BULLETIN OF

FIELD TRAINING PROGRAMS

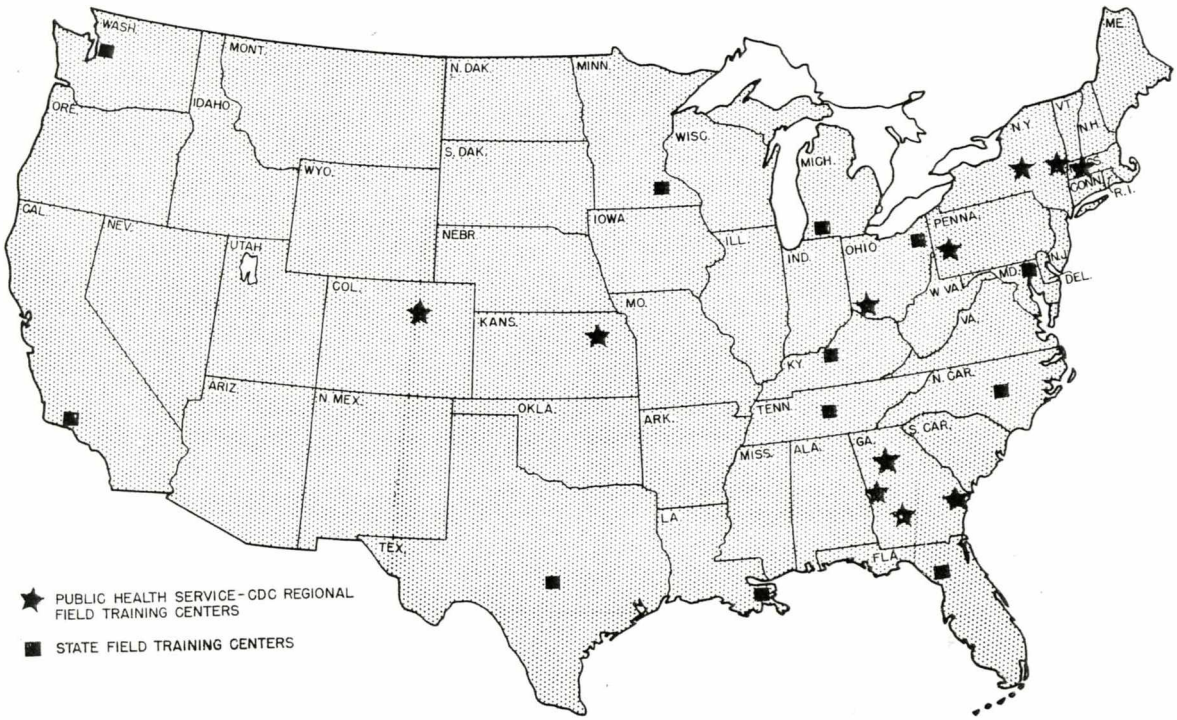
JAN. 1 - DEC. 31

1950

FEDERAL SECURITY AGENCY
Public Health Service
Communicable Disease Center
Atlanta, Georgia

Field Training
OF PUBLIC HEALTH WORKERS
1950

INTRODUCTION
and
SUMMARY of ACCOMPLISHMENTS



Regional Public Health Service-CDC-Field Training Centers and State training centers for public health personnel with which cooperative relationships have been established.

FOREWORD

The Training Division of the Communicable Disease Center, in carrying out its primary purpose of developing and improving techniques of field training for public health personnel, has worked in three ways.

THREE MODES OF LENDING ASSISTANCE TO STATES

1. It has operated eight regional training centers staffed by Public Health Service training officers. Training courses operated under the auspices of the Training Division during 1947, 1948, and 1949 have been completed by 1,982 persons. Two more regional centers are now under development at Pittsburgh, Pa., and Amherst, Mass., in cooperation with State and local health departments.

2. The assignment of experienced field training officers to the States of New York, North Carolina, South Carolina, Maryland, and Kentucky to cooperate with State health departments in developing field training areas and programs has proved a fruitful practice. It appears to be a sound concept that a State health department can advantageously give field training in several categories to its new public health workers by developing suitable training areas throughout the State.

3. As States develop their own field training centers, the Training Division has adopted the practice of loaning training officers to them for short courses of a specialized character, such as milk and food sanitation, and insect and rodent control. Decentralized courses in which the training staff, with necessary demonstration equipment, proceeds to convenient points at the request of States, have proved helpful devices in giving field training.

RECRUITMENT AND REQUIREMENTS FOR ADMISSION TO COURSES

Great care is being taken to plan the field work at each training center in such a manner that there will be no conflict with didactic courses in universities and schools of public health. The greatest need has been demonstrated to be field training at the vocational level for the public health workers now on the job.

In all cases the requirements for admission to courses specify that the trainee must obtain the endorsement of the State health department. The assistance of the Regional Public Health Service offices during the past 3 years has been of great help in recruitment and in interpreting to the States the ways in which new personnel could receive field training. The approval of the Federal sponsor, the educational institution, or the appropriate State official must be obtained before trainees are admitted to field training courses offered by the Training Division.

EXPANSION OF HOUSING FIELD TRAINING

In addition to the 5-week housing training courses at Atlanta, Ga., where trainees from 11 States received housing evaluation practice during the past year, the Training Division has established, in cooperation with the New York State Health Department and the City of Syracuse Health Department, a new field training center at Syracuse, N.Y. Atlanta, Ga., will serve trainees from the South and Southeast; and Syracuse, N.Y., will serve interested persons from the northeastern section of the United States.

FOREIGN VISITOR TRAINING

The increasing number of foreign visitors seeking field training at the Communicable Disease Center, Atlanta, and nearby field training centers — 317 public health administrators, sanitary engineers, and other public health workers from 61 countries in the last 3 years — makes it necessary for more adequate plans to be made to finance this type of field training. During 1950, an endeavor will be made to serve these distinguished foreign public health administrators as well as possible with our limited facilities.

Ellis S. Tisdale

FIELD TRAINING PROGRAMS

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* *Digit left of decimal indicates basic program type. (See next page)*
Digit to the right of decimal indicates variations within the basic program.
Digit to the right of hyphen indicates principal location of field training.

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BASIC PROGRAMS

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2.00 to 2.99 - Sanitation
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5.00 to 5.99 - Public Health Laboratory
6.00 to 6.99 - Public Health Education Technics
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LOCATIONS

0 - Special Arrangement
1 - Atlanta, Ga.
2 - Savannah, Ga.
3 - Columbus, Ga.
4 - Topeka, Kans.
5 - Albany, Ga.
6 - Troy, N. Y.
7 - Cincinnati, Ohio
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12 - Syracuse, N. Y.
13 - Amherst, Mass.
14 - Pittsburgh, Pa.

TRAINING PROGRAM STAFF

TRAINING DIVISION, COMMUNICABLE DISEASE CENTER, ATLANTA, GA.

Ellis S. Tisdale, Sanitary Engineer Director, Chief
James H. Crawford, Sanitary Engineer, Assistant Chief
Lloyd C. McMurray, Sanitary Engineer (R), Training Methods Consultant
Marshall Walker, Jr., Administrative Assistant

INSECT AND RODENT CONTROL BRANCH, ATLANTA, GA.

Clyde F. Fehn, Sanitary Engineer, Acting in Charge
Kent S. Littig, Entomologist
Alfred R. Kinney, Jr., Training Instructor
Clarence W. Marshall, Entomologist
James F. Hackney, M.D., Director of Public Health, Atlanta, Ga.
Stafford W. Graydon, Public Health Engineer, Atlanta Department of Health, Atlanta, Ga.
Melvin H. Goodwin, Sanitarian (R), Director, Emory University Field Station, Newton, Ga.

SPECIAL SERVICES BRANCH, ATLANTA AND ALBANY, GA.

Joseph E. Borches, Training Officer, In Charge
Mary L. Garretson, Training Officer, Evaluation Section
David M. Wolfe, M.D., Commissioner of Health, Albany-Dougherty County Health Department, Albany, Ga.
Ralph S. Howard, Sanitary Engineer, Dougherty County, Albany, Ga.

PUBLIC HEALTH INTERNSHIP TRAINING BRANCH, ATLANTA, GA.

James H. Crawford, Sanitary Engineer, In Charge

Assignment to State Health Departments

Elmer H. Hill, Surgeon, Training Officer, New York
Ruth Sumner, Scientist, Training Officer, Health Education, New York
Joseph F. O'Brien, S. A. Sanitarian, Training Officer, Sanitation, New York
Charles C. Wilson, Training Officer, Health Department Records, Columbia, S.C.
William C. Gibson, Sanitary Engineer, North Carolina
John A. Sullivan, J. A. Sanitarian (R), Maryland

Housing Sanitation Section, Atlanta, Ga.

Ross W. Buck, S. A. Engineer, Training Officer, In Charge
Herbert H. Rogers, J. A. Sanitary Engineer (R)
Emil A. Tiboni, S. A. Sanitarian (R), Training Officer, Syracuse, N.Y.

COLUMBUS FIELD TRAINING STATION, COLUMBUS, GA.

J. A. Thrash, M.D., Director, Columbus Public Health Training Station and Health Commissioner, Columbus-Muscogee County Health Department
Charles D. Spangler, Sanitary Engineer, Training Officer
Richard F. Clapp, Sanitarian, Training Officer
Mark R. Harbison, Public Health Engineer, Columbus-Muscogee County Health Department
Veronica F. Richeimer, R.N., Public Health Nurse, Training Instructor
Martha J. Spence, Bacteriologist, Training Instructor
George T. Turnipseed, Sanitarian, Training Instructor
John W. McCain, Sanitary Engineer Aid, Training Instructor

SAVANNAH FIELD TRAINING STATION, SAVANNAH, GA.

Clair A. Henderson, M.D., Director, Savannah Field Training Station and Health Commissioner, Savannah-Chatham County Health Department

TOPEKA FIELD TRAINING CENTER, TOPEKA, KANS.

T. R. Hood, M.D., Director, Topeka Field Training Center, and Health Officer, Topeka City-Shawnee County Health Department
Hugh E. Eagan, Training Officer
Romaine E. Kious, Training Officer

TRAINING PROGRAM STAFF (contd.)

Consultant Staff from the Topeka City-Shawnee County Health Department

Charles J. Sheetz, Sanitary Engineer Consultant
Leslie W. Rowles, D.V.M., Veterinarian Consultant
Jeanette Rosenstock. R.N., Public Health Nurse Consultant
Emil Freienmuth, Public Health Laboratory Consultant

Participating Members from the Kansas State Board of Health

V. M. Winkle, M.D., Assistant Director of Local Health Administration
Roberta Foote, R.N., Public Health Nurse Consultant
Evelyn Ford, Records Consultant

NEW YORK STATE-RENSSELAER COUNTY PUBLIC HEALTH TRAINING CENTER, Troy, N.Y.

F. E. Coughlin, M.D., Director, New York State-Rensselaer County Public Health Training Center, and Rensselaer County Commissioner of Health
M. H. Thompson, Dr. Engr., Assistant Director, New York State-Rensselaer County Public Health Training Center, and Director, Division of Environmental Hygiene, Rensselaer County Department of Health
Juliette Julien, R.N., Director of Nursing, Rensselaer County Health Department
Joseph L. Minkin, S. A. Sanitarian, Training Officer

Participating Members from the New York State Department of Health

Robert Korns, M.D., Director, Division of Communicable Diseases
F. W. Gilcreas, Assistant Director, Division of Laboratories
Earl Devendorf, Director, Division of Sanitation
Anselmo F. Dappert, Principal Sanitary Engineer
Charles R. Cox, Chief, Bureau of Water Supply
Andrew F. Allen, Chief, Bureau of Camp Sanitation
Stanley T. Barker, Chief, Bureau of Sewage Treatment and Waste Disposal
Charles C. Agar, Senior Sanitary Engineer
Albert I. Howd, Associate Sanitary Engineer
Walter D. Tiedeman, Chief, Bureau of Milk and Restaurant Sanitation
C. Sidney Leete, Principal Milk Sanitarian
Franklin L. Schacht, Ph.D., Supervising Milk Inspector
Frederick W. Graves, D.V.M., Senior Milk Sanitarian
Clarence W. Weber, Senior Milk Sanitarian
Michael J. McCormack, Assistant Milk Sanitarian

CINCINNATI FIELD TRAINING CENTER (IN COOPERATION WITH PUBLIC HEALTH SERVICE ENVIRONMENTAL HEALTH CENTER), CINCINNATI, OHIO

Vernon G. MacKenzie, Sanitary Engineer Director, Officer in Charge, Environmental Health Center
Maurice LeBosquet, Jr., Senior Sanitary Engineer
C. T. Butterfield, Bacteriologist
C. C. Ruchhoft, Chemist
Luther A. Black, Bacteriologist
F. M. Middleton, S. A. Sanitarian (R)
Ernest P. Dubuque, Senior Sanitary Engineer, Training Officer
Harry P. Kramer, Chemist

ROCKY MOUNTAIN FIELD TRAINING CENTER, DENVER, COLO.

Lloyd Florio, M.D., Director, Rocky Mountain Field Training Center, and Professor of Preventive Medicine and Public Health, University of Colorado Medical School
Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer

TRAINING PROGRAM STAFF (contd.)

NEW ENGLAND FIELD TRAINING CENTER, AMHERST, MASS.

Leon Bradley, Ph.D., Director, Massachusetts Public Health Training Center, and Head of Department of Bacteriology and Public Health, University of Massachusetts
Herbert W. Haas, Sanitary Engineer, Training Officer
Irving H. Schlafman, J. A. Sanitarian

Participating Members from the University of Massachusetts

Ralph France, Ph.D., Associate Professor
Robert Perriello, Assistant Professor

Participating Members from the Massachusetts Department of Public Health

Vlado A. Getting, M.D., State Commissioner of Public Health
Arthur D. Weston, Director, Division Sanitary Engineering and Deputy Commissioner
Roy Feemster, M.D., Director, Division of Communicable Diseases
Richard MacKnight, M.D., Director, Division of Hospitals
Carl Ferguson, Director, Division of Food and Drugs
John Skinner, Director, Division Occupational Hygiene
Alexander Witkow, M.D., Director of Public Health, Worcester
William Wood, Chief Health Education Coordinator
Ethel Brooks, Chief, Bureau of Nursing
Dorothy Nicholl, Chief, Bureau of Nutrition
Helen Amy, Chief, Bureau of Social Service
Ernest Snow, Chief of Laboratory
A. A. Robertson, Supervising Sanitary Officer
Harold Rose, District Sanitary Officer
Karol Wisnieski, District Sanitary Officer
Walter Merrill, Senior Sanitary Engineer
George Edwards, Assistant Chemist
George Drury, D.V.M., Veterinarian

PITTSBURGH FIELD TRAINING CENTER, PITTSBURGH, PA.

I. Hope Alexander, M.D., Director, Pittsburgh Field Training Center and Director, Pittsburgh Department of Public Health
Karl M. Mason, Training Officer

Participating Members from the City of Pittsburgh Health Department

E. C. Drescher, Senior Surgeon, Special Consultant
Herbert J. Dunsmore, Chief Sanitary Engineer
Stephen Koelz, S. A. Sanitarian (R)

Participating Members from the University of Pittsburgh

Thomas Parran, M.D., Dean, School of Public Health
James A. Crabtree, M.D.

Participating Member from the Public Health Service Region II Office

Harold B. Robinson, Scientist

Advanced Sanitary Engineering Training in Water Pollution Abatement Programs

(1.1-7)

TYPE OF TRAINING PROGRAM: Lectures, laboratory demonstrations, and practice, with emphasis on interpretations, field demonstration, and practice in the use of survey equipment. For supervisory sanitary engineering personnel.

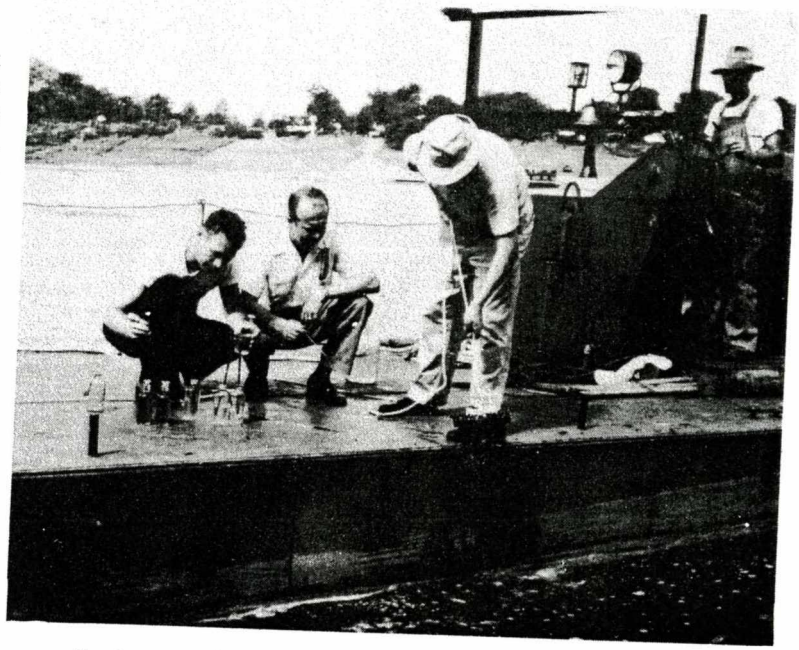
LOCATION: Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio

TIME: March 20 — March 31, 1950

STAFF: Ernest P. Dubuque, Senior Sanitary Engineer
Harry P. Kramer. Chemist
Members of the training staff, personnel of the Environmental Health Center, and prominent consultants in specific fields

A. OUTLINE OF TRAINING PROGRAM

The program covers a 2-week period, furnishing training in the organization and operation of water pollution and industrial waste surveys. Time is devoted to the latest techniques, methods, and interpretation of bacteriological, biological, and chemical examinations of water, sewage, and industrial wastes. The bacteriological, chemical and biological phases of the sanitary engineering problems will be considered equally with the engineering aspects. Emphasis will be on the administration of stream pollution programs, including field demonstrations of the latest techniques and developments for making stream sanitation surveys and interpretation of data. Time will be available for informal group discussions of special problems.



Engineers collecting stream samples from various depths for biological analyses and temperature determinations.

Some of the major subjects to be covered in this technical training course are:

Methods of organizing water pollution abatement programs and industrial waste surveys
Legal aspects of water pollution abatement
Methods of investigating industrial waste problems and latest developments on the removal of

substances causing taste and odor problems
The latest bacteriological, biological, and chemical test techniques for use in water pollution abatement programs
Statistical methods as applied to stream pollution data
Interpretation of water pollution data and its application to water supplies
Water quality standards
Practical application of corrective measures to water pollution problems

Laboratory demonstrations and practice will be carried out at the Environmental Health Center training laboratory.

B. ENTRANCE REQUIREMENTS

This program is offered for sanitary engineers with a wide background in water pollution control. Candidates should be graduate engineers and should be recommended for training by the State health officer, the head of the State agency responsible for water pollution control, or an appropriate Federal official.

No tuition will be charged. Trainees are expected to arrange for their own living and traveling expenses while attending the course, either through State stipend or other means.

C. APPLICATIONS

Letters of application for this program should be sent to the Chief, Training Section, Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio. The letters should give the name and a brief outline of the education and experience of each applicant and should bear the appropriate recommendation of his superior. Applications should be made prior to February 10, 1950.

Orientation Course for Sanitary Engineers in Water Pollution and Industrial Waste Survey Methods (1.2-7)

TYPE OF TRAINING PROGRAM: Practical field training supplemented by lectures and laboratory practice for sanitary engineers with limited experience in the field of water pollution and industrial waste survey methods

LOCATION: Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio

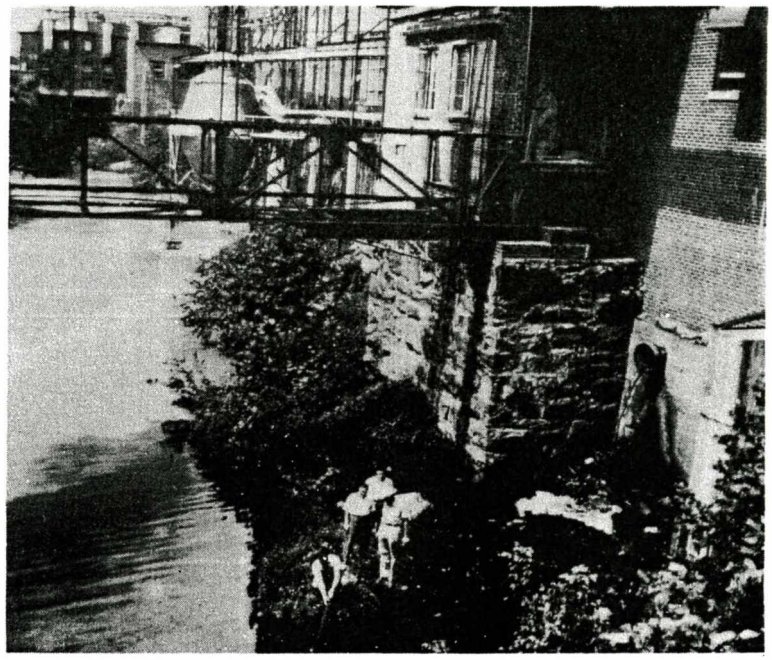
TIME: April 17 — May 26, 1950

STAFF: Ernest P. Dubuque, Senior Sanitary Engineer
Harry P. Kramer, Chemist
Members of the training staff and personnel of the Environmental Health Center

A. OUTLINE OF TRAINING PROGRAM

The program covers a 6-week period and furnishes training in the techniques and methods of conducting water pollution and industrial waste surveys. Sampling and gauging equipment utilized in making surveys will be demonstrated in the field and used by the trainees. The bacteriological, biological, and chemical phases will be given a proportionate share of time along with the engineering problems.

Approximately three-quarters of the time will be spent in conducting practical field and laboratory demonstrations. The remainder of the time will be given to discussions, interpretation of analytical results, and report writing.



Engineers collecting samples of dye wastes from stream receiving industrial waste.

Some of the major subjects in this course are:

- Organization of water pollution abatement programs
- Methods of investigating industrial waste problems
- Interpretation of data
- Bacteriological, biological, and chemical aspects of water pollution investigations
- Water quality standards

Conduct of a stream pollution survey and the writing of a report
Conduct of an industrial waste survey and the writing of a report

B. ENTRANCE REQUIREMENTS

This program is offered for sanitary engineers with little or no experience in water pollution and industrial waste survey methods. Candidates should be graduate engineers and should be recommended for training by the head of the State agency represented or by an appropriate Federal official.

No tuition will be charged. Trainees are expected to arrange for their own living and traveling expenses while attending the course, either through State stipend or other means.

C. APPLICATIONS

Applications should be made through the sponsoring agency and be addressed to the Chief, Training Section, Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio. The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the division head of the organization concerned. Applications should be made prior to March 3, 1950.

General Sanitary Engineering Field Training

(1.3-3)

TYPE OF TRAINING PROGRAM: Practical field training for graduate engineers

LOCATION: Public Health Training Station, Columbus, Ga.

