockefeller Foundation whose health officers, like those of the Department of Health serve as instructors."

It also states that—

"None of the courses extend over more than one term, and in some cases the work is covered by intensive study through a shorter period. The intensive method is followed especially in the field work.

"Students may either devote their entire time to one subject, occupying themselves in research in addition to the regular courses or they may elect a program of study including several different subjects.

"Recognizing the fact that individual interests and needs vary widely, it will be the policy of the School to allow such freedom as possible in the choice of studies. However, adequate preparation will be insisted upon in the case of each course, and a correlation of the studies undertaken will be strongly advised.

"Physicians or other qualified persons wishing to devote only a part of their time to study may register for single courses.

"Lectures in subjects of general interest will be open to all students as well as to the local physicians.

"From time to time a series of courses planned particularly for busy physicians and health officers who can take only a few weeks from their work, will be offered. Such courses will be given as far as possible at times most convenient for those who are interested and at a season of the year when regular term courses are not in progress. Special announcement of these courses will be issued several months in advance."

As to certificates and credits it states that—

"Graduates in medicine may obtain a *Certificate in Tropical Medicine* by at least one year's work in residence, involving the completion of an approved course of study, representing a minimum of 30 points, ten of which must

include research work in the preparation of a thesis. A special examination, in addition to the usual course examinations, will be required for the Certificate.

"Credits for courses in the School will be accepted by Columbia toward higher degrees (A. M., Ph. D.) provided the candidate has had at least one year's residence as a graduate student in Columbia University or (in special cases) provided the candidate presents evidence of previous training acceptable to the graduate department of Columbia University. In each case the approval of the department in which the candidate wishes to register must be obtained. Once the candidate is accepted for graduate work by Columbia University he may be assigned for work in Porto Rico. Prospective candidates for higher degrees in Columbia University, doing their work in the School of Tropical Medicine, should obtain a personal interview with the Director of the School in San Juan or with the head of the department in which he wishes to register in Columbia University, New York. A certified transcript of previous academic training must be presented in every case together with two letters of recommendation from previous instructors.

"Credits will be accepted by the University of Porto Rico towards higher degrees (M. A., M. S., Ph. D.) upon the approval of the department in which the candidate is registered. Candidates for such degrees should solicit information in advance of registration since the question of credits must be taken up in each case individually."

A very representative group of professors, instructors and associates as well as consultants form the Faculty of the School for the Fourth Session. The visiting professors are Colonel Edward B. Vedder, U. S. A., P. H. B., A. M., M. D., Sc. D. of the U. S. Army Medical School, Washington D. C., Professor Wm. H. Taliaferro, Ph. D., Colonel Charles F. Craig, U. S. A., A. M., M. D.; Professor Henry C. Sherman, B. S., Ph. D., Sc. D.; Professor Ernest L. Scott, B. S., M. S., Ph. D., and Maurice C. Hall, B. S., A. M., Ph. D., Sc. D., D. V. M.; Professor Edwin O. Jordan, University of Chicago.