TIME: June 19 — September 8, 1950

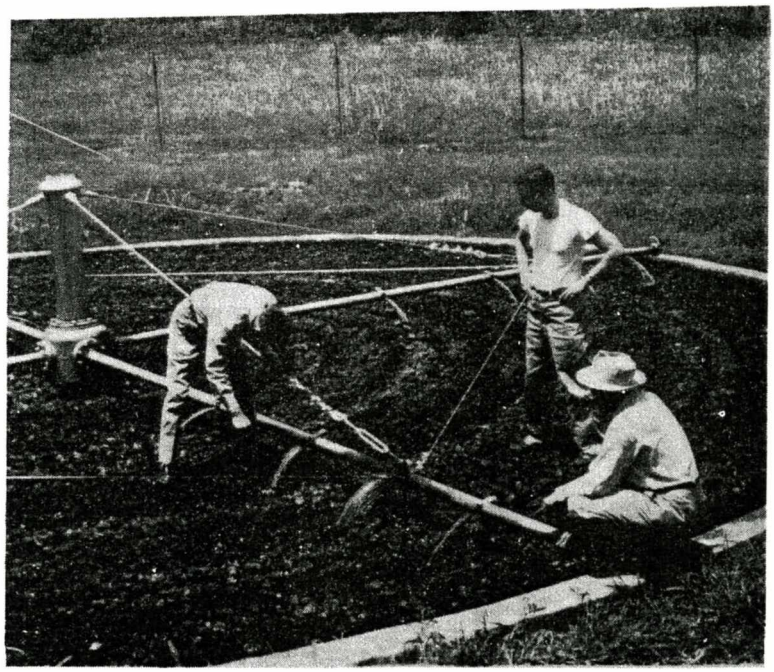
STAFF: Charles D. Spangler, Sanitary Engineer
Richard F. Clapp, Sanitarian
and other members of the staff of the Columbus Public Health Training Station, Columbus-Muscogee County Health Department, members of the staffs of the Columbus Water Department, the Albany Field Training Station, and the Training Division, CDC

A. OUTLINE OF TRAINING PROGRAM

The program covers a 12-week period, giving field training in many phases of public health engineering. Although this program is designed for public health engineers who are engaged in supervisory positions with local health departments, it is available to sanitary engineering personnel of State health departments who will derive benefit from this type of field training.

These practical assignments will be primarily a field training experience where the trainee will actually engage in the regular activities of an operating health department, as well as learn the public health engineering aspects of other public works departments in the area. Arrangements have been made to:

Participate in the operation of a rapid sand-filtration treatment plant for the municipal water supply
Participate in the drilling of wells
Participate in construction of septic tank systems
Make operating reports on a sewage treatment plant
Make inspections and reports on several types of garbage disposal



Trainees receiving instruction on operation of a trickling filter.

Work on rodent and insect control programs
Make food sanitation inspections and surveys
Inspect and report on milk production and milk processing
Make housing, premises, and plumbing surveys
Practice field techniques of health education
Carry out the standard laboratory techniques necessary to supplement any portion of the program listed above
Brief experience in industrial hygiene, swimming pool sanitation, meat processing, school sanitation, stream pollution, and sanitary surveys

Adequate laboratory, construction, and operational equipment, and projection and transportation facilities are available.

The trainees are divided into groups of two or three men and these teams rotate during 8 weeks of field practice. The trainees are changed from team to team so that they have an opportunity to learn from each other. The teams are given specific daily assignments in the various activities. A variety of large and small municipal water and sewage treatment plants are available. Over two hundred food handling establishments, approximately eighty producing dairy farms, one holding type pasteurization plant, and one high-temperature short-time pasteurization plant are available for food and milk sanitation field practice. Three sanitary land fills and one incinerator, six swimming pools of various types, and operating programs in insect and rodent control, well drilling, and septic tank and privy construction are also available.

Extensive use will be made of training aids such as filmstrips, motion pictures, and demonstrations to supplement the field work. The trainee will run laboratory tests connected with various phases of the training and will be instructed in the theory and interpretation of the tests.

Excellent cooperation is given by the Columbus-Muscogee County Health Department in the conduct of the training program. The sanitation program of the Health Department represents an annual expenditure of approximately one hundred fifteen thousand five hundred dollars for an estimated population in Muscogee County of ninety-six thousand including the City of Columbus which has a population of fifty-seven thousand.

B. ENTRANCE REQUIREMENTS

This program is offered for engineering graduates who have had a satisfactory background in environmental sanitation and are recommended for training by a State health officer, an appropriate Federal official, or the dean of an accredited school of engineering or public health.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses while attending the training program, either through State stipend, their personal resources, or other arrangements with their employers. Rooms for single men are readily available, although desirable apartments for families are difficult to obtain.

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Columbus Public Health Training Station, Columbus, Ga.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Sanitary Engineering Field Training for Public Health Service Regular Corps Officers

(1.4-3,0)

TYPE OF TRAINING PROGRAM: Practical field training for graduate engineers followed by additional supervised field experience in State and local health departments

LOCATION: Public Health Training Station, Columbus, Ga., and selected State and local health departments

TIME: Three-year training program to be arranged

STAFF: Columbus Public Health Training Station:
Members of the staff of the Columbus Public Health Training Station
Members of the staffs of the Columbus Water Department, the Albany Field Training Station, and the Training Division, CDC
Members of the staffs of the Divisions of Sanitary Engineering and Sanitation of selected State and local health departments, and all Divisions of the Public Health Service concerned

A. OUTLINE OF TRAINING PROGRAM

This 3-year field training program is designed to provide wide field experience in sanitary engineering and environmental sanitation activities for regular corps sanitary engineer officers of the U. S. Public Health Service who have recently completed 1 year of academic instruction leading to a M.P.H. degree or a M.S. degree in sanitary engineering.

The field training will be divided as follows:

1. Assignment to the Columbus Public Health Training Station, Columbus, Ga., for a period of 3 months to take the regularly scheduled training program, "General Sanitary Engineering Field Training."

2. Assignment for further field training to selected local and

Public Health Service officers observing sanitary land fill operations.

State health departments will be under the direction of the Division of Commissioned Officers and the Division of Sanitation of the U. S. Public Health Service.

For further information concerning the content of the 3-month training program at the Columbus Public Health Training Station, see the description of the course, "General Sanitary Engineering Field Training (1.3-3)," in this bulletin.

At the completion of training at the Columbus Field Training Station, all trainees will be under the direction of the Division of Commissioned Officers and the Division of Sanitation of the Public Health Service. They will be assigned to selected local and State health departments where they will receive supervised experience in the various sanitary engineering activities of these departments. Through this medium, the trainee will receive sufficient practical experience to have a thorough working knowledge of both local and State health department activities.

The remainder of the 3-year training program will consist of assignments in various regional offices and headquarters units of the U. S. Public Health Service.

B. ENTRANCE REQUIREMENTS

This 3-year training program is designed for regular corps sanitary engineering officers who have recently completed the academic instruction indicated previously. During this period of training, the officer will be assigned on full-pay status and cost of all travel from station to station on change of field training assignment will be paid by the Government.

C. APPLICATIONS

This field training will be arranged for each officer undertaking graduate academic training as part of his training in the Public Health Service. Upon application for graduate training, each officer should indicate the particular type of duty for which he desires field training. Insofar as practicable and with consideration of the needs of the Service, the officer's desires in regard to field training will be given full consideration. All arrangements for field training will be made jointly by the Division of Commissioned Officers, the Division of Sanitation, and the Communicable Disease Center.

Environmental Sanitation Field Training for Graduate Sanitarians (2.1-13)

TYPE OF TRAINING PROGRAM: Practical field training for graduate sanitarians

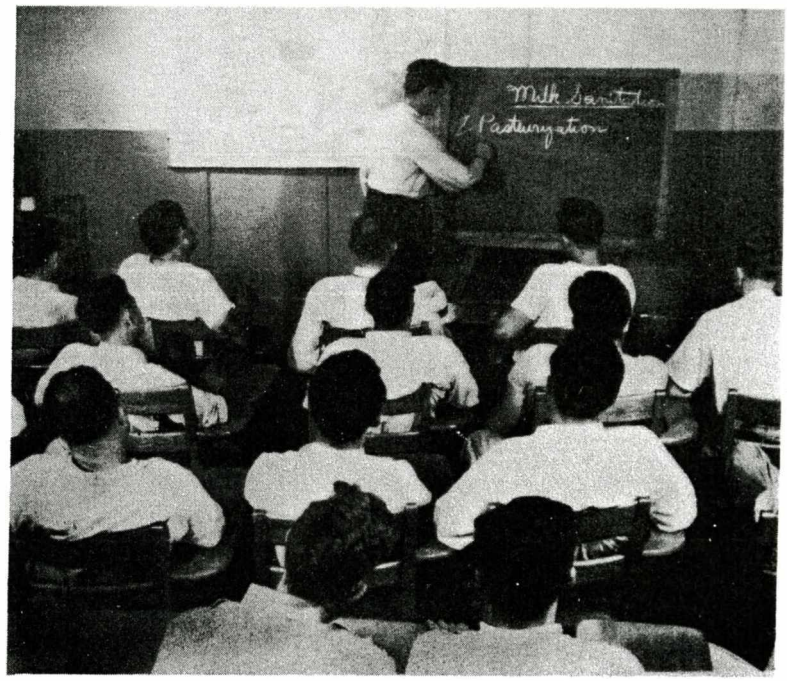
LOCATION: New England Field Training Center, Marshall Hall, University of Massachusetts, Amherst, Mass.

TIME: July 10 — September 1, 1950

STAFF: Herbert W. Haas, Sanitary Engineer
Irving H. Schlafman, J. A. Sanitarian
and certain personnel of the Massachusetts State Department of Public Health, the University of Massachusetts, and the Training Division of the Communicable Disease Center

A. OUTLINE OF TRAINING PROGRAM

The program covers an 8-week period and is organized to give field training in all phases of environmental sanitation for graduate sanitarians of the University of Massachusetts. It is designed to give the trainee a working knowledge of the major elements of municipal and rural sanitation and their relation to sanitary inspectors' work. The first week will consist of general orientation and an introduction to health organizational structure including local, State, and Federal. The next week will be devoted to basic principles of public health. The third and fourth weeks will be devoted to discussion and field experience in water and sewage, swimming pool and school sanitation, and refuse collection and disposal. The fifth and sixth weeks will be concerned with food and milk sanitation. During the last 2 weeks of the course, trainees make a sanitary survey in a small community and undertake a resort sanitation survey. This serves both as a review and as a practical application of the subjects previously covered during the course.



Sanitarians receive briefing on milk pasteurization preparatory to making field trip.

Environmental Sanitation Field Training

(2.2-13)

TYPE OF TRAINING PROGRAM: Practical field training for sanitary inspectors

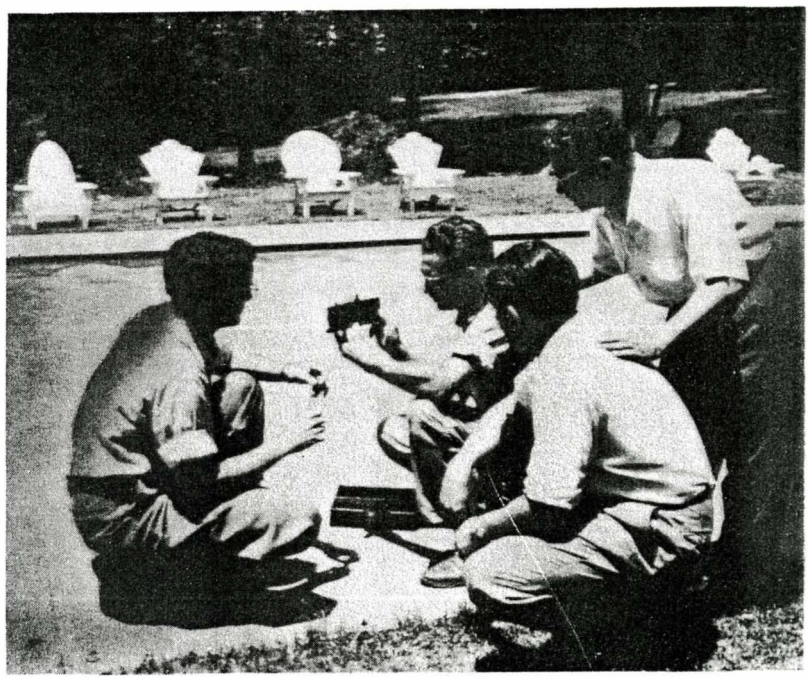
LOCATION: New England Field Training Center, Marshall Hall, University of Massachusetts, Amherst, Mass.

TIME: January 3 — March 24, 1950
April 10 — June 30, 1950
September 25 — December 16, 1950

STAFF: Herbert W. Haas, Sanitary Engineer
Irving R. Schlafman, J. A. Sanitarian
and certain personnel of the Massachusetts State Department of Public Health and the University of Massachusetts

A. OUTLINE OF TRAINING PROGRAM

Each of the courses covers a 12-week period, and they are designed to give the trainee a practical working knowledge of the field of environmental sanitation and of a sanitary inspector's duties.



Trainees receiving instruction in determining chlorine residual of a swimming pool.

The first 2 weeks of fundamental background include elementary bacteriology, chemistry, communicable diseases, public health organization and administration, public relations, and public health education. During the next 2 weeks, the trainees will hear discussions on and receive field experience in public and private water supplies and sewage disposal, swimming pool sanitation, and school sanitation. The fifth week is devoted to a variety of subjects, such as concrete construction, nuisances, garbage collection and disposal, mathematics as related to a sanitary inspector's duties, and industrial hygiene. Insect and rodent control will be discussed, and trainees will participate in field demonstrations during the sixth week. The following 4 weeks are devoted to food and milk sanitation. This includes discussions of ordinances and regulations and field inspections of restaurants, dairy farms, milk plants, bakeries, food processing plants, etc. During this

period, milk samples are collected and tests run on the samples in the laboratory by the trainees. At the close of the weeks devoted to study of milk and food, round table discussions are held to clear up any points that trainees may wish to have clarified. During the last 2 weeks of the course, the trainees make a sanitary survey of a small community and undertake a resort sanitation survey. Since this requires a knowledge and use of the principles of environmental sanitation, it serves both as a review and as practical application of these subjects.

Guest lecturers from the Massachusetts State Department of Public Health and the University of Massachusetts participate in presenting lectures. Laboratory facilities of the University are used in the examination of samples collected during the course.

B. ENTRANCE REQUIREMENTS

This program is offered to any person who has, or who can meet, the merit system requirements for some type of sanitary position in the State he represents.

These courses will be given primarily for residents of Massachusetts, with a limited number admitted from other New England States.

C. APPLICATION

Applications should be made through the sponsoring agency and should be addressed to the New England Field Training Center, Marshall Hall, University of Massachusetts, Amherst, Mass.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Environmental Sanitation Field Training

(2.3-3)

TYPE OF TRAINING PROGRAM: Practical field training for sanitarians

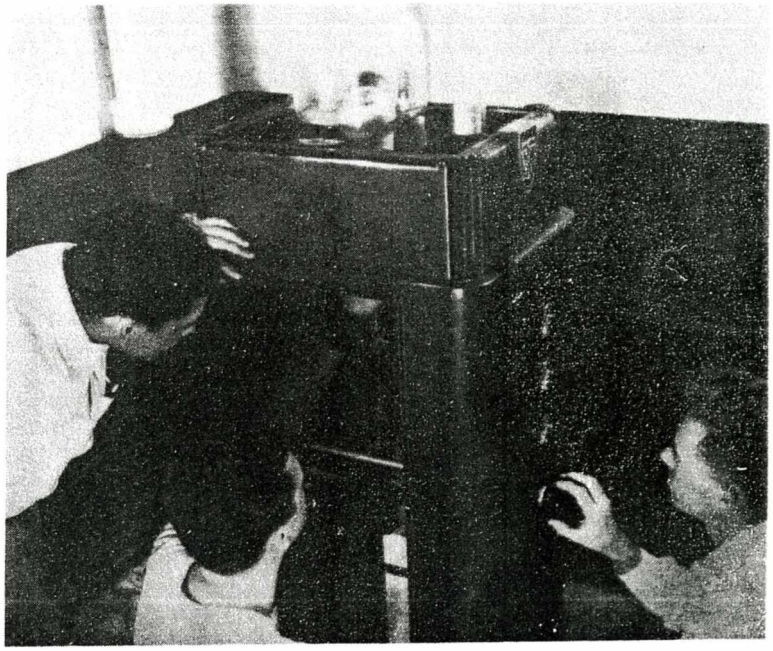
LOCATION: Columbus Field Training Station, Columbus, Ga.

TIME: February 6 — April 28, 1950

STAFF: Charles D. Spangler, Sanitary Engineer
Richard F. Clapp, Sanitarian
and other members of the staff of the Columbus Public Health Training Station, Columbus-Muscogee County Health Department, members of the staffs of the Columbus Water Department, the Albany Field Training Station, and the Training Division of CDC

A. OUTLINE OF TRAINING PROGRAM

The program covers a 12-week period, giving field training in all phases of environmental sanitation. The program is designed for sanitarians who will do general sanitation in a city or county health department. This course is intended for new men in the field of public health sanitation and is flexible enough to be valuable for men who have had experience in one or two fields and who now desire to broaden the scope of their activities. This is also an excellent refresher course to bring men up to date on the latest information in various activities.



Sanitarian trainees receiving instruction in the operation of a chlorinator.

This program will offer principally a field training experience where the trainee will actually engage in the regular activities of an operating health department. Practical assignments in all of the usual activities of sanitarians in city-county health units will be made and will include field experience in the following:

Urban and rural water supplies
Urban and rural sewage disposal
Garbage collection and disposal
School and recreational area sanitation

Private premises sanitation
Housing and plumbing
Food handling sanitation
Milk sanitation
Bathing area sanitation
Sanitary surveys
Insect and rodent control
Laboratory and field tests and their interpretation
Health education techniques
Record keeping and report writing

Adequate laboratory, construction, and operational equipment, and projection and transportation facilities are available.

The trainees are divided into groups of two or three men for field practice assignments. Each group carries out field activities under the general supervision of a field training instructor. More experienced sanitarian trainees are given special field practice assignments to work out on their own initiative. A variety of large and small municipal water and sewage treatment plants are available. More than two hundred food handling establishments, approximately eighty producing dairy farms, one holding type pasteurization plant, and one high-temperature short-time pasteurization plant are available for food and milk sanitation field practice. Three sanitary land fills and one incinerator, six swimming pools of various types, and operating programs in insect and rodent control, well drilling, and septic tank and privy construction are also available.

Extensive use will be made of training aids such as filmstrips, motion pictures, and demonstrations to supplement the field work. The trainee will run laboratory tests connected with various phases of the training and will be instructed in the theory and interpretation of the tests.

Excellent cooperation is given by the Columbus-Muscogee County Health Department in the conduct of the training program. The sanitation program of the Health Department represents an annual expenditure of approximately one hundred and fifteen thousand dollars for an estimated population in Muscogee County of ninety-six thousand including the City of Columbus which has a population of fifty-seven thousand.

B. ENTRANCE REQUIREMENTS

This program is offered to any person who has, or who can meet, the merit system requirements for some type of sanitation position in the State he represents.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses while in attendance, either through State stipend, their personal resources, or other arrangements with their employers. Rooms for single men are readily available, although desirable apartments for families are difficult to obtain.

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Columbus Field Training Station, Columbus, Ga.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Environmental Sanitation Field Training (2.4-11)

TYPE OF TRAINING PROGRAM: Practical field training for sanitarians

LOCATION: Rocky Mountain Field Training Center, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.

TIME: March 6 — May 26, 1950
September 18 — December 8, 1950

STAFF: Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer
and other members of the staffs of the Denver City-County Health Department, the Colorado State Health Department, University of Colorado Medical Center, and the U. S. Public Health Service Region IX Office

A. OUTLINE OF TRAINING PROGRAM

These 12-week specialized training programs in environmental sanitation are designed to equip the trainee with a working knowledge of an overall program of municipal and county sanitation work. The first 4 weeks of fundamental background information include public health administration, records, bacteriology, public health nursing, and public health education. The remaining 8 weeks include field experience in rural and urban sanitation, rodent and insect control, plumbing, meat sanitation, housing, milk sanitation, and sanitation of eating and drinking establishments. During the entire training programs, emphasis will be placed on the methods used in handling sanitation problems in the midwestern region of the United States.

Trainee receiving instruction on proper installation of septic tank drain tile.

Each trainee is given an opportunity to work alone in solving practical problems with guidance and counsel from the training ing staff. In the past the planned discussion following each field experience has proved to be a valuable aid in emphasizing fundamental points of public health practice. This work, under close supervision, gives the trainee confidence in himself and an understanding of sanitary practices which fit him to do a better job as a co-worker in a health department.

B. ENTRANCE REQUIREMENTS

These programs are offered to any person actively engaged in environmental sanitation work. *No tuition will be charged, but trainees are to arrange for their own living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.*

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Rocky Mountain Field Training Center, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Environmental Sanitation Field Training (2.5-4)

TYPE OF TRAINING PROGRAM: Practical field training for sanitarians

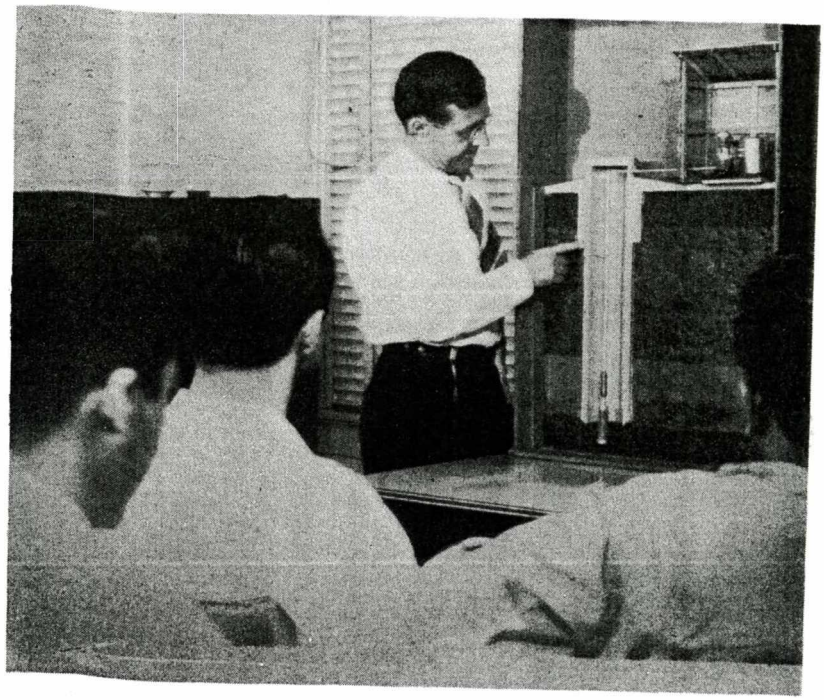
LOCATION: Topeka Field Training Center, Room 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.

TIME: February 6 — April 29, 1950
August 21 — November 11, 1950

STAFF: T. R. Hood, M.D., Director
Hugh E. Eagan, Senior Training Officer
Romaine E. Kious, Training Officer
and other members of the staffs of the Topeka-City-Shawnee County Health Department and the Kansas State Board of Health. Also members of the staff of the U. S. Public Health Service Region VII Office

A. OUTLINE OF TRAINING PROGRAM

This 12-week specialized training program in environmental sanitation is designed to equip the trainee with a working knowledge of an overall program of municipal and county sanitation work. The first 4 weeks of fundamental background information include public health administration, records, bacteriology, public health nursing, and public health education. The remaining 8 weeks include field experience in rural and urban sanitation, rodent and insect control, plumbing, meat sanitation, housing, milk sanitation, and sanitation of eating and drinking establishments. During the entire training program emphasis is placed on the methods used in handling sanitation problems in the midwestern region of the United States.



Instructor pointing out method of protecting small well water supply.

Each trainee is given an opportunity to work alone in solving practical problems, with guidance and counsel from the training staff. The planned discussion following each field experience has proved to be a valuable aid in emphasizing fundamental points of public health practice. This work, under close supervision, gives the trainee confidence

in himself and an understanding of sanitary practices which fit him to do a better job as a co-worker in a health department.

The Topeka Field Training Center is located in Topeka, Kans., a midwestern city of one hundred thousand population. Topeka, the State capitol, is a center of railroad, industrial, and agricultural interests. The area served by the Topeka City-Shawnee County Health Department has a total population of one hundred twenty-seven thousand and offers many advantages for the study of urban and rural environmental sanitation. The Topeka City-Shawnee County Health Department has developed a progressive, fully-staffed health organization with outstanding facilities. Active participation in the training program is maintained by the Topeka City-Shawnee County Health Department, the Kansas State Board of Health, and the Region VII Office of the U. S. Public Health Service.

B. ENTRANCE REQUIREMENTS

This program is offered to any person actively engaged in environmental sanitation work.

No tuition will be charged, but trainees are to arrange for their own living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Topeka Field Training Center, Room 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Environmental Sanitation Field Training (2.6-6)

TYPE OF TRAINING PROGRAM: Practical field training for sanitary inspector personnel

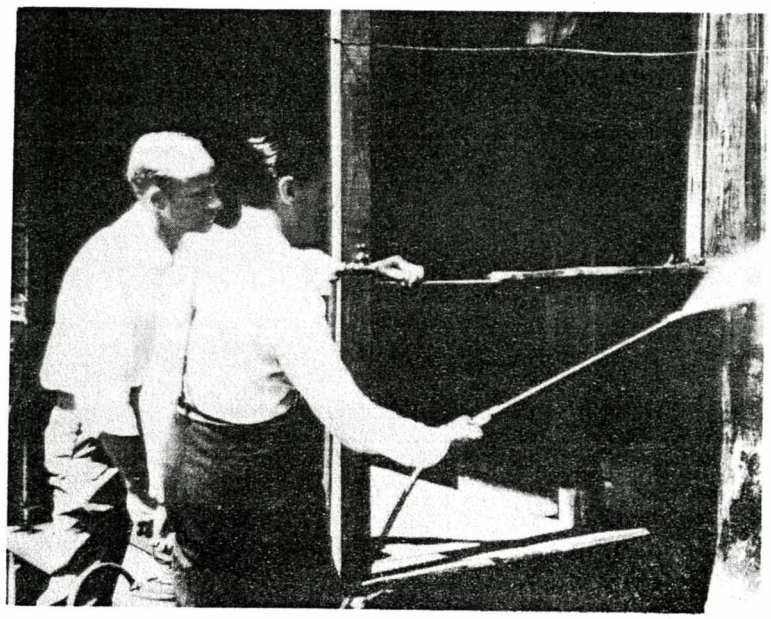
LOCATION: New York State-Rensselaer County Public Health Training Center, Troy, N.Y.

TIME: September 11 — December 8, 1950

STAFF: Joseph L. Minkin, S.A. Sanitarian
and other members of the staff of the New York State-Rensselaer County Public Health Training Center. Also members of the staff of the U.S. Public Health Service Region II Office

A. OUTLINE OF TRAINING PROGRAM

This 12-week course in environmental sanitation is organized to give the trainee a working knowledge of the major elements in municipal and rural sanitation and their relation to sanitary inspectors' work.



Instruction in proper spraying technique for insect control.

The first 2 weeks of fundamental background will include elementary bacteriology, communicable diseases, public health organization and administration, and public health education. The next 2 weeks will be devoted to discussion and field experience in water and sewage, swimming pool sanitation, and school sanitation. The fifth week will cover concrete construction and mathematics pertaining to a sanitary inspector's work and to nuisances, garbage collection and disposal, and industrial hygiene. During the sixth week, insect and rodent control will be discussed and trainees will participate in field demonstrations.

The following 4 weeks (seventh through tenth) will be devoted to milk and food sanitation. Food and milk ordinances, restaurants, dairy farms, pasteurization plants, and laboratory and field tests of food and milk and their interpretation will be discussed during the first 1½ weeks. The trainees will then be taken out in small groups accompanied by various instructors to inspect restaurants, farms, and dairy plants. During the latter part of this 4-week period, the trainees will inspect these various activities alone, and will collect samples on which they will run field tests and simple laboratory tests. The last 2 days of the period will be used for participation by the students in a round table discussion on milk and food.

During the last 2 weeks of the course, the trainees will make a sanitary survey of a small community and undertake a resort sanitation survey. As this requires a knowledge and use of most of

the principles of environmental sanitation, it will serve both as a review and as a practical application of the subjects.

During the course, over 20 guest lecturers who are among the leaders in their fields will participate in the discussions and demonstrations.

The station uses the laboratory facilities of the Rensselaer County Health Department in the examination of the samples collected during their field inspections. Extensive use is made of audio-visual aids and demonstration equipment.

B. ENTRANCE REQUIREMENTS

This program is offered to any person who has, or who can meet, the merit system requirements for some type of sanitary inspector position in the State he represents. The trainee should have at least a high school education and 2 years of experience in similar health department activities to obtain the maximum benefit from this field training program. College trained applicants will be given preference for this program.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses while in attendance, either through State stipend, their own personal resources, or other arrangements with their employers.

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the New York State- Rensselaer County Public Health Training Center, Troy, N.Y.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Environmental Sanitation Field Training

(2.7-14)

TYPE OF TRAINING PROGRAM: Practical field training for sanitarians

LOCATION: Pittsburgh Field Training Center, Pittsburgh, Pa.

TIME: Dates to be announced

STAFF: Karl M. Mason, Training Officer
and members of the staffs of the Pittsburgh Department of Public Health, the Pennsylvania State Health Department, U. S. Public Health Service Region II, and University of Pittsburgh School of Public Health

A. OUTLINE OF TRAINING PROGRAM

It is anticipated that this program will cover a 12-week period, giving field training in all phases of environmental sanitation. However, this Center is under development and will not be active until the late spring of 1950.

Those desiring the latest information relative to course content and schedule dates should write to the Pittsburgh Field Training Center, Pittsburgh Department of Public Health, City Hall, Pittsburgh, Pa.; or to the Training Division, Communicable Disease Center, U.S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to Public Health Service Region II, 42 Broadway, New York 4, N.Y.

Food sanitation is one of the subjects to be included in the training schedule at this Center.

Special Training Program in Milk Sanitation (2.8-3)

TYPE OF TRAINING PROGRAM: Comprehensive field training in milk production and processing sanitation

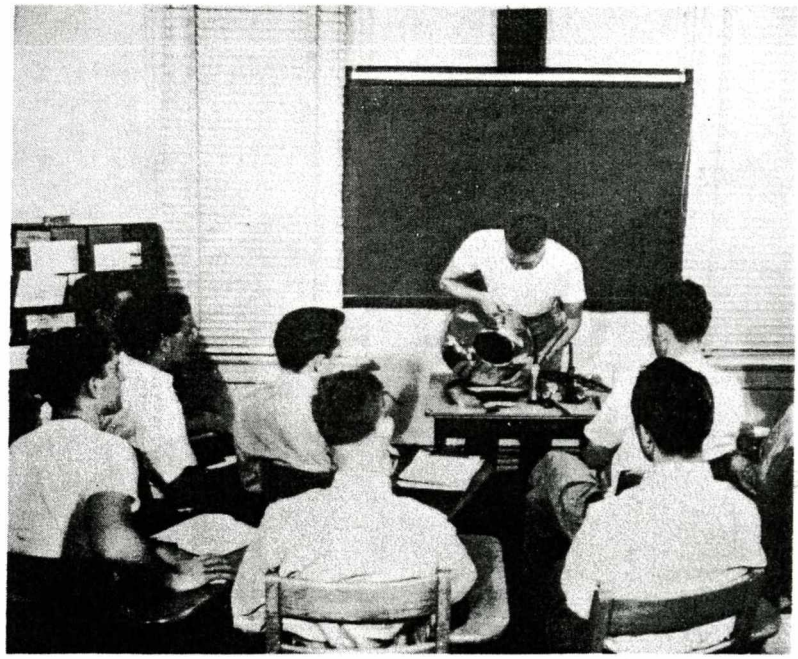
LOCATION: Columbus Field Training Station, Columbus, Ga.

TIME: Tentatively scheduled for 2 weeks in the spring; dates to be announced

STAFF: Charles D. Spangler, Sanitary Engineer
Richard F. Clapp, Sanitarian
and other members of the staffs of the Columbus Field Training Station and the Muscogee County Health Department

A. OUTLINE OF TRAINING PROGRAM

The 2-week training period is designed to provide those State and local health department personnel with particular interest in milk sanitation an intensive course in milk production and processing sanitation. Emphasis will be placed, insofar as possible, on active participation by the trainee in the operation and instrumentation of a working demonstration pasteurization unit for both holding and high temperature — short time processing, in conducting all laboratory procedures commonly applied in milk sanitation control, and in milk production sanitation practices. Class work will be held to a minimum and will consist essentially of discussions rather than lectures.



Trainees receive instruction in the operation of all types of milk equipment.

The Columbus-Muscogee County milk shed affords excellent opportunity to study a variety of milk producing methods, facilities, and practices. At the two milk plants in Columbus, both holding and high temperature-short time pasteurization will be observed, as well as the manufacture of dairy products and the operating of newly installed plant equipment.

B. ENTRANCE REQUIREMENTS

This program is offered to any person who has, or who can meet, the merit system requirements for a sanitation position in the State he represents.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses while in attendance, either through State stipend, their personal resources, or other arrangements with their employers. Rooms for single men are readily available, although desireable apartments for families are difficult to obtain.

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Columbus Field Training Station, Columbus, Ga.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Special Training Program in Milk and Restaurant Sanitation (2.9-11)

TYPE OF TRAINING PROGRAM: Special training program in milk and restaurant sanitation

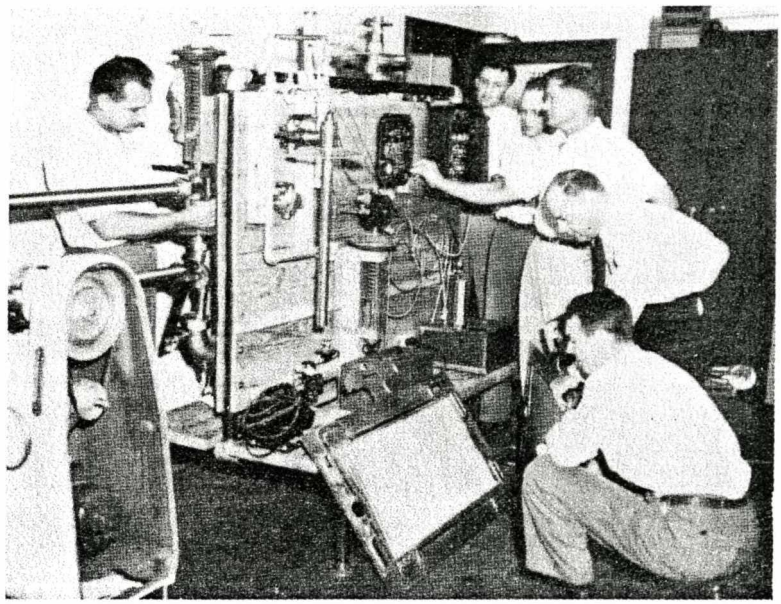
LOCATION: Rocky Mountain Field Training Center, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.

TIME: Tentatively scheduled for 2 weeks in August, dates to be announced

STAFF: Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer
and other members of the staffs of the Denver City-County Health Department, the Colorado State Health Department, University of Colorado Medical Center, and the U. S. Public Health Service Region IX Office

A. OUTLINE OF TRAINING PROGRAM

This 2-week training period is designed to assist industry personnel and the personnel of local and State health departments in the technical aspects of milk and food sanitation. Emphasis will be placed on the demonstration of physical and chemical tests and in familiarizing the trainee with the engineering design and operation of dairy, milk plant, and restaurant equipment. Active participation by the trainee will be expected in field work as well as in the panel discussions.



Milk sanitarian trainees working with short-time high temperature pasteurization equipment.

B. ENTRANCE REQUIREMENTS AND APPLICATIONS

This program is offered to any person actively engaged in public health or industrial sanitation work. *No tuition will be charged, but trainees are to arrange for their own living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.*

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Rocky Mountain Field Training Center, 4200 E. Ninth Ave., Denver, Colo.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Special Training Programs in Milk and Restaurant Sanitation (2.10-4)

TYPE OF TRAINING PROGRAM: Special training programs in milk and restaurant sanitation

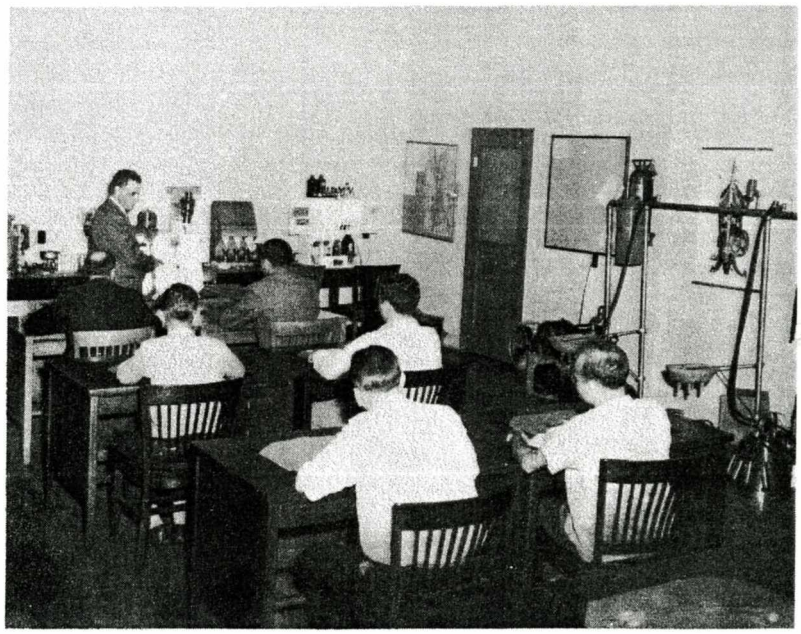
LOCATION: Topeka Field Training Center, Room 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.

TIME: Milk Sanitation
May 15 — May 27, 1950
Restaurant Sanitation
January 9 — January 27, 1950

STAFF: T. R. Hood, M.D., Director
Hugh E. Eagan, Senior Training Officer
Romaine E. Kious, Training Officer
and other members of the staffs of the Topeka City-Shawnee County Health Health Department and the Kansas State Board of Health; also, members of the staff of the U. S. Public Health Service Region VII Office and invited authorities on specialized subjects.

A. OUTLINE OF TRAINING PROGRAM

The 2-week training period in milk sanitation and the 3-week training period in restaurant sanitation are designed to assist the personnel of local and State health departments and industry personnel in the technical aspects of milk and food sanitation. Emphasis will be placed on the demonstration of physical and chemical tests and in familiarizing the trainee with the engineering design and operation of dairy, milk plant, and restaurant equipment. Active participation by the trainee will be expected in field work as well as in the panel discussions.



Instructor briefing trainees on different types of milk equipment before taking field trip.

The Topeka Field Training Center is located in Topeka, Kans., a midwestern city of one hundred thousand population which is the State capitol. Topeka is a center of railroad, industrial, and agricultural interests. The area served by the Topeka City-Shawnee County Health Department has a total population of one hundred twenty-seven

thousand and offers many advantages for the study of urban and rural environmental sanitation. The Topeka City-Shawnee County Health Department has developed a progressive, fully staffed health department with outstanding facilities. Active participation in the training programs is maintained by the Topeka City-Shawnee County Health Department, the Kansas State Board of Health, and the U. S. Public Health Service Region VII Office. Experts in specialized fields employed by private industry aid materially in the presentation of these studies.

B. ENTRANCE REQUIREMENTS

These programs are offered to any person actively engaged in public health or industrial sanitation work.

No tuition will be charged, but trainees are to arrange for their own living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Topeka Field Training Center, Room 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Special Training Program in Plumbing Inspections (2.11-11)

TYPE OF TRAINING PROGRAM: Special training program in plumbing inspections

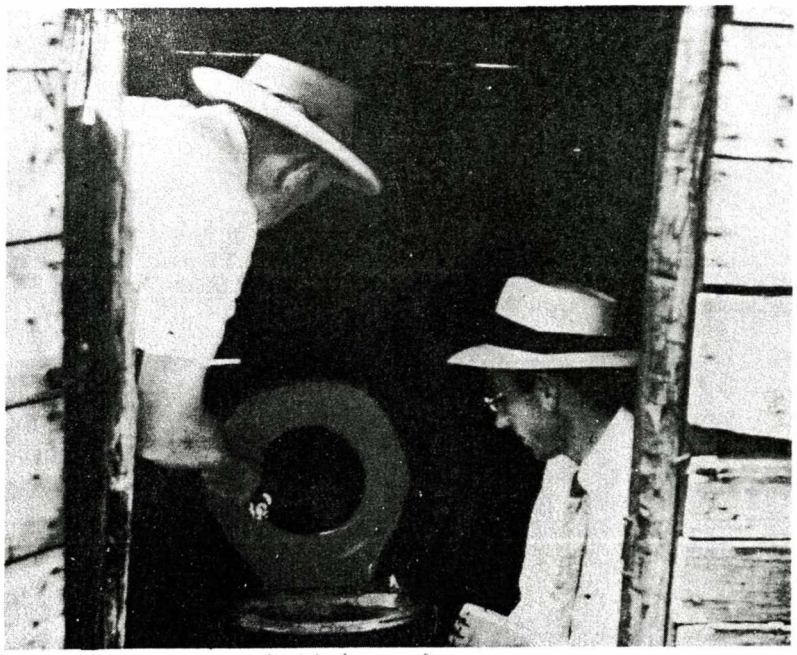
LOCATION: Rocky Mountain Field Training Center, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.

TIME: January 16 — January 21, 1950

STAFF: Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer
and other members of the staffs of the Denver City-County Health Department, the Colorado State Health Department, University of Colorado Medical Center, and the U. S. Public Health Service Region IX Office

A. OUTLINE OF TRAINING PROGRAM

This 1-week course in plumbing inspections is offered to general sanitarians and other interested health department personnel. It is designed to train the general sanitarian to recognize faulty plumbing and nonapproved fixtures and installations in contrast with approved types. It will also assist the sanitarian in recognizing a cross connection in a plumbing system when he is confronted with this problem while carrying out his normal activities as a general sanitarian.



Trainees receiving instruction in both inside and outside plumbing inspections.

B. ENTRANCE REQUIREMENTS

This program is offered to any person actively engaged in environmental sanitation work and other interested health department personnel. *No tuition will be charged, but trainees are to arrange for their own living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.*

Trainees should bring field and laboratory work clothes.

Special Training Program in Plumbing Inspections (contd.)

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Rocky Mountain Field Training Center, 4200 E. Ninth Ave., Denver, Colo.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Decentralized Training Programs in Specialized Fields of Environmental Sanitation

(2.12-4)

TYPE OF TRAINING PROGRAM: In-service training programs in milk, restaurant, and general sanitation, and insect and rodent control

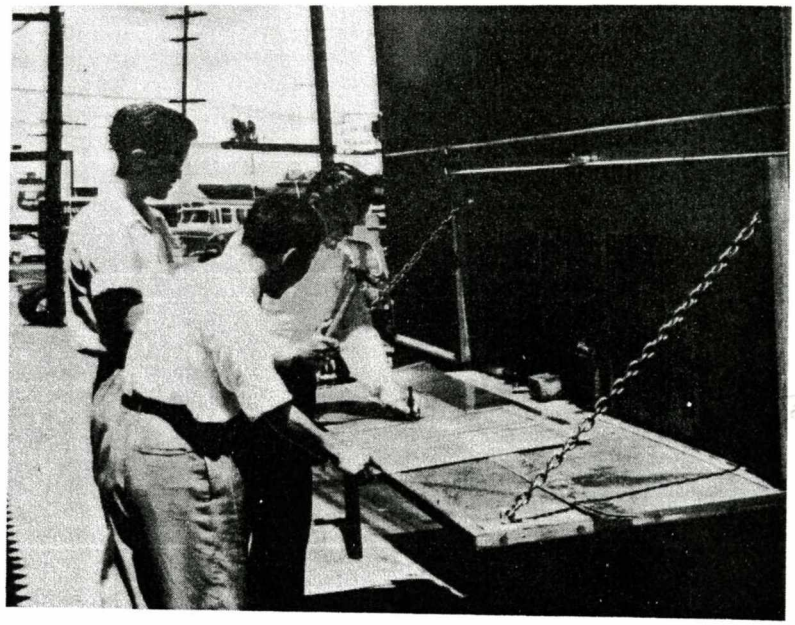
LOCATION: As determined by consultation with municipal and State authorities

TIME: To be arranged

STAFF: T. R. Hood, M.D., Director
Hugh E. Eagan, Senior Training Officer
Romaine E. Kious, Training Officer
Members of industry, of State educational institutions, of State boards of health, and of the U. S. Public Health Service are called upon to participate in this type of in-service training.

A. OUTLINE OF TRAINING PROGRAM

The presentation of this type of program varies according to the type of in-service training in demand. The duration may be for 1 week or 2 weeks. Emphasis is placed on standardization of inspectional and enforcement procedures. Guest lecturers present newest developments in the special fields studied. The Topeka Field Training Center makes available mobile demonstration equipment to be manipulated by the trainees. This equipment includes mechanical dishwashers, electro-thermometric milk plan controls, pasteurization appurtenances, milking machines and others as used by industry. Visual aids and projection equipment, stenographic assistance, and a capable specialized staff for teaching are available for these programs.



Ratproofing techniques are explained to trainees through actual field practice.

Upon request by the State or municipal authority to the Public Health Service Regional Office to which the State is assigned, the Training Center staff will consult with the requesting authority to study the needs for training and develop an in-service training program to meet these specific needs. Cooperation with the Training Center staff in

securing guest lecturers and providing training areas and meeting rooms is essential for the success of such programs.

The need for such a course would be studied by the Training Center and final justification for the course will be the responsibility of the Center.

B. REQUESTS FOR ASSISTANCE:

Any municipality or State authority may make application for this type of training to the Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; or to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

securing guest lecturers and providing training areas and meeting rooms is essential for the success of such programs.

The need for such a course would be studied by the Training Center and final justification for the course will be the responsibility of the Center.

B. REQUESTS FOR ASSISTANCE:

Any municipality or State authority may make application for this type of training to the Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; or to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

Decentralized Training Programs in Specialized Fields of Environmental Sanitation (2.13-6)

TYPE OF TRAINING PROGRAM: Short training programs on food, water supply, and waste disposal for sanitary inspectors, a service to New York State Health Department

LOCATION: Programs to be given at points designated by the New York State Health Department

TIME: To be arranged

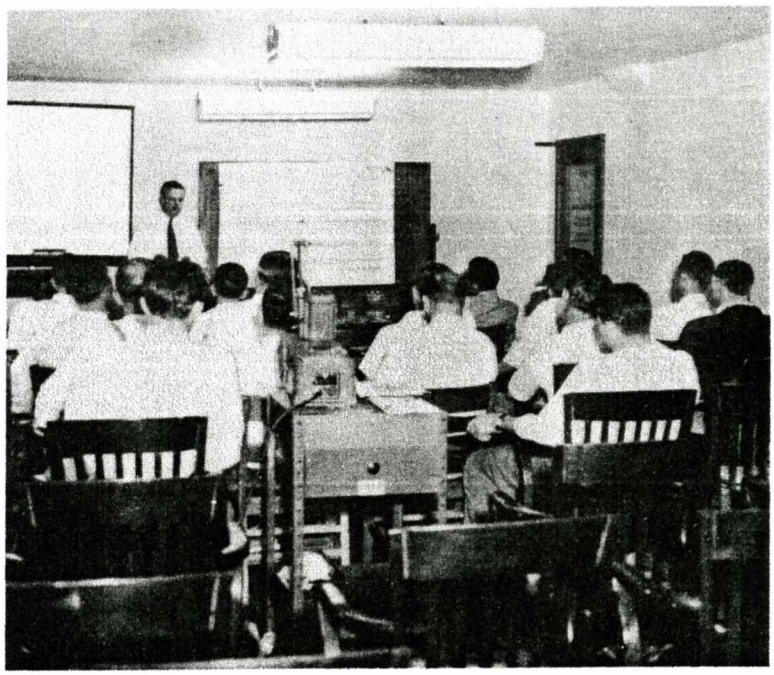
STAFF: Joseph F. O'Brien, S. A. Sanitarian, Senior Training Officer and other members of the staffs of various local health departments, and State representatives

A. OUTLINE OF TRAINING PROGRAM

Special programs of from 1 day to 1 week will be designed to offer training for sanitary inspectors in the latest methods of food, water supply, and waste disposal inspections. Material will be presented by means of lectures, audio-visual aids, and field demonstrations.

B. REQUESTS FOR ASSISTANCE

Any municipality or State authority may make application for this type of training to the Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.



Visual aids are used in briefing sanitarians before a field trip.

Decentralized Training Programs in Specialized Fields of Environmental Sanitation

(2.14-11)

TYPE OF TRAINING PROGRAM: In-service training programs in milk, restaurant, and general sanitation, and insect and rodent control

LOCATION: As determined by consultation with municipal and State authorities

TIME: To be arranged

STAFF: Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer
and other members of the staffs of the Denver City-County Health Department, the Colorado State Health Department, University of Colorado Medical Center, and the Public Health Service Region IX Office

A. OUTLINE OF TRAINING PROGRAM

The presentation of this type of program varies according to the type of in-service training in demand. The duration may be for 1 week or 2 weeks. Emphasis is placed on standardization of inspectional and enforcement procedures. Guest lecturers present newest developments in the special fields studied. The Rocky Mountain Field Training Center makes available mobile demonstration equipment to be manipulated by the trainees. Visual aids and projection equipment, stenographic assistance, and a capable specialized staff for teaching are available for these programs.

Visual aids and projection equipment available for use on decentralized training programs.

Upon request by the State or municipal authority to the Public Health Service Regional Office to which the State is assigned, the Training Center staff will consult with the requesting authority to study the needs for training and develop an in-service training program to meet these specific needs. Cooperation with the Training Center staff in securing guest lecturers and providing training areas and meeting rooms is essential for the success of such programs.

The need for such a course would be studied by the Training Center and final justification for the course will be the responsibility of the Center.

B. REQUESTS FOR ASSISTANCE

Any municipality or State authority may make application for this type of training to the Rocky Mountain Field Training Center, 4200 E. Ninth Ave., Denver, Colo.; or to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Building, Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

Field Survey and Evaluation Methods in Housing Sanitation

(3.1-1) (3.1-12)

TYPE OF TRAINING PROGRAM: Field and office training in the "Appraisal Method for Measuring the Quality of Housing" for supervisory health department personnel, public housing officials, and others interested in the use of this technique

LOCATION:

Training Division, Communicable Disease Center, 165 Luckie St., N.W., Atlanta, Ga.
and the City of Atlanta Health Department

Syracuse Training Center, City Health Department, City Hall, Syracuse, N.Y.

TIME:

ATLANTA TRAINING CENTER		SYRACUSE TRAINING CENTER
January 9	- February 10, 1950	January 23 - February 24, 1950
March 13	- April 14, 1950	March 27 - April 28, 1950
May 15	- June 16, 1950	May 29 - June 30, 1950
July 17	- August 18, 1950	July 31 - September 1, 1950
September 18	- October 20, 1950	October 2 - November 3, 1950
November 13	- December 15, 1950	November 20 - December 22, 1950

STAFF:

ATLANTA TRAINING CENTER
Ross W. Buck
Engineer
Herbert H. Rogers
Engineer
Harold P. Dobbs
City of Atlanta Health Dept.

SYRACUSE TRAINING CENTER
Emil A. Tiboni
Training Officer
George P. Hanna, Jr.
City of Syracuse Health Dept.

A. OUTLINE OF TRAINING PROGRAM

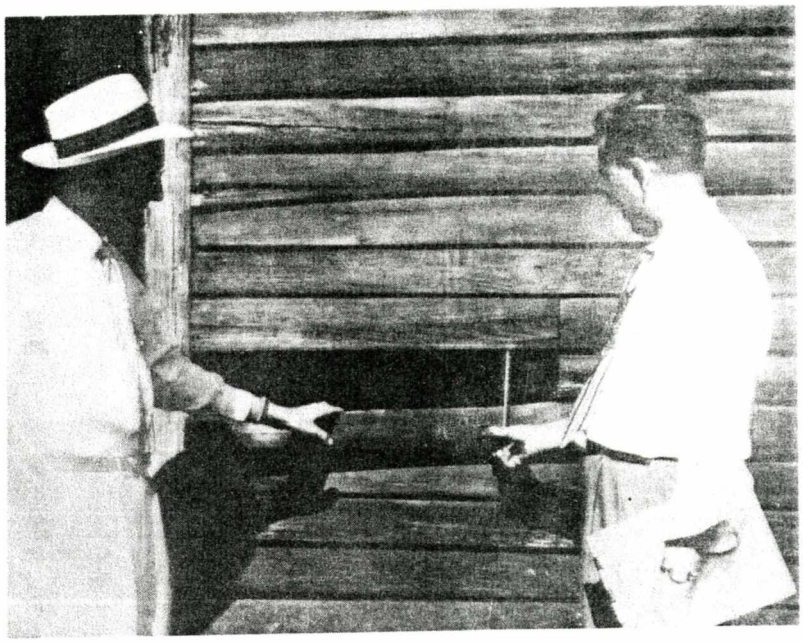
The program covers a 5-week period of intensive field and office training in the "Appraisal Method for Measuring the Quality of Housing" as developed by the Committee on the Hygiene of Housing, American Public Health Association. The course is designed to cover all parts of the survey such as field inspections, office processing, selection of areas, and environmental survey. The last week is devoted to analysis interpretation and preparation of reports.

The 5-week training period will enable the trainees to establish the survey in their respective localities and to train their local personnel for essential duties.

B. ENTRANCE REQUIREMENTS

This program is offered for supervisory personnel of State and local health departments, public housing agencies, and city planning commissions. Candidates need not be engineers, but persons recommended should have a background in environmental sanitation, statistics, or city planning. Since part of the training period will be spent considering each trainee's local problem, it is important that only personnel well acquainted with their particular areas be considered for enrollment in this program. Certain basic maps of each trainee's local area will be required, and information regarding this requirement will be forwarded to him as soon as he is accepted.

Sanitary engineer and inspector making field inspection of dwelling unit.



C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga., or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Field Survey and Evaluation Methods For Measuring Quality of Housing Environment

(3.2-1) (3.2-12)

TYPE OF TRAINING PROGRAM: Field and office training in the "Appraisal Method for Measuring the Quality of Housing," Environmental Survey only. For supervisory health department personnel, city, county, and metropolitan planning agencies, and others interested in the use of this technique.

LOCATION: Training Division, Communicable Disease Center, 165 Luckie St., N.W., Atlanta, Ga. and the City of Atlanta Health Department

Syracuse Training Center, City Health Department, City Hall Syracuse, N.Y.

TIME:

ATLANTA TRAINING CENTER	SYRACUSE TRAINING CENTER
January 30 - February 4, 1950	February 13 - February 18, 1950
April 3 - April 8, 1950	April 17 - April 22, 1950
June 5 - June 10, 1950	June 19 - June 24, 1950
August 7 - August 12, 1950	August 21 - August 26, 1950
October 9 - October 14, 1950	October 23 - October 28, 1950
December 4 - December 9, 1950	December 11 - December 15, 1950

STAFF:

ATLANTA TRAINING CENTER
Ross W. Buck
Engineer
Herbert H. Rogers
Engineer
Harold P. Dobbs
City of Atlanta Health Dept.

SYRACUSE TRAINING CENTER
Emil A. Tiboni
Training Officer
George P. Hanna, Jr.
City of Syracuse Health Dept.

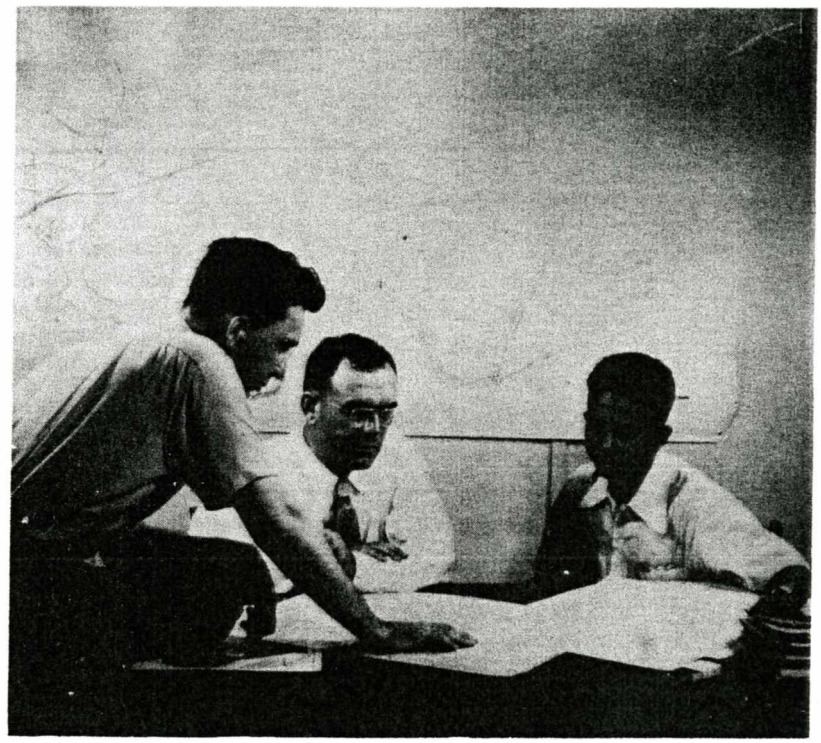
A. OUTLINE OF TRAINING PROGRAM

The program covers a 1-week period of intensive field and office training in the environmental survey technique developed by the Committee on the Hygiene of Housing, American Public Health Association. The course is designed to cover only a part of the method known as the "Appraisal Method for Measuring the Quality of Housing." It will enable city planning agencies to have trained personnel familiar with and able to evaluate the quality of the environment in which a particular dwelling unit and structure is located.

B. ENTRANCE REQUIREMENTS

This program is offered for supervisory personnel of State and local health departments and city planning commissions. Candidates need not be engineers, but persons recommended should have a background in environmental sanitation, statistics, or city planning.

Training officer discussing field procedures of appraisal technique with trainees.



C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga., or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Orientation in Hygiene of Housing (3.3-4)

TYPE OF TRAINING PROGRAM: General course in housing hygiene for supervisory health department personnel and others interested in the problems of slum clearance and urban redevelopment

LOCATION: Topeka Field Training Center, 603 Topeka Ave., Topeka, Kans.

TIME: 3 Days — dates to be announced later

STAFF: Hugh E. Eagan, Sr., Senior Training Officer
Romaine E. Kious, Training Officer
Ross W. Buck, Engineer
and other members of the staffs of the Topeka Field Training Center and the Kansas State Board of Health. Also members of the staff of the U. S. Public Health Service Region VII Office

A. OUTLINE OF TRAINING PROGRAM

The program covers a 3-day period of general information and discussion on housing hygiene. One day will be spent in discussion of the major provisions of the Federal Housing Act of 1949 with emphasis on opportunities for Health Department cooperation with official agencies. A day will be used to discuss the "Appraisal Method for Measuring the Quality of Housing" as developed by the American Public Health Association. The third day will include a discussion of housing laws and ordinances.

Training officer explaining the use of the appraisal technique to health department personnel.

B. ENTRANCE REQUIREMENTS

This program is offered for supervisory personnel of State and local health departments and city planning commissions. Persons recommended should have a background in environmental sanitation, statistics, or city planning. Candidates need not be engineers.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Topeka Field Training Center, 603 Topeka Ave., Topeka, Kans.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Special Training Programs in Housing Sanitation (3.4-1) (3.4-12)

TYPE OF TRAINING PROGRAM: Administration of housing program for health departments, for selected Public Health Service and State health department personnel

LOCATION: Training Division, Communicable Disease Center, 165 Luckie St., N.W., Atlanta, Ga., and the City of Atlanta Health Department

Syracuse Training Center, City Health Department, City Hall, Syracuse, N.Y.

TIME: Tentatively scheduled for 5 days. Dates to be announced later.

STAFF:

ATLANTA TRAINING CENTER
Ross W. Buck
Engineer
Herbert H. Rogers
Engineer
Harold P. Dobbs
City of Atlanta Health Dept.

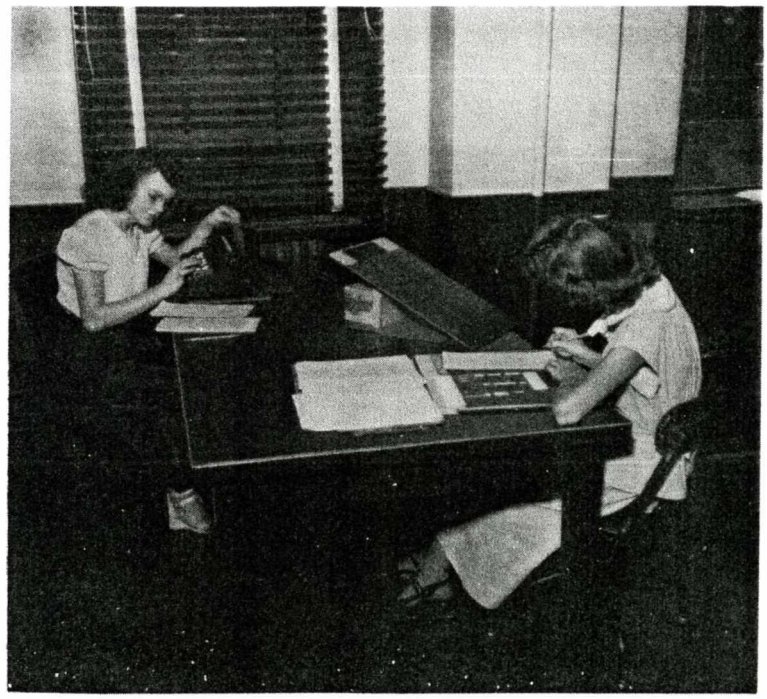
SYRACUSE TRAINING CENTER
Emil A. Tiboni
Training Officer
George P. Hanna, Jr.
City of Syracuse Health Dept.

A. OUTLINE OF TRAINING PROGRAM

The program covers a demonstration in field and office procedures on the Housing Sanitation Survey as developed by the Committee on the Hygiene of Housing, American Public Health Association. In addition to the demonstration, items such as costs, personnel requirements, and production estimates will be discussed in detail.

Basic types of housing and relocation laws will be discussed. This discussion will include the new Federal laws on slum clearance, low rent housing, and farm housing.

The importance of a cooperative relationship between health departments and city planning commissions in solving health problems in the housing field is emphasized. The course is designed with emphasis placed on the role of the State health department in housing sanitation.



Clerical workers analyzing housing data after it is gathered in the field.

Specific programs on housing sanitation at the State level will be discussed.

B. ENTRANCE REQUIREMENTS

This program is offered for supervisory personnel of State and local health departments and city planning commissions. Candidates need not be engineers, but persons recommended should have a background in environmental sanitation, statistics, or city planning.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga., or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Rat-Borne Disease Prevention and Control

(4.1-1)

TYPE OF TRAINING PROGRAM: A comprehensive field training program in rat-borne disease prevention and control

LOCATION: Training Division, Communicable Disease Center, 165 Luckie St., N.W., Atlanta, Ga.

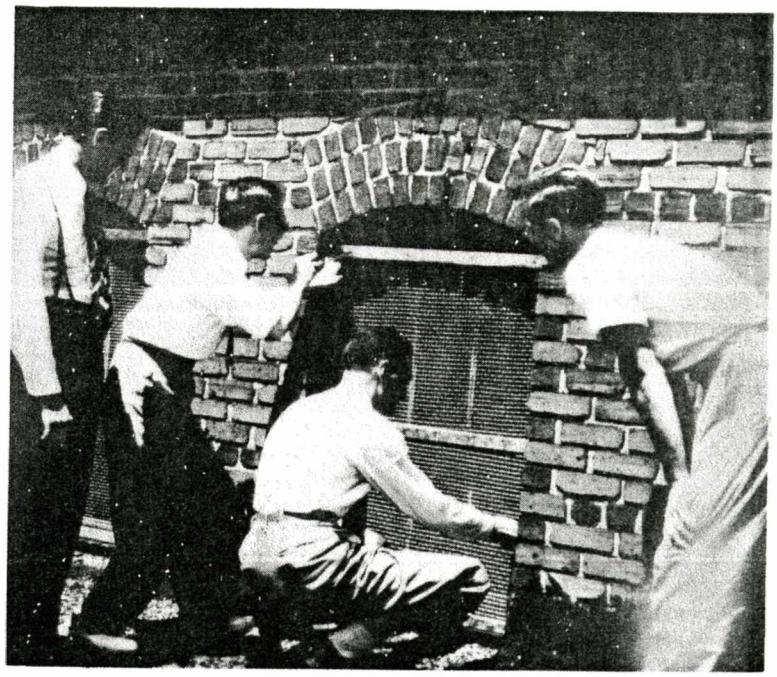
TIME: March 13 — March 31, 1950
October 2 — October 20, 1950

STAFF: Clyde F. Fehn, Sanitary Engineer
Alfred L. Kinney, Jr., Training Officer
Kent S. Littig, Entomologist
Clarence W. Marshall, Entomologist
and other members of the staffs of the Communicable Disease Center and the City of Atlanta Health Department

A. OUTLINE OF TRAINING PROGRAM

These 3-week, comprehensive field training programs include extensive supervised field practice in the principal procedures applicable in the prevention and control of rat-borne diseases. The following subjects are included in these programs:

- Epidemiology of the various rat-borne diseases
- Rat-borne disease surveys
- Habits and characteristics of the domestic species of rats
- Habits, characteristics, and identification of rat ectoparasites
- Environmental sanitation and rat control
- Techniques of ratproofing existing buildings, including estimating, contracts, and bookkeeping
- Procedures and techniques in the control and eradication of rats
- Ratproof construction of new buildings
- Control of rat ectoparasites
- Evaluation of rat ectoparasite control
- Organization of rat-borne disease prevention and control programs



Trainees receiving instruction in the installation of a hardware cloth screen.

The new comprehensive manual entitled "Rat-Borne Disease Prevention and Control" will be used

as a reference for this course. Copies of this manual will be furnished to all trainees for their permanent retention.

This training program develops sound, practical approaches to rat-borne disease problems in accordance with the best current practices. An understanding of the total scope of these problems is provided and their integration with other public health problems is demonstrated. In achieving these objectives, emphasis is placed on actual field work, with class work being based on preparation for field practice and summarization of field work accomplished. A limited amount of rearrangement of the program may be permitted if the background, needs, or interests of the students make such changes desirable.

The field training is obtained on the Rodent Control Program of the City of Atlanta Health Department, Atlanta, Ga., which has been in successful operation for over 4 years and has ratproofed and rat freed the business premises of most blocks in the heart of downtown Atlanta. The use of the facilities and the assistance of the staff and personnel of the City of Atlanta Health Department have been made possible by the cooperation of the City Health Officer and the Director of the Insect and Rodent Control Program of the City of Atlanta Health Department. Adequate personnel and equipment are available to assure effective rat control work in Atlanta and to carry out field training in rat-borne disease control methods.

Field work in this training program is supervised by the staff of the Training Division. Lectures and discussions of the problems are carried on by the staff and by authorities in special fields invited to participate in the training program. The class work will be augmented, where practicable, with training films, filmstrips, models, and other visual aids.

B. ENTRANCE REQUIREMENTS

This program is planned for prospective and currently employed environmental sanitation personnel in health departments. Also, personnel of other organizations actively engaged in rat control or related fields will find the program of practical value.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses while participating in the training program, either through financial arrangement with their sponsors or through their personal resources. Accommodations for single men may be obtained at Atlanta hotels and the Atlanta YMCA, which are conveniently located near the offices of the Training Division. Accommodations for families may be secured at local motor courts and tourist homes. Upon request, and after application has been accepted and enrollment confirmed, the Training Division will endeavor to obtain reservations for such housing as may be specifically requested and may be found to be available.

Trainees should bring field work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga., or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Special Training in Insect and Rodent Control (4.2-1)

TYPE OF TRAINING PROGRAM: Special training in the identification, biology, and control of insects and rodents of public health importance

LOCATION: Training Division, Communicable Disease Center, 165 Luckie St., N.W., Atlanta, Ga.

TIME: To be arranged

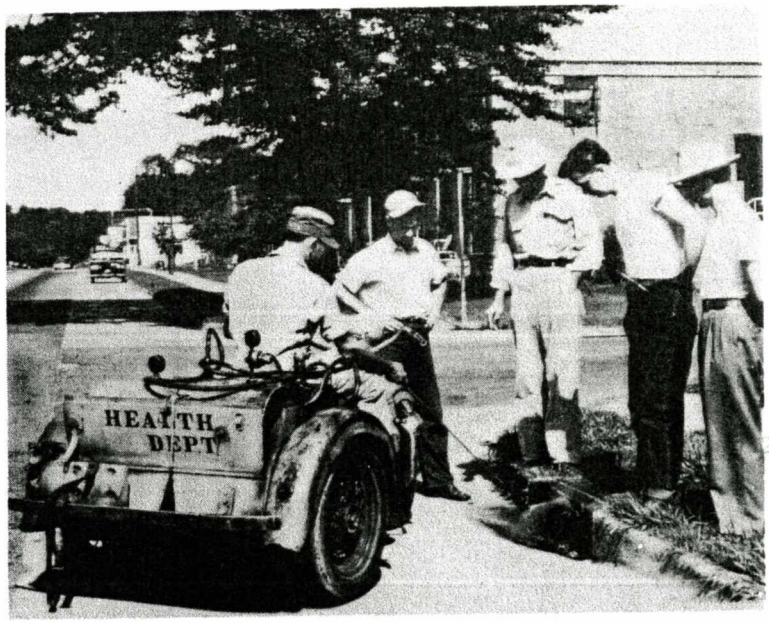
STAFF: Clyde F. Fehn, Sanitary Engineer
Kent S. Littig, Entomologist
Clarence W. Marshall, Entomologist
Alfred R. Kinney, Jr., Training Officer
and other members of the staffs of the Training Division and the City of Atlanta Health Department

A. OUTLINE OF TRAINING PROGRAM

This is a special in-service training for new CDC personnel and certain State and local health department employees. Training will be given to small groups and will be arranged to satisfy the needs of the participants.

Facilities are available for field and laboratory training in the following subjects:

1. Fly and Mosquito Control
   a. Biology and habits
   b. Public health importance
   c. Identification
   d. Survey and evaluation methods
   e. Control equipment, materials, and methods.
2. Rodent Control
   a. Biology and habits of rodents and rodent ectoparasites
   b. Public health importance
   c. Identification
   d. Survey and evaluation methods
   e. Control equipment, materials, and methods.
3. Identification and Control of Other Insects of Public Health Importance
   a. Lice
   b. Bedbugs
   c. Ticks
   d. Roaches
   e. Mites.



Trainees observing treatment of catch basin for mosquito control.

Field training in insect and rodent control operations will be obtained on the Insect and Rodent Control Program of the City of Atlanta Health Department.

B. ENTRANCE REQUIREMENTS

Employees of the Communicable Disease Center will be accepted upon recommendation of the Chief of the Division concerned. State and local health department personnel should be recommended by the State health officer.

Trainees should bring field work clothes.

C. APPLICATIONS

Application should be made to the Chief, Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga. Letters of application should give the name, education, and experience of each person desiring this training.

Insect and Rodent Control Training for Foreign Public Health Personnel (4.3-1)

TYPE OF TRAINING PROGRAM: Practical training in the recognition and control of disease-bearing insects and rodents

LOCATION: Training Division, Communicable Disease Center, 165 Luckie St., N. W., Atlanta, Ga.

TIME: June 5 - June 16, 1950
July 5 - July 18, 1950
July 31 - August 11, 1950

STAFF: Clyde F. Fehn, Sanitary Engineer
Kent S. Littig, Entomologist
Alfred R. Kinney, Jr., Training Officer
Clarence W. Marshall, Entomologist
and other members of the staffs of the Communicable Disease Center and the City of Atlanta Health Department

A. OUTLINE OF TRAINING PROGRAM

This special 2-week course for foreign public health personnel will be offered three times during the summer of 1950 as scheduled above. United States public health workers may also enroll in these courses.

The first week of each of these courses will be concerned with the recognition and control of insects of public health importance throughout the world. The second week of each course will be on rodent control and will be particularly concerned with the prevention of murine typhus fever and plague.

These courses will consist of classroom and laboratory instruction together with field observation and participation. Classroom work will be supplemented by appropriate motion picture films, filmstrips, slides, exhibits, and distribution of literature. Field experience will be obtained in Atlanta and vicinity in cooperation with the City of Atlanta Health Department.

Public health trainee from China making a template for use on ratproofing project.

Persons may enroll for the 2-week course, or may enroll for the first week only (insect control),

Insect and Rodent Control Training

for Foreign Public Health Personnel (contd.)

or second week only (rodent control). Facilities will be available for additional specialized training if prior arrangements are made.

B. ENTRANCE REQUIREMENTS

This program is available to public health personnel of foreign countries and the United States who are concerned with insect and rodent control. Personnel of other organizations who are actively engaged in insect or rodent control will also be accepted if facilities permit.

No tuition is charged, but trainees are expected to arrange for their own living and traveling expenses.

Trainees should bring field work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency to the Chief, Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga., or to the appropriate Public Health Service Regional Office. The name, education, and experience of each person applying should be included in the letter.

Special Training in Rodent Control (4.4-4)

TYPE OF TRAINING PROGRAM: Practical training in rat control for State, local, and Federal public health personnel

LOCATION: Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.

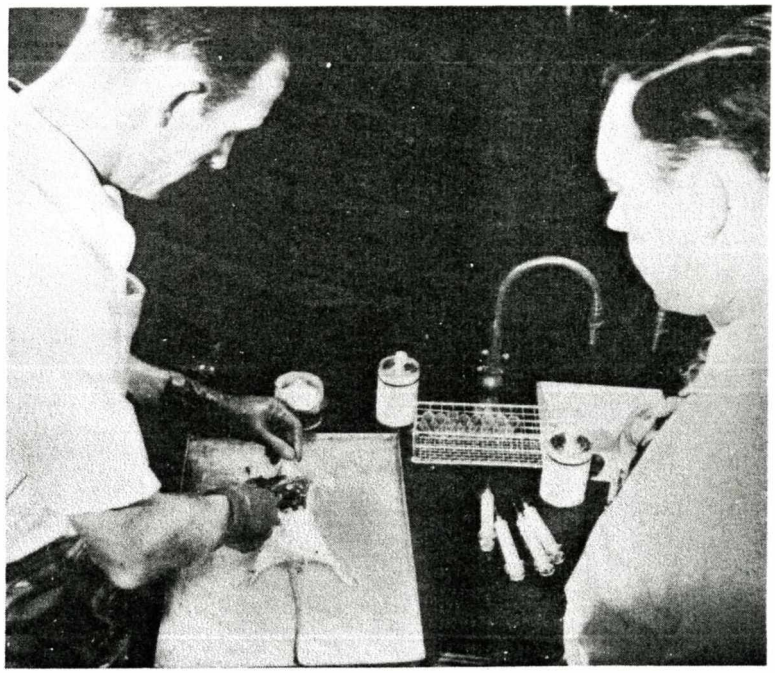
TIME: September 11 — September 22, 1950

STAFF: Hugh E. Eagan, Senior Training Officer
Joseph W. Hunt, Rodent Control Specialist, Office of Midwestern CDC Services
Clyde F. Fehn, Sanitary Engineer, Training Division
Alfred R. Kinney, Jr., Training Officer, Training Division
and other members of the Office of Midwestern CDC Services, the Communicable Disease Center Training Division, Atlanta, Ga., the Topeka, Kans., Field Training Center, and the Kansas City Health Department

A. OUTLINE OF TRAINING PROGRAM

This 2-week field training program in rat control will be offered by the Topeka Field Training Center in cooperation with the Office of Midwestern CDC Activities, Kansas City, Mo., and the Communicable Disease Center Training Division, Atlanta, Ga. This course is designed particularly for rat control personnel in health departments located in Public Health Service Region VII and adjoining States and will include the following subjects:

- Epidemiology of various rat-borne diseases
- Rat population surveys
- Rat-borne disease surveys
- Economics and rats
- Habits and characteristics of domestic rats
- Habits and characteristics of rat ectoparasites
- Environmental sanitation and rat control
- Techniques of ratproofing existing buildings
- Eradication of rats in ratproof buildings
- Area poisoning programs
- Ratproof construction of new buildings
- Control of rat ectoparasites
- Organization of local rat control programs



Trainee obtaining sample of rat blood for use in connection with rat-borne disease surveys.

B. ENTRANCE REQUIREMENTS

This program is available to Public Health Service personnel and to State and local health department employees. Members of other organizations who are concerned with rat control will also be accepted if available facilities permit.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Special Training in Garbage and Rubbish Disposal and Insect and Rodent Control (4.5-11)

TYPE OF TRAINING PROGRAM: Practical training in garbage and rubbish disposal and insect and rodent control

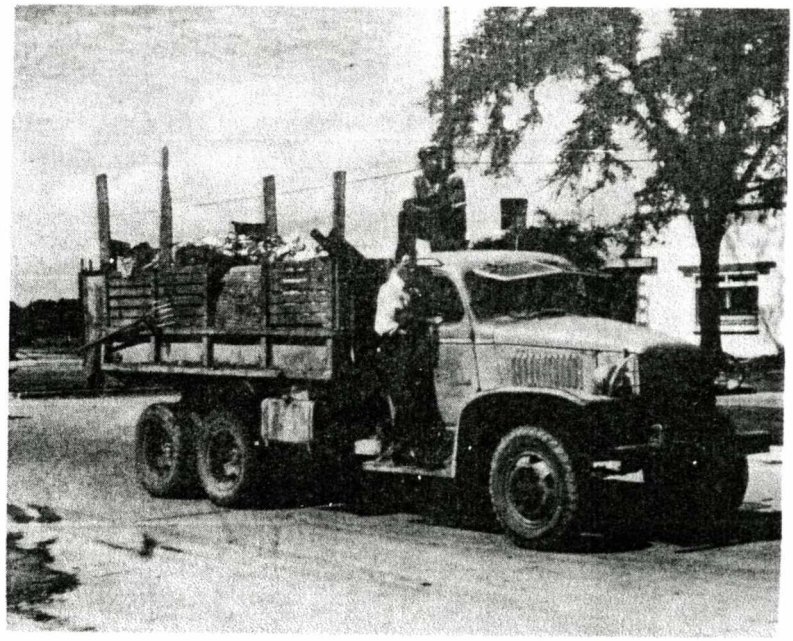
LOCATION: Rocky Mountain Field Training Center, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.

TIME: February 13 — February 17, 1950

STAFF: Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer
and other members of the staffs of the Denver City-County Health Department, the Colorado State Health Department, University of Colorado Medical Center, and the U. S. Public Health Service Region IX Office

A. OUTLINE OF TRAINING PROGRAM

This 5-day course, covering the subjects of garbage and rubbish disposal and insect and rodent control, is offered to municipal sanitation personnel in the State of Colorado, with special invitation to be extended to municipal inspectors not associated with health departments in bordering states of this region. Trainees will be given 2 days of intensive training in the proper collection, storage, and disposal of garbage and rubbish, including not only the land fill methods but also incineration and properly operated hog farms. The remaining 3 days will be spent on insect and rodent control, presented at a level which would be most practical for municipal inspectors.



Trainee making survey of garbage and rubbish collection procedure.

B. ENTRANCE REQUIREMENTS

This program is offered to municipal sanitation personnel in the State of Colorado, with special invitation to be extended to municipal inspectors not associated with health departments in bordering States of this region. *No tuition will be charged, but trainees are to arrange for their own*

living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.

Trainees should bring field work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Rocky Mountain Field Training Center, 4200 E. Ninth Ave., Denver, Colo.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Fly Control (4.6-1)

TYPE OF TRAINING PROGRAM: Practical training in the control of the common flies of public health importance

LOCATION: Training Division, Communicable Disease Center, 165 Luckie St., Atlanta, Ga.

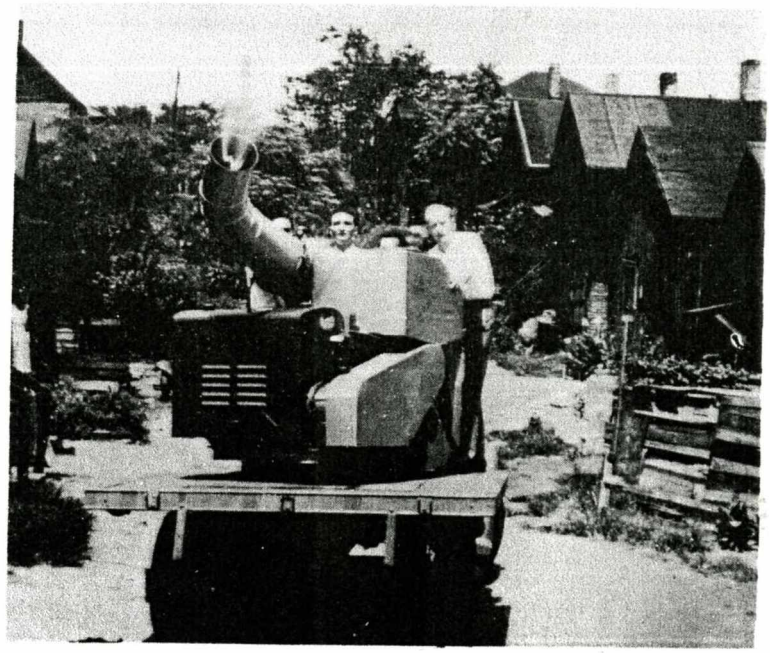
TIME: April 24 — April 28, 1950
May 15 — May 19, 1950

STAFF: Kent S. Littig, Entomologist
Clarence W. Marshall, Entomologist
Clyde F. Fehn, Sanitary Engineer
and other members of the staff of the Communicable Disease Center

A. OUTLINE OF TRAINING PROGRAM

These 1-week training programs are designed to acquaint public health workers with the biology, identification, and control of the common flies which occur about homes, restaurants, markets, garbage dumps, etc. The courses will include classroom discussions, laboratory exercises, field demonstrations, and supervised experience. The following subjects will be covered:

- Habits and characteristics of domestic flies
- Fly identification
- Relation of flies to public health
- Methods of conducting fly surveys
- Fly control methods
- Community fly control programs
- Evaluation of fly control operations



Trainees operating a mist sprayer for the control of domestic flies.

B. ENTRANCE REQUIREMENTS

These programs are available to Public Health Service personnel and to State and local health department employees. Members of other organizations who are concerned with fly control will also be accepted if available facilities permit.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses.

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Application should be made through the State health officer or through the sponsoring agency to the Chief, Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.

Practical Course in Community Fly Control

(4.7-4)

TYPE OF TRAINING PROGRAM: Practical course in community fly control

LOCATION: Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.

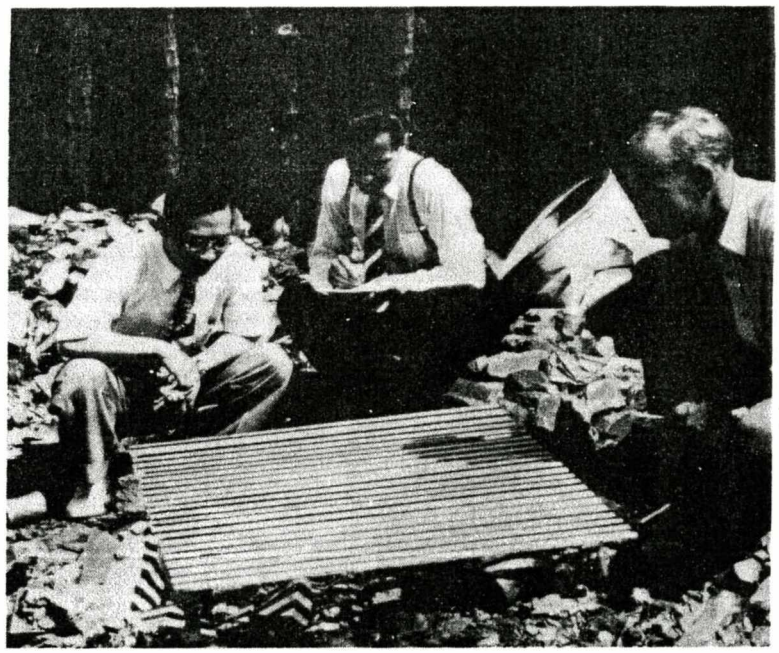
TIME: May 1 — May 5, 1950

STAFF: Hugh E. Eagan, Senior Training Officer
Kent S. Littig, Entomologist
Clyde F. Fehn, Sanitary Engineer
Arthur Johnson, Engineer
Joe G. McWilliams, Entomologist
and other members of the Training Division, Communicable Disease Center; the Community Fly Demonstration Operating Staff, Topeka, Kans.; and the Office of Midwestern CDC Services, Kansas City, Mo.

A. OUTLINE OF TRAINING PROGRAM

This 1-week training program is designed to acquaint public health workers with the biology, identification, and control of the common flies which occur around places such as homes, restaurants, markets, and garbage dumps. The course will include classroom discussions, laboratory exercises, field demonstrations, and supervised experience. The following subjects will be covered:

- Habits and characteristics of domestic flies
- Fly identification
- Relation of flies to public health
- Methods of conducting fly surveys
- Fly control methods
- Community fly control programs
- Evaluation of fly control operations



Instructor demonstrating use of the fly grill to determine fly density.

B. ENTRANCE REQUIREMENTS

This program is available to Public Health Service personnel and supervisory personnel from States and principal cities. Members of other organizations who are concerned with fly control will also be accepted if available facilities permit.

No tuition will be charged, but trainees are expected to arrange for their own living and traveling expenses.

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Topeka Field Training Center, 512 Central Bldg., 700 Kansas Ave., Topeka, Kans.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Decentralized Training Programs in Insect and Rodent Control (4.8-1)

TYPE OF TRAINING PROGRAM: Short training programs on the control of insects and rodents of public health importance — a service to State and local health departments and schools of public health

LOCATION: Programs to be given at points designated by State health officers

TIME: To be arranged

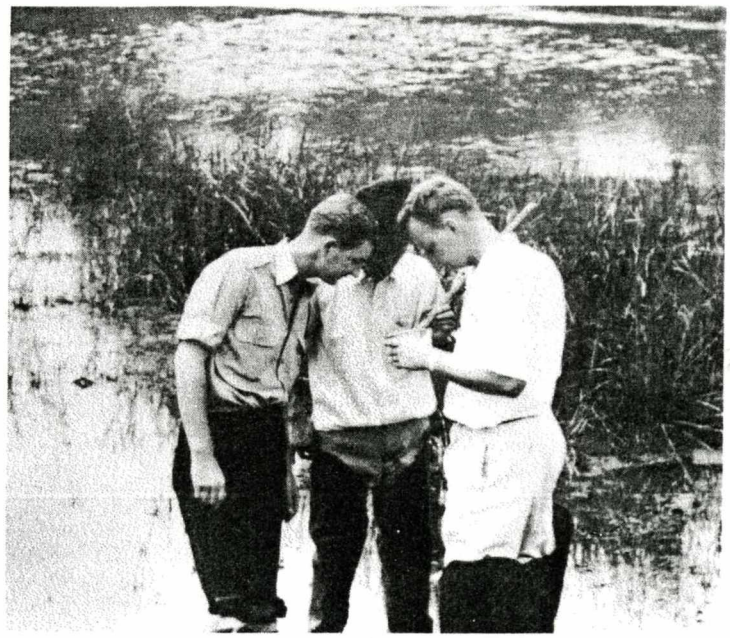
STAFF: Clyde F. Fehn, Sanitary Engineer
Kent S. Littig, Entomologist
Clarence W. Marshall, Entomologist
Alfred R. Kinney, Jr., Training Officer
and other members of the staff of the Training Division, and State and district CDC representatives

A. OUTLINE OF TRAINING PROGRAM

These are special programs of from 1 to 5 days to assist States in training public health personnel in the latest methods of insect and rodent control.

Emphasis in these programs is given to those disease vectors in which the trainees are particularly interested. In previous years the time distribution according to subject matter has been as follows: 5 days of fly control, 1 to 5 days of rodent control, and 1 to 5 days of both insect and rodent control.

Material will be presented by means of lectures, motion picture films, and demonstrations. Field demonstrations and practice will be arranged in cooperation with existing control programs wherever possible.



Trainees making mosquito larval survey to evaluate mosquito control operations.

B. ELIGIBILITY

Any State, State district, or local health department, or any nonprofit public health organization is eligible to receive this service.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga., or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Advanced Training Course for State Sanitary Chemists Primarily Concerned with Water Pollution Investigations

(5.1-7)

TYPE OF TRAINING PROGRAM: Special technical training program for sanitary chemists primarily concerned with water pollution investigations

LOCATION: Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio

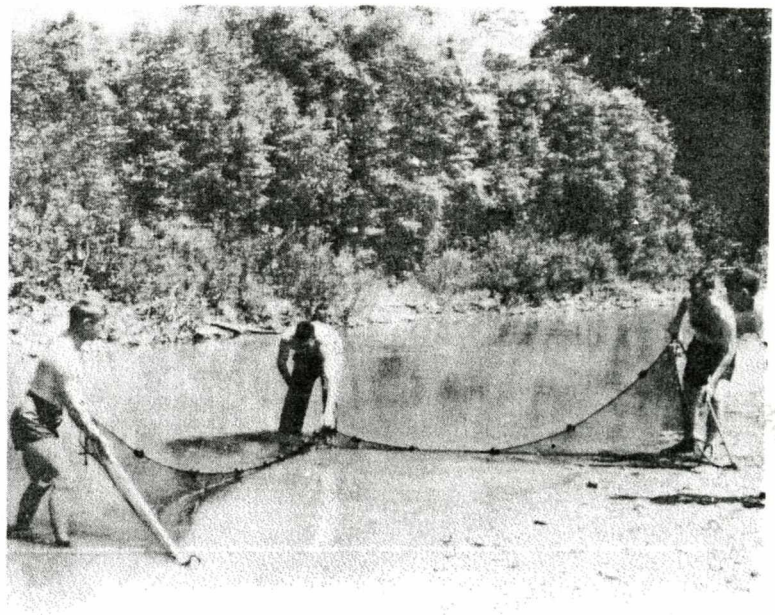
TIME: October 2 — October 13, 1950

STAFF: Ernest P. Dubuque, Senior Sanitary Engineer
Harry P. Kramer, Chemist
Members of training staff, personnel of the Environmental Health Center, and prominent consultants in specific fields

A. OUTLINE OF TRAINING PROGRAM

A 2-week refresher program designed for the evaluation of the chemical, engineering, bacteriological, and biological principles underlying the investigation of water pollution problems. Particular emphasis will be placed on problems of a chemical nature. Improved methods for analyses developed at the Environmental Health Center research laboratories will be explained and demonstrated in the laboratory. Statistical treatment of data will be presented and interpretation of data will be the subject of extensive discussion.

A mobile laboratory will be used in the field to demonstrate the practical application of standard methods and a consideration given to their values and limitations. Practical applications of the latest techniques for sampling, analysis, and related problems will be demonstrated in the field.



Sampling aquatic flora to determine stage of stream recovery from pollution.

Some of the major subjects to be covered in this advanced technical training course are:
Organization of stream pollution and industrial waste surveys
The practical application of B.O.D. and dissolved oxygen determination

Advanced Training Course for State Sanitary Chemists Primarily Concerned with Water Pollution Investigations (contd.)

The role of the biologist in pollution abatement programs
Bioassays of toxic wastes in relation to industrial waste disposal
Field determination of toxic materials in industrial waste and its effect on B.O.D.
Sanitary significance of indicator organisms in water bacteriology
Statistical methods as applied to stream sanitation
Practical application of water quality standards
Interpretation of water pollution data

B. ENTRANCE REQUIREMENTS

This program is offered for sanitary chemists with a considerable background in water pollution investigations. Candidates should be graduate chemists and should be recommended for training by the State health officer, the head of the State agency responsible for water pollution control, or an appropriate Federal official.

No tuition will be charged. Trainees are expected to arrange for their own living and traveling expenses while attending the course, either through State stipend or other means.

C. APPLICATIONS

Letters of application for this program should be sent to the Chief, Training Section, Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio. The letters should give the name and a brief outline of the education and experience of each applicant and should bear the appropriate recommendation of his superior. Applications should be made prior to September 1, 1950.

Orientation Course for Laboratory Personnel in the Examination of Sewage, Polluted Water, and Industrial Wastes (5.2-7)

TYPE OF TRAINING PROGRAM: Lectures, laboratory and field demonstrations and practice, and interpretation of results. For chemists, biologists, and bacteriologists with limited experience in this field

LOCATION: Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio

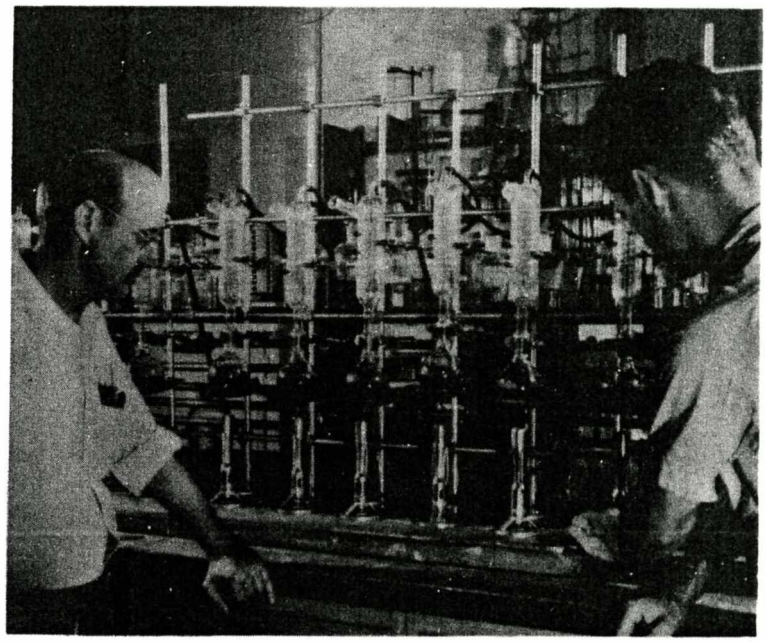
TIME: September 11 -- September 29, 1950

STAFF: Ernest P. Dubuque, Senior Sanitary Engineer
Harry P. Kramer, Chemist
Members of the training staff and personnel of the Environmental Health Center

A. OUTLINE OF TRAINING PROGRAM

The program covers a 3-week period of intensive training in the latest techniques in standard and nonstandard methods of making chemical, bacteriological, and biological examinations of samples encountered in stream pollution and industrial waste surveys.

The theory and interpretation of the tests used in stream pollution and industrial waste surveys will be treated in discussions and field demonstrations. Field and laboratory demonstrations and intensive practice will be carried out in the field training laboratory and mobile field laboratory. Ample time will be allowed for informal discussions of methods and the interpretation of results.



Chemical determinations of samples from streams receiving industrial wastes.

Some of the major subjects which will be covered in this field and laboratory course are:

- Field application of standard methods for determining D.O. and B.O.D. and the effect of various interfering substances on these determinations
- Determination of phenols
- Determination of cyanides

Orientation Course for Laboratory Personnel in the Examination of Sewage, Polluted Water, and Industrial Wastes (contd.)

Ammonia, nitrite, nitrate, and Kjeldahl nitrogen, alkalinity, acidity, pH, solids, odor and turbidity determinations
Methods of investigating industrial waste problems
Significance of the coliform and enterococcus groups as indicators of pollution
Relative bactericidal efficiencies of chlorine and chloramines
Biological indicators of pollution
Field work will be done in the vicinity of Cincinnati, Ohio

B. ENTRANCE REQUIREMENTS

This program is offered for graduate chemists, bacteriologists, or biologists who have had little or no experience in the field of sanitary chemistry and sanitary bacteriology and is designed especially for those who will be employed on water pollution and industrial waste survey programs. *No tuition will be charged. Trainees are expected to arrange for their own living and traveling expenses while attending the course, either through State stipend or other means.*

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Chief, Training Section, Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio. The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the division head of the organization concerned. Applications should be made prior to August 1, 1950.

Advanced Training Course for State Bacteriologists Primarily Concerned with Water or Milk Analyses or Dairy Products and Food Utensil Examinations

(5.3-7)

TYPE OF TRAINING PROGRAM: Lectures, laboratory demonstrations, laboratory practice, field demonstrations, and interpretation of bacteriological results for experienced bacteriologists

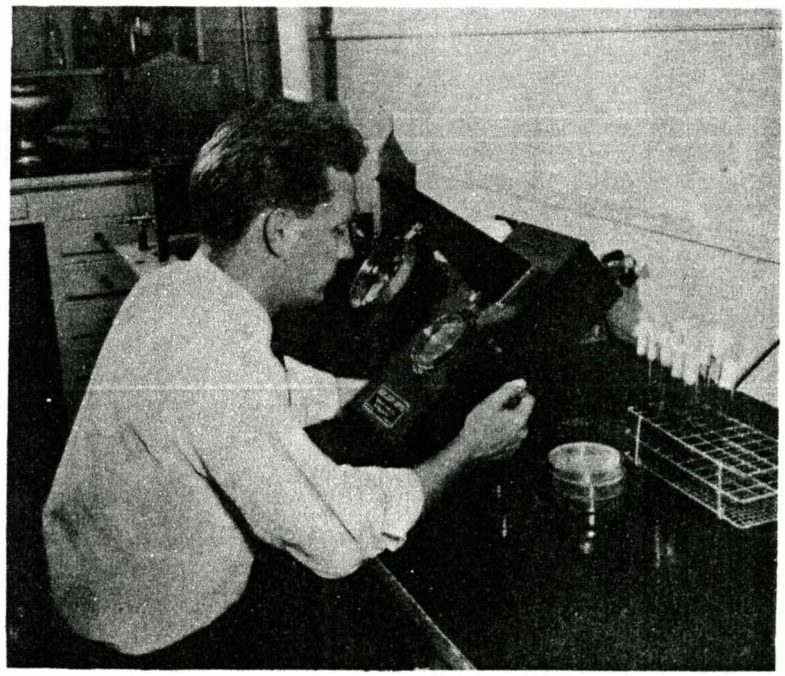
LOCATION: Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio

TIME: February 27 — March 17, 1950

STAFF: Ernest P. Dubuque, Senior Sanitary Engineer
Harry P. Kramer, Chemist
Members of training staff, personnel of the Environmental Health Center, and prominent consultants in specific fields

A. OUTLINE OF TRAINING PROGRAM

The program covers a 3-week period of advanced training in theory, laboratory techniques, and interpretation of results obtained in the field of sanitary bacteriology as they pertain to water and milk analyses, together with the methods of sampling and bacteriological examinations of dairy products and food utensils. The standard methods and permissible deviations in the performance of the various tests and the interpretation of results will be stressed. The course is divided as follows: the first week is devoted to water bacteriology and an introduction to the related phases of chemistry, biology, and sanitary engineering encountered in stream sanitation; the second week is devoted to milk analyses and bacteriological tests; the third week is devoted to dairy products and food



Bacteriologist makes plate count in studying effect of incubation temperatures.

Advanced Training Course for State Bacteriologists Primarily Concerned with Water or Milk Analyses or Dairy Products and Food Utensil Examinations (contd.)

utensil examinations. The division makes it possible for States to send trainees for 1, 2, or 3 weeks of the course depending on the individual needs.

The majority of the time will be devoted to field demonstrations of sampling techniques and laboratory practice. The balance of the time will be devoted to discussions relative to interpretation of results.

Some of the major subjects which will be covered in the training course are:

Preparation for bacteriological examination and sample collecting
Relative value of coliform media in the examination of water
Significance of the coliform and enterococcus groups as indicators of pollution
Bactericidal properties of free chlorine and chloramines in water
Microscopic counts and new staining methods
Principles of methylene blue and resazurin reduction tests
Principles of the phosphatase test
Analyses of frozen desserts
Methods of taking swab samples on food utensils
Physical and chemical testing of detergents

B. ENTRANCE REQUIREMENTS

This program is offered for bacteriologists with a wide background in sanitary bacteriology who are in charge of or in responsible positions in State health department laboratories engaged in water and milk analyses and dairy products and food utensil examinations. Candidates should be graduate bacteriologists and should be recommended for training by the State health officer or by an appropriate Federal official.

No tuition will be charged. Trainees are expected to arrange for their own living and traveling expenses while attending the course, either through State stipend or other means.

C. APPLICATIONS

Letters of application for this program should be sent to the Chief, Training Section, Environmental Health Center, 1014 Broadway, Cincinnati 2, Ohio. The letter should give the name and a brief outline of education and experience of each applicant and should bear the appropriate recommendation of his superiors. Applications should be made prior to January 15, 1950.

Public Health Orientation for Graduate Veterinarians (6.1-11)

TYPE OF TRAINING PROGRAM: Orientation for graduate veterinarians in the various phases of public health procedures

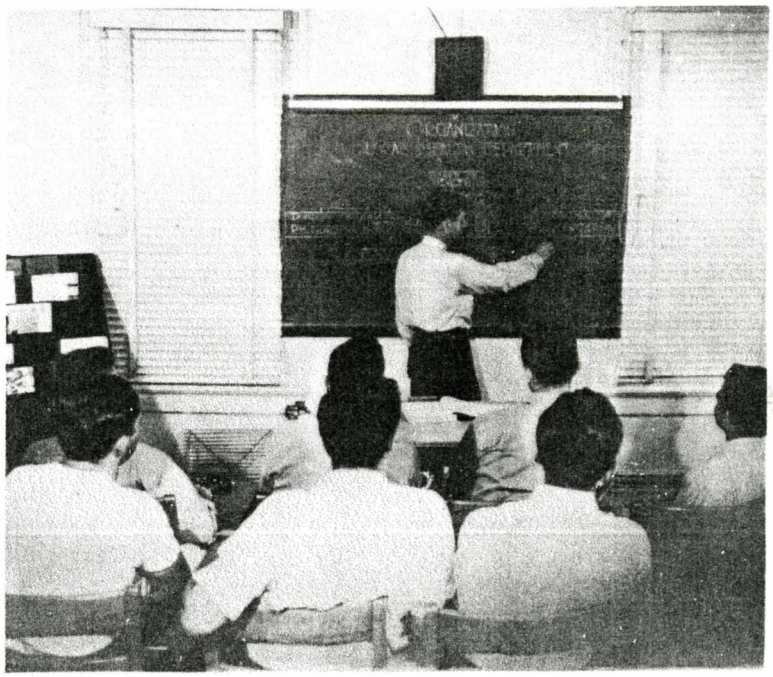
LOCATION: Rocky Mountain Field Training Center, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver, Colo.

TIME: June 19 — June 23, 1950

STAFF: Clyde F. Herring, Training Officer
Howard M. Weindel, Training Officer
and other members of the staffs of the Denver City-County Health Department, the Colorado State Health Department, University of Colorado Medical Center, and the U. S. Public Health Service Region IX Office

A. OUTLINE OF TRAINING PROGRAM

This 5-day course is designed to orient newly graduated veterinarians in the various phases of public health procedure. The course content will include: (1) organization and functions of Federal, State, and local health departments; (2) the planning of veterinary public health programs at the State level; and (3) the inspection techniques required of veterinarians. This could be expected to supply the young veterinarian with an over-all picture of what is required of him when he enters the field of public health, whether at the Federal, State, or local level.



Trainees are instructed in the organization and operation of a local health department.

B. ENTRANCE REQUIREMENTS

This program is offered to newly graduated veterinarians. *No tuition will be charged, but trainees are to arrange for their own living and traveling expenses either through State stipend, their personal resources, or other arrangements with their employers.*

Trainees should bring field and laboratory work clothes.

C. APPLICATIONS

Applications should be made through the sponsoring agency and should be addressed to the Rocky Mountain Field Training Center, 4200 E. Ninth Ave., Denver, Colo.; to the Training Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga.; or to the appropriate Public Health Service Regional Office.

The name, education, and experience of each person applying should be included in the letter. Health department personnel should make application through the State health officer, and personnel of other organizations should apply through the organization concerned.

Due to the physical limitations of space and staff, the field training center must make final decisions regarding acceptance of trainees.

Administration of a Public Health Audio-Visual Program (6.2-8)

TYPE OF TRAINING PROGRAM: Audio-visual instruction methods assigned to Public Health

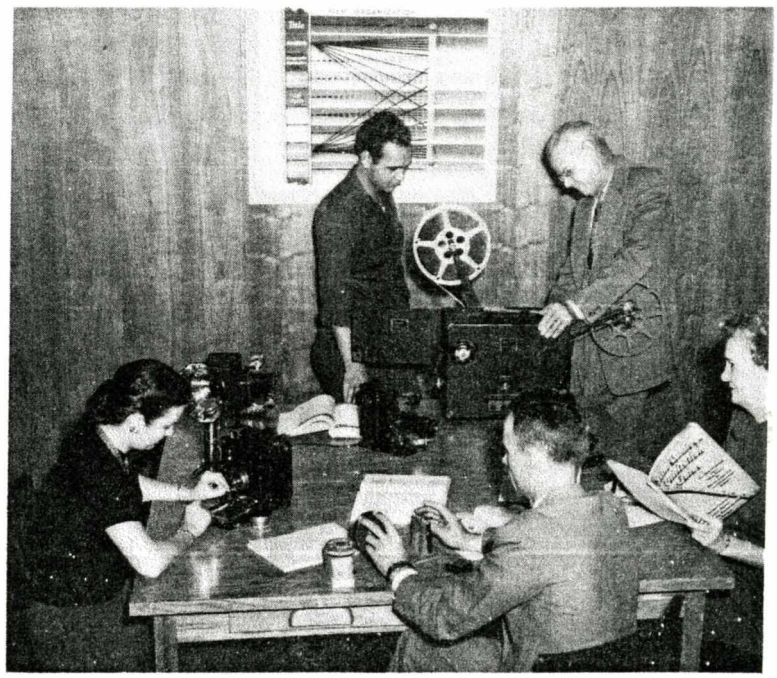
LOCATION: Headquarters of Production Division at the Veterans' Administration Hospital near Atlanta, Ga.

TIME: February 13 — February 17, 1950
March 13 — March 17, 1950

STAFF: Gale C. Griswold
Walter S. Bell
Harry A. Sherrill
Merle I. Wimmer
Everett L. Priest
Richard B. Brown
Technicians of the Division as Needed

A. OUTLINE OF TRAINING PROGRAM

These are 1-week courses concerned with administration of an audio-visual program as applied to public health. The courses will be given for personnel of FSA-PHS and State-Department-of-Health personnel. This course is not the ordinary projectionists course, but is a comprehensive course including all aspects of an audio-visual materials program as applied to public health. The course will be presented in the form of laboratory, demonstration, and lecture. Learning by doing will be emphasized.



Students at work on various types of audio-visual materials.

The following outline indicates the scope of the program:

A. Problems of Administration. Training personnel for work with audio-visual materials-organizing and conducting workshops on the local level; planning for physical facilities; promotion of the program.

B. Educational methods as applied to production, selection, distribution, utilization, and evaluation of audio-visual materials.

C. Production of audio-visual materials — preplanning, story development, shooting, editing, and sound. Still photography and slide making will be covered briefly. Preparation of exhibits,

posters, etc., will be demonstrated.

D. Distribution of audio-visual materials. —Film library operation and maintenance including promotion, cataloging, booking, shipping, filing, storage, care and repair, film sources, and library records and reports

E. Equipment — Selection, operation, and maintenance of all types of equipment will be covered.

F. Summarization — with emphasis on local application through improved administration.

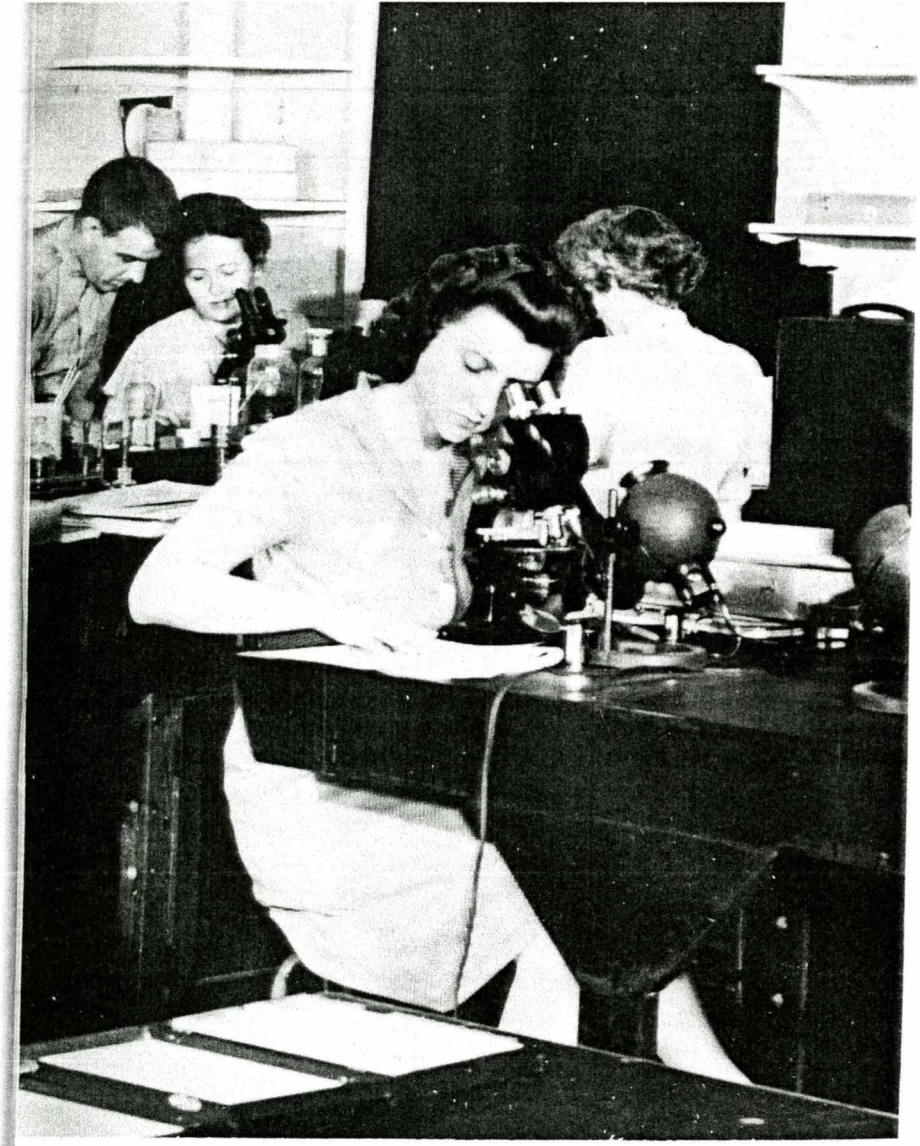
B. ENTRANCE REQUIREMENTS

To be eligible for this course, the applicant must now be working in a Federal or State public health position requiring the knowledge and skills covered, or have an assignment to such position upon return to duty.

No tuition will be charged, but those taking the course should arrange for their own living and traveling expenses.

C. APPLICATIONS

Applications should be made in writing to the Production Division, Communicable Disease Center, U. S. Public Health Service, 605 Volunteer Bldg., Atlanta, Ga. Attendance will be limited to 15 persons. The first 15 applications will be processed for the first course. Additional applicants will be notified to the effect that they will be given first consideration for the second course, if they desire.



FEDERAL SECURITY AGENCY
Public Health Service
Communicable Disease Center
Atlanta, Ga.

• SCHEDULES FOR 1950 •

PUBLIC HEALTH LABORATORY COURSES

List of Laboratory Training Courses

*Digit left of decimal indicates basic program type.
Digit to the right of decimal indicates variations within the basic program.
Digit to the right of hyphen indicates principal location of training laboratory.

** Course given by special arrangement only.

Laboratory Division, Communicable Disease Center

STAFF MEMBERS

OFFICE OF THE CHIEF
S. E. Miller, M.D., Chief
W. M. Fisher, M.D., Ph.D., Assistant Chief
R. F. Reider, M.D., D.P.H., In Charge, Training Services
E. J. Tiffany, M.D., In Charge, Consultation Services

PARASITOLOGY BRANCH
M. M. Brooke, Sc.D., In Charge
P. L. Guptill, M.A.
J. Acosta-Matienzo, M.S.

Protozoology Section
M. M. Brooke, Sc.D., In Charge
L. Norman, B.A.

Helminthology Section
A. W. Donaldson, Sc.D., In Charge
M. Goldman, M.S.
S. A. Johnson, B.A.

Medical Entomology Section
H. D. Pratt, Ph.D., In Charge
J. E. Lane, B.S.

VIRUS AND RICKETTSIA BRANCH
M. Schaeffer, M.D., Ph.D., In Charge
E. H. Arnold, C.E., M.S.
R. W. Chamberlain, Sc.D.

Virus Section
M. Schaeffer, M.D., Ph.D., In Charge
B. F. Howitt, M.A.
R. R. Gorrie, A.B.
V. J. Nichols, B.S.

Rabies Section
R. E. Kissling, D.V.M., In Charge
H. Rubin, D.V.M.

BACTERIOLOGY BRANCH
M. Frobisher, Jr., Sc.D., In Charge
J. G. Paine, B. S.
L. M. Sommermeyer, R.N., M.A.

General Bacteriology — Serology Section
M. Frobisher, Jr., Sc.D., In Charge
E. I. Parsons, Sc.D.
J. H. Schubert, Ph.D.
E. L. Updyke, Sc.D.
M. K. Ward, Sc.D.
E. O. King, M.S.
M. I. Nickle, M.S.
S. Stanford, B.S.

BACTERIOLOGY BRANCH (contd.)

Enteric Bacteriology Section
P. R. Edwards, Ph.D., In Charge
W. H. Ewing, Ph.D.
M. G. West, M.S.
A. C. Arnold, A.B.

Tuberculosis Section
C. H. Fish, M.D., Acting in Charge
R. A. Patnode, M.S.
A. W. Jones, Jr., M.P.H.
G. C. Klein, B.A.
J. H. Robinson, B.S.
T. R. Read, Jr., A.B.

Mycology Section
L. Ajello, Ph.D., In Charge
L. K. Georg, Ph.D.
M. A. Gordon, Ph.D.
V. Q. Grant, B.S.

CLINICAL PATHOLOGY BRANCH
E. E. Mandel, M.D., Acting in Charge

Patho-Physiology Section
E. E. Mandel, M.D., In Charge
J. T. Rogers, M.S.

WESTERN CDC LABORATORY BRANCH
C. R. Eskey, M.D., In Charge

Plague and Rodent Control Section
V. B. Link, M.D., In Charge

Medical Entomology Section
F. M. Prince, M.S., In Charge

STAFF MEMBERS (contd.)

CONSULTANTS

Donald L. Augustine, M.D. Professor of Tropical Public Health, Department of Tropical Public Health, Harvard School of Public Health, Boston 15, Mass.

Dorsey W. Bruner, Ph.D., D.V.M. Professor of Bacteriology, New York State Veterinary College, Cornell University, Ithaca, N.Y.

Charles M. Carpenter, M.D. Professor of Infectious Diseases, University of California School of Medicine, Los Angeles, Calif.

Norman F. Conant, Ph.D. Professor of Mycology and Associate Professor of Bacteriology, Duke University School of Medicine, Durham, N.C.

William W. Cort, Ph.D. Professor of Parasitology, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md.

Herald R. Cox, Sc.D. Director, Viral and Rickettsial Research, Lederle Laboratories, Pearl River, N.Y.

Martin M. Cummings, M.D. Chief, Tuberculosis Research Laboratories, Lawson, V.A. Hospital, Chamblee, Ga.

Ernest C. Faust, Ph.D. Professor of Parasitology, Department of Tropical Medicine, Tulane University, New Orleans, La.

Stanley B. Freeborn, Ph.D. Assistant Dean, College of Agriculture, University of California, Berkeley 4, Calif.

William F. Friedewald, M.D. Professor of Bacteriology, Emory University School of Medicine, Emory University, Ga.

Edwin S. Gault, M.D. Associate Professor of Pathology and Bacteriology, Temple University, Philadelphia 40, Pa.

Russell Y. Gottshall, Ph.D. Assistant Director, Bureau of Laboratories, Michigan Department of Health, Lansing 4, Mich.

John H. Hanks, Ph.D. Associate Professor of Bacteriology, Department of Bacteriology and Immunology, Harvard Medical School, Boston, Mass.

Joseph G. Hopkins, M.D. Professor Emeritus, Department of Dermatology, College of Physicians and Surgeons, Columbia University, New York, N.Y.

Herbert G. Johnstone, Ph.D. Associate Professor of Medical Parasitology, University of California Medical School, San Francisco, Calif.

Edmund K. Kline, Dr.P.H. Director of Laboratories, Cattaraugus County Board of Health, Olean, N.Y., and Director of Allegany County Laboratories, Belmont, N.Y.

George T. Lewis, Ph.D. Professor of Biochemistry, Emory University, Atlanta, Ga.

William G. Sawitz, M.D. Associate Professor of Parasitology and Associate in Medicine, Jefferson Medical College, Philadelphia, Pa.

Aubrey B. Schneider, Sc.D. Assistant Director, Statistical Research Section American Cancer Society, Inc., New York, N.Y.

Thomas F. Sellers, M.D. State Health Officer, State Department of Public Health, Atlanta, Ga.

David T. Smith, M.D. Professor of Bacteriology, Duke University School of Medicine, Durham, N.C.

William Steenken, Jr., Director of Research and Clinical Laboratories, Trudeau Sanitarium, Trudeau, N.Y.

Herbert A. Wenner, M.D. Assistant Professor of Pediatrics and Bacteriology, University of Kansas, Kansas City, Kans.

Henry S. Willis, M.D. Superintendent and Medical Director, North Carolina Sanitarium for the Treatment of Tuberculosis, McCain, N.C.

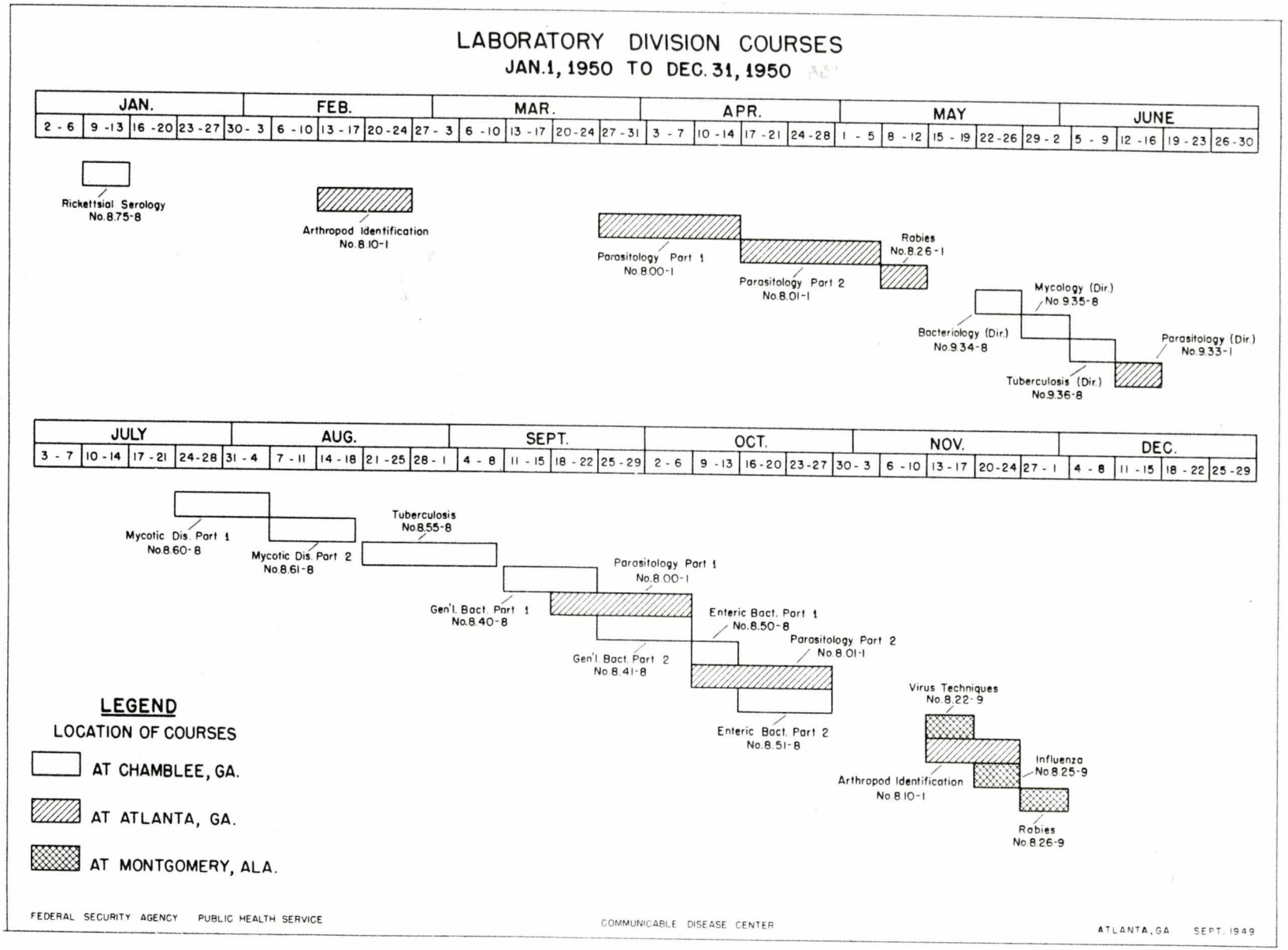
C. Eugene Woodruff, M.D. Director of Laboratories, Wm. H. Maybury Sanitarium, Northville, Mich.

Schedule of Laboratory Training Courses

Jan. 1 — Dec. 31, 1950

DATES	COURSES	DURATION	PROGRAM & LOCATION NUMBER*
Jan. 9 — Jan. 13	SEROLOGICAL DIAGNOSIS OF RICKETTSIAL DISEASES	1 Wk.	8.75-8
Feb. 13—Feb. 24	IDENTIFICATION OF MEDICALLY IMPORTANT ARTHROPODS	2 Wks.	8.10-1
Mar. 27— Apr. 14	LABORATORY DIAGNOSIS OF PARASITIC DISEASES PART 1. INTESTINAL PARASITES	3 Wks.	8.00-1
Apr. 17— May 5	LABORATORY DIAGNOSIS OF PARASITIC DISEASES PART 2. BLOOD PARASITES	3 Wks.	8.01-1
May 8 —May 12	LABORATORY DIAGNOSIS OF RABIES	1 Wk.	8.26-1
May 22 — May 26	LABORATORY DIAGNOSIS OF BACTERIAL DISEASES (DIRECTORS)	1 Wk.	9.34-8
May 29 — June 2	LABORATORY DIAGNOSIS OF MYCOTIC DISEASES (DIRECTORS)	1 Wk.	9.35-8
June 5 — June 9	LABORATORY DIAGNOSIS OF TUBERCULOSIS (DIRECTORS)	1 Wk.	9.36-8
June 12— June 16	LABORATORY DIAGNOSIS OF PARASITIC DISEASES (DIRECTORS)	1 Wk.	9.33-1
July 24— Aug. 4	LABORATORY DIAGNOSIS OF MYCOTIC DISEASES PART 1. CUTANEOUS AND SUBCUTANEOUS FUNGI	2 Wks.	8.60-8
Aug. 7 — Aug. 17	LABORATORY DIAGNOSIS OF MYCOTIC DISEASES PART 2. SYSTEMIC FUNGI	2 Wks.	8.61-8
Aug. 21— Sept. 7	LABORATORY DIAGNOSIS OF TUBERCULOSIS	3 Wks.	8.55-8
Sept.11— Sept.22	LABORATORY DIAGNOSIS OF BACTERIAL DISEASES GENERAL BACTERIOLOGY, PART 1.	2 Wks.	8.40-8
Sept.25— Oct. 6	LABORATORY DIAGNOSIS OF BACTERIAL DISEASES GENERAL BACTERIOLOGY, PART 2.	2 Wks.	8.41-8
Oct. 9 — Oct. 13	LABORATORY DIAGNOSIS OF ENTERIC DISEASES PART 1. INTRODUCTORY ENTERIC BACTERIOLOGY	1 Wk.	8.50-8
Oct. 16— Oct. 27	LABORATORY DIAGNOSIS OF ENTERIC DISEASES PART 2. ADVANCED ENTERIC BACTERIOLOGY	2 Wks.	8.51-8
Sept.18— Oct. 6	LABORATORY DIAGNOSIS OF PARASITIC DISEASES PART 1. INTESTINAL PARASITES	3 Wks.	8.00-1
Oct. 9 — Oct. 27	LABORATORY DIAGNOSIS OF PARASITIC DISEASES PART 2. BLOOD PARASITES	3 Wks.	8.01-1
Nov. 13— Nov. 24	IDENTIFICATION OF MEDICALLY IMPORTANT ARTHROPODS	2 Wks.	8.10-1
Nov. 13— Nov. 17	VIRUS ISOLATION AND IDENTIFICATION TECHNIQUES	1 Wk.	8.22-9
Nov. 20— Nov. 24	LABORATORY DIAGNOSIS OF INFLUENZA	1 Wks.	8.25-9
Nov. 27— Dec. 1	LABORATORY DIAGNOSIS OF RABIES	1 Wk.	8.26-9
By Special Arrangement	LABORATORY DIAGNOSIS OF MALARIA	2 Wks	8.05-1
	LABORATORY DIAGNOSIS OF VIRUS DISEASES	2-4 Wks.	8.20-9
	PHAGE TYPING OF SALMONELLA TYPHOSA	1 Wk.	8.52-8

*Refer to System of Code Numbers of Laboratory Training Programs and Locations of Training Laboratories.



System of Code Numbers of Laboratory Training Programs and Locations of Training Laboratories

Public Health Laboratory Programs

8.00 to 8.09	Courses in Parasitology
8.10 to 8.19	Courses in Medical Entomology
8.20 to 8.29	Courses in Virology
8.30 to 8.39	Courses in Rickettsiology
8.40 to 8.49 8.50 to 8.59	Courses in Bacteriology
8.60 to 8.69	Courses in Mycology
8.70 to 8.79	Courses in Serology
8.80 to 8.89 8.90 to 8.99	Courses in Clinical Pathology
9.00 to 9.09	Courses in Hematology
9.10 to 9.19	Courses in Biochemistry
9.20 to 9.29	Courses for Central Services personnel
9.30 to 9.39 9.40 to 9.49	Courses for laboratory directors and laboratory supervisors
9.50 to 9.59 9.60 to 9.69	Courses for health officers and epidemiologists
9.70 to 9.79	Courses for foreign students
9.80 to 9.89 9.90 to 9.99	Courses in the States by special arrangement

Locations

0 - Special arrangement
1 - Atlanta, Ga.
2 - Savannah, Ga.
3 - Columbus, Ga.
4 - Topeka, Kans.
5 - Albany, Ga.
6 - Troy, N. Y.
7 - Cincinnati, Ohio
8 - Chamblee, Ga.
9 - Montgomery, Ala.
10 - San Francisco, Calif.
11 - Denver, Colo.

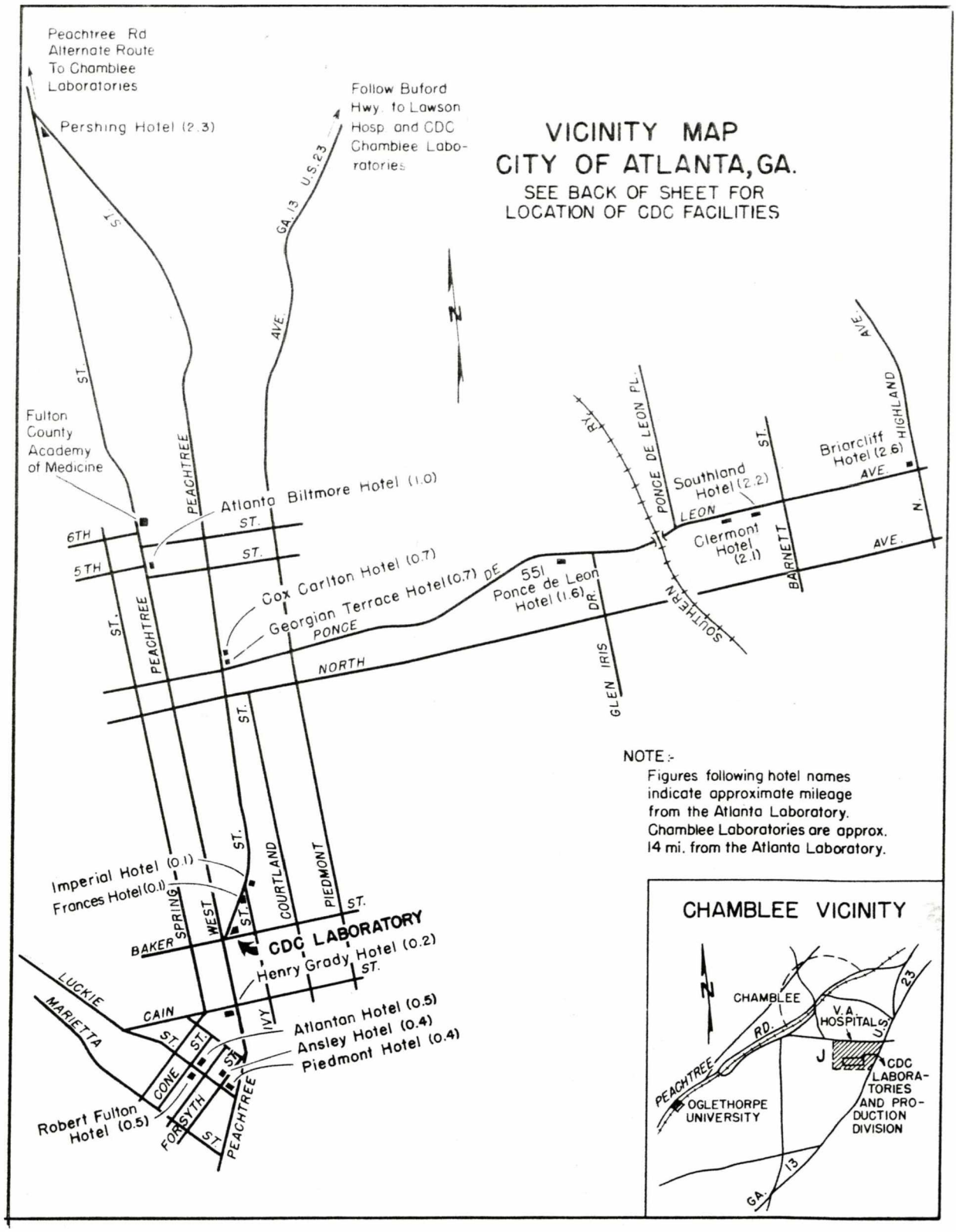
The course number is designated by the code number for the training program followed by the code number of the location separated by a hyphen.

Atlanta Hotels

	AAA Rating	Single	Double	Phone. No.
Ansley Hotel 98 Forsyth St., N.W.	First class	$4.00 Up	$5.50 Up	LA-2461
Atlanta Biltmore Hotel 817 W. Peachtree St., N.W.	First Class	4,00 "	6,00 "	EM-3461
Atlantan Hotel 111 Luckie St., N.W.	Good	3.50 "	5.50 "	LA-6461
Briarcliff Hotel 1050 Ponce de Leon Ave., N.E.	Very nice	4.00 "	5.50 "	AT-9711
Clermont Hotel 799 Ponce de Leon Ave., N.E.		3.00 "	4.50 "	AT-8611
Cox Carlton Hotel 683 Peachtree St., N.E.	Good	3.50 "	6.00 "	VE-7721
Frances Hotel 343 Peachtree St., N.E.		$17.50 per week	$24.50 per week	LA-2636
Five Fifty-one Hotel 551 Ponce de Leon Ave., N.E.		3.00 Up	4.00 Up	VE-4761
Georgian Terrace Hotel 659 Peachtree St., N.E.	Popular	3.50 "	7.50 "	VE-6671
Henry Grady Hotel 210 Peachtree St., N.W.	First Class	3.50 "	5.50 "	LA-3211
Imperial Hotel 355 Peachtree St., N.E.		3.50 "	5.00 "	LA-1941
Pershing Hotel 1428 Peachtree St., N.E.		3.50 "	5.00 "	AT-8621
Piedmont Hotel 108 Peachtree St., N.W.	Well maintained	3.50 "	5.50 "	LA-2431
Robert Fulton Hotel 114 Luckie St., N.W.		3.00 "	5.00 "	LA-3261
Southland Hotel 825 Ponce de Leon Ave., N.E.		$21.00 per week	$31.50 per week	HE-3120

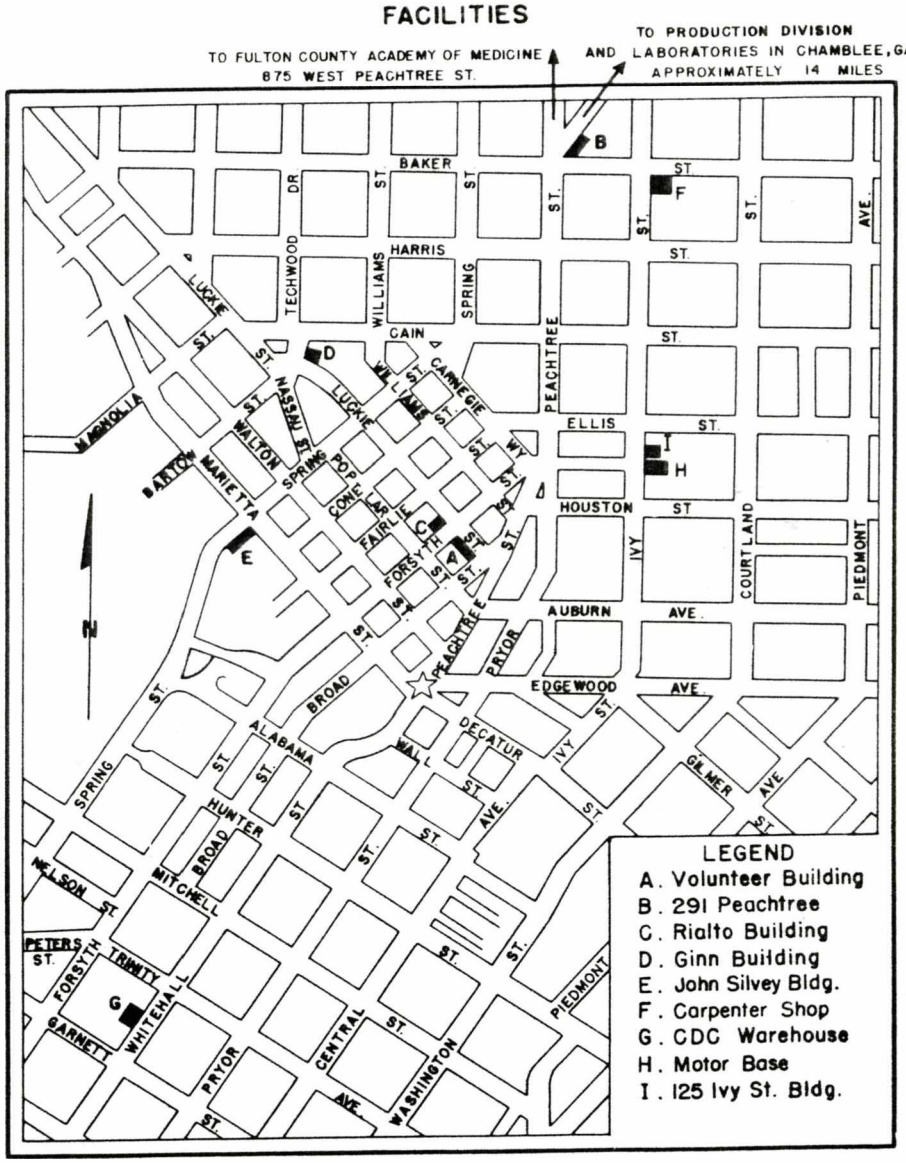
Montgomery Hotels

	AAA Rating	Single	Double	Phone No.
Exchange Hotel 5 Commerce St.		$2.75 Up	$3.50 Up	8371
Greystone Hotel 100 Commerce St.		2.50 "	3.50 "	6641
Jefferson Davis Hotel 320 Montgomery St.	Very good	3.25 "	4.50 "	5251
Whitley Hotel 215 Montgomery St.	Very nice	3.25 "	4.50 "	6461


Peachtree Rd
Alternate Route
To Chamblee
Laboratories
Pershing Hotel (2.3)
Follow Buford
Hwy. to Lawson
Hosp. and CDC
Chamblee Labo-
ratories
VICINITY MAP
CITY OF ATLANTA, GA.
SEE BACK OF SHEET FOR
LOCATION OF CDC FACILITIES
N
GA. 13 U.S. 23
AVE
ST.
Fulton
County
Academy
of Medicine
PEACHTREE
Atlanta Biltmore Hotel (1.0)
6TH
5TH
Cox Carlton Hotel (0.7)
Georgian Terrace Hotel (0.7)
551
Ponce de Leon
Hotel (1.6)
PONCE DE LEON FL.
RY.
Southland
Hotel (2.2)
LEON
Clermont
Hotel
(2.1)
Briarcliff
Hotel (2.6)
HIGHLAND
BARNETT
DE
PONCE
NORTH
SOUTHERN
GLEN IRIS
DR.
Imperial Hotel (0.1)
Frances Hotel (0.1)
SPRING
WEST
COURTLAND
PIEDMONT
BAKER
CDC LABORATORY
Henry Grady Hotel (0.2)
LUCKIE
MARIETTA
CAIN
IVY
Atlantan Hotel (0.5)
Ansley Hotel (0.4)
Piedmont Hotel (0.4)
CONE
FORSYTH
Robert Fulton
Hotel (0.5)
NOTE:-
Figures following hotel names
indicate approximate mileage
from the Atlanta Laboratory.
Chamblee Laboratories are approx.
14 mi. from the Atlanta Laboratory.
CHAMBLEE VICINITY
CHAMBLEE
RD.
V.A.
HOSPITAL
U.S.
23
J
CDC
LABORA-
TORIES
AND PRO-
DUCTION
DIVISION
PEACHTREE
OGLETHORPE
UNIVERSITY
GA.
13

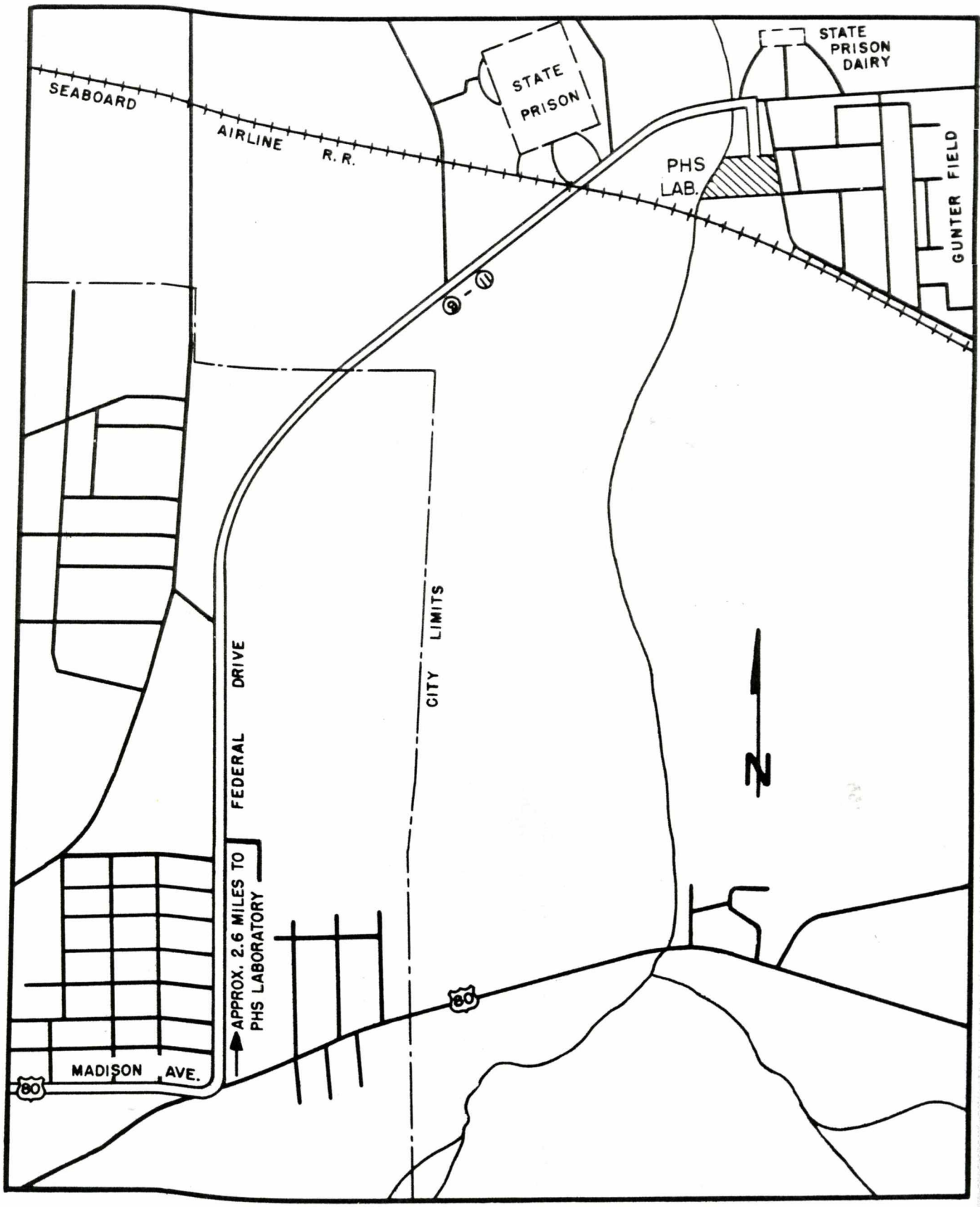
DOWNTOWN ATLANTA

SHOWING LOCATION OF COMMUNICABLE DISEASE CENTER FACILITIES



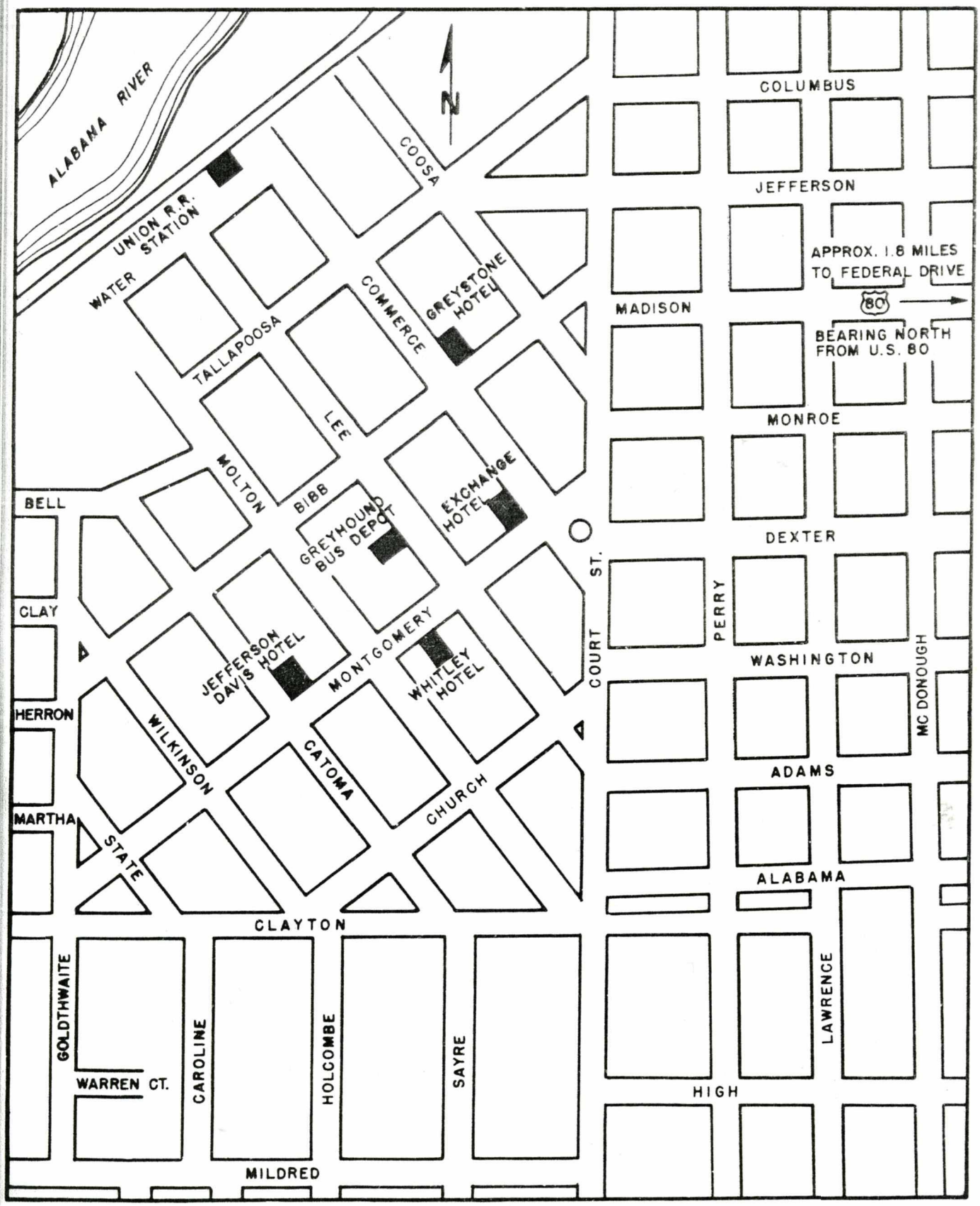
USPHS — CDC ATLANTA, GEORGIA SEPT. 1949

VICINITY MAP OF MONTGOMERY, ALA.
SHOWING LOCATION OF PUBLIC HEALTH SERVICE LABORATORY



DOWNTOWN MONTGOMERY

SHOWING LOCATION OF HOTELS & TRANSPORTATION FACILITIES



General Information for the Group of Courses In Laboratory Diagnosis

Type of Training Program: Practical refresher courses in the principles and practice of laboratory methods in the diagnosis of communicable diseases. Emphasis is placed on the practical aspects of diagnostic laboratory procedures.

Aim of Training: To develop accuracy and dependability in the professional laboratory worker; to acquaint him with the best methods and apparatus available for each procedure; to familiarize him with the basic principles underlying each step; and to allow for interchange of ideas and discussion of problems with other students in group seminars.

Type of Instruction: Laboratory exercises, lectures, demonstrations, motion picture films, and group discussions. A high instructor – student ratio is maintained.

Size of Classes: Classes are limited to 20 - 22 students.

Fees: No tuition or laboratory fees are charged.

Travel Arrangements and Expenses: To be arranged and paid for by the student or his employer.

Living Accommocations: It is suggested that trainees obtain reservations for living accommodations at the earliest possible date. The hotel lists and maps given herein may be of some help. If accommodations do not meet needs of students, the training office will be glad to assist in obtaining more suitable quarters after their arrival.

Eating Facilities: Restaurants and cafeterias are located near places where classes are held. Special arrangements will be made for the virus classes in Montgomery.

Transportation to and from Classes: A government bus will provide transportation to and from classes in courses which are given in the Bacteriology Laboratories of the Communicable Disease Center at Chamblee, Georgia, leaving the laboratory training office at 291 Peachtree St., N. E. (Baker Street entrance) at 8:00 a.m., and returning from Chamblee at 4: 30 p.m. Special arrangements will be made for virus classes in Montgomery.

Time of Classes: Classes are held daily, Monday through Friday, from 8:45 a.m. to 4:45 p.m. Classes at Chamblee are held from 8:30 a.m. to 4:00 p.m. No classes are held on holidays.

Laboratory Equipment, Supplies, and Books: All necessary laboratory equipment is loaned to the student for the duration of the course. Fresh and preserved materials and animals are made available. Textbooks are available for loan. Information sheets and certain manuals are given to students.

Library Facilities: Adequate facilities for reference are made available at the Communicable Disease Center Library at 291 Peachtree St., Atlanta; at the Bacteriology Branch Laboratories at Chamblee; and at the Emory University Medical Library. A branch library is located at the Virus Laboratories in Montgomery.

Examinations: Practical, oral, and written examinations are given for grading of students in most of the courses. No examinations are given in the courses for laboratory directors.

Certificates: Certificates suitable for framing and signed by the Surgeon General of the U. S. Public Health Service are issued to those students who make outstanding grades in courses as noted in the descriptions of individual courses. No certificates are issued for laboratory directors' courses. Letters of attendance are issued to students to whom certificates are not awarded.

Extension Service: The laboratories from which students come to attend certain courses are placed on the Extension Service of the laboratory concerned. Specimens are mailed at intervals to the laboratory and become the property of the recipient laboratory. They serve as refresher materials for trained employees; as training materials for new employees; as test materials at the discretion

of the laboratory director; as reference materials with which to compare unusual specimens; and as demonstration materials at meetings. In addition to the more common specimens, every effort is made to get unusual materials which are not readily available in this country and are infrequently seen by laboratory workers in this country. The aim of the Extension Service is to have as many people as possible in each laboratory see these materials, and to make them available to other laboratories nearby.

Eligibility: This training is open to all grades of employed laboratory personnel from nonprofit diagnostic laboratories who are approved by their State health officers. Each applicant is expected to have had at least one laboratory course in elementary bacteriology, parasitology, mycology, serology, or chemistry at an approved institution, or at least 2 years' experience in a diagnostic laboratory, involving the handling of living pathogenic organisms. In recommending students for these courses, State health officers and laboratory directors are reminded that students with good educational background will profit much more from the courses than poorly prepared students. Laboratory directors and senior laboratory staff members may make application for these courses instead of the shorter ones if they prefer to do so.

Selection of Students: First consideration is given to the laboratories of State and local health departments, Federal agencies, and other nonprofit organizations. Preference is given in areas where the particular training is most urgently needed and where such services will be of the greatest value to the public. Other factors being equal, the earliest date of application receives first choice. Acceptances are made approximately 1 month before the beginning of the course.

Applications: Application forms should be requested from the Laboratory Division, Communicable Disease Center, 291 Peachtree St., N.E., Atlanta, Ga., or from the State health officer.

Applications for training should be submitted for the approval of the State health officer concerned, and forwarded to the Chief, Laboratory Division, Communicable Disease Center. This should be done as far in advance as possible so that notification of acceptance can be made in sufficient time for the trainee to arrange for living accommodations. Applications from Federal personnel should be submitted for approval through the Chief of the Bureau or Division in which the applicant is employed.

A separate application form should be submitted for each course or part of course the applicant wishes to attend. Every effort will be made to allow students who so desire to attend consecutive courses, since in many instances it may mean a substantial saving in travel cost. Students are urged to complete courses whenever possible. Where the time available permits attendance in only one part of a course, every effort should be made to complete that course by attendance in the other part when time can be spared.

Laboratory Diagnosis of Parasitic Diseases
Part 1. Intestinal Parasites (8.00-1)

DATES:	March 27 — April 14, 1950 September 18 — October 6, 1950
LOCATION:	Parasitology Laboratories, Laboratory Division, Communicable Disease Center, 291 Peachtree St., N.E., Atlanta, Ga.
STAFF:	Marion M. Brooke, Sc.D. Alan W. Donaldson, Sc.D. Morris Goldman, M.S. Paul L. Guptill, M.A. Lois Norman, A.B. Guest lecturers, consultants, and staff members of the Communicable Disease Center.

Laboratory personnel receive intensive practice in determining unknown parasitic specimens.

Laboratory Diagnosis of Parasitic Diseases
Part 1. Intestinal Parasites (contd.)

TYPE OF TRAINING:

Materials for teaching are made available through importation of fresh parasitic materials from tropical countries, as well as from many sources in this country. Preserved materials and permanent slide preparations are also used. Various organisms are maintained in cultures and laboratory animals. The student is made thoroughly familiar with the diagnostic stages of parasites and laboratory procedures by repeated drilling with unknown specimens. Lectures and discussion sessions emphasize the values and limitations of the available diagnostic procedures.

OUTLINE OF COURSE:

First Week	**Characteristics of Diagnostic Stages** (Amebae, other protozoa, nematodes, cestodes, and trematodes).
Second and Third Weeks	**Laboratory Diagnostic Techniques** **Intestinal Parasitic Diseases of Major Importance** **Practice in Examination of Stool Specimens** (Practice specimens, unknowns, and finals)

CERTIFICATES:

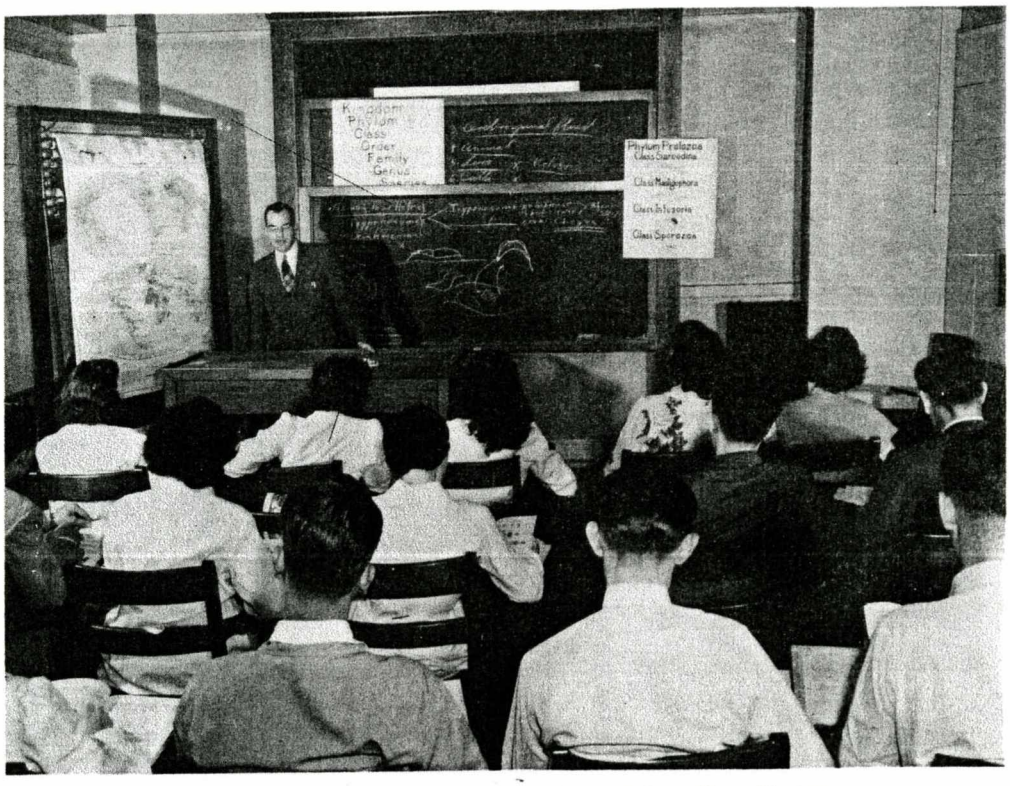
A certificate will be awarded only for completion of both Parts 1 and 2 of the Laboratory Diagnosis of Parasitic Diseases, provided grades are outstanding.

OTHER INFORMATION:

Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Parasitic Diseases
Part 2. Blood Parasites (8.01-1)

DATES:	April 17 — May 5, 1950 October 9 — October 27, 1950
LOCATION:	Parasitology Laboratories, Laboratory Division, Communicable Disease Center, 291 Peachtree St., N.E., Atlanta, Ga.
STAFF:	Marion M. Brooke, Sc.D. Allan W. Donaldson, Sc.D. Harry D. Pratt, Ph.D. Paul L. Guptill, M.A. Lois Norman, A.B. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Class lecture in diagnostic stages of hemoflagellates.

Laboratory Diagnosis of Parasitic Diseases
Part 2. Blood Parasites (contd.)

TYPE OF TRAINING:

The characteristics of the blood parasites are studied in fresh blood from laboratory animals, mounts from cultures, stained blood films, and other permanent preparations. Practice is obtained in performance of laboratory procedures. Unknown specimens are used to develop proficiency in identification of organisms. Lectures and discussion sessions emphasize the values and limitations of available diagnostic procedures.

OUTLINE OF COURSE:

First Week	**Characteristics of Diagnostic Stages** (Malaria parasites, trypanosomes, leishmanias, filarial worms)
Second and Third Weeks	**Laboratory Diagnostic Techniques** **Blood Parasite Diseases of Major Importance** **Arthropods of Medical Importance** **Practice in Examination of Blood Specimens** (Practice specimens, unknowns, and finals)

CERTIFICATES:

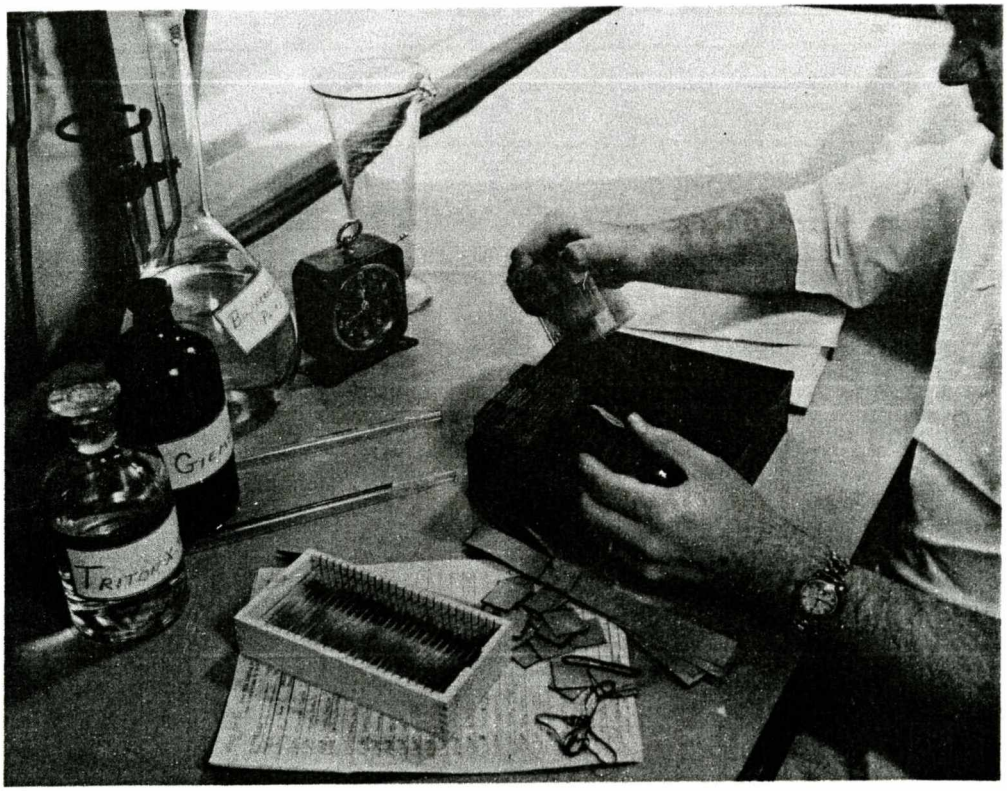
A certificate will be awarded only for completion of both Parts 1 and 2 of the Laboratory Diagnosis of Parasitic Diseases, provided grades are outstanding.

OTHER INFORMATION:

Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Malaria (8.05-1)

DATES:	By special arrangement only
LOCATION:	Parasitology Laboratories, Laboratory Division, Communicable Disease Center, 291 Peachtree St., N.E., Atlanta, Ga.
STAFF:	Marion M. Brooke, Sc.D. Alan W. Donaldson, Sc.D. Paul L. Guptill, M.A. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Mass staining of blood films.

Identification of Medically Important Arthropods (contd.)

TYPE OF TRAINING:

The characteristics of arthropods of medical importance are studied from live specimens, slide preparations, and preserved materials. Practice is obtained in the various techniques of mounting and preparing many types of arthropods for study and identification, such as adult and larval mosquitoes, fly larvae, fleas, ticks, and other ectoparasites. Unknown specimens are used to develop proficiency in identification of various species. Lectures and discussion sessions emphasize diagnostic characteristics, literature dealing with identification, and to a lesser extent life histories and importance in disease transmission.

OUTLINE OF COURSE:

First Week	**Characteristics of Diagnostic Stages** (Crustacea, ticks, mites, cockroaches, lice, true bugs, fleas) **Methods of Preparing Specimens for Identification**
Second Week	**Characteristics of Diagnostic Stages** (Mosquito larvae and adults, biting flies, fly larvae, muscoid flies) **Practice in Examination of Arthropods** (Practice specimens, unknowns, and finals)

CERTIFICATES:

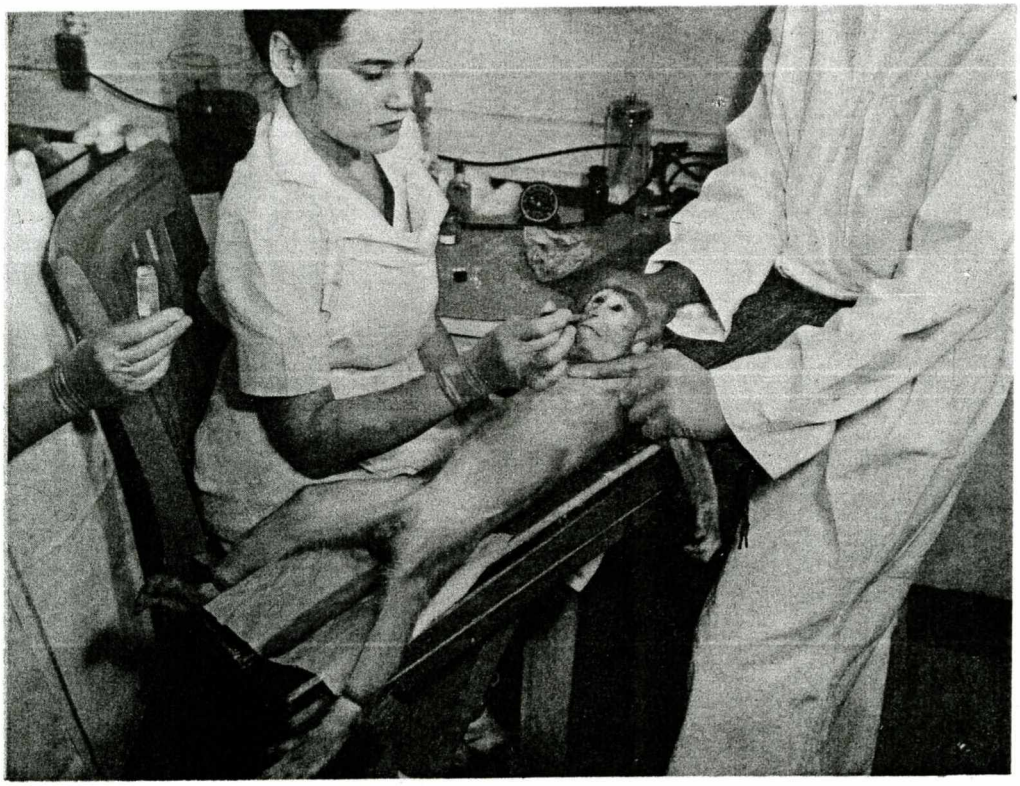
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:

Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Virus Diseases (8.20-9)

DATES:	By special arrangement only
LOCATION:	Virus and Rickettsia Laboratories, Laboratory Division, Communicable Disease Center, Federal Dr., Montgomery, Ala.
STAFF:	Morris Schaeffer, M.D., Ph.D. Beatrice F. Howitt, M.A. Rachel Gorrie, A.B. Robert E. Kissling, D.V.M. Roy W. Chamberlain, Sc.D. Earl H. Arnold, C.E., M.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Intranasal inoculation of monkey for virus identification.

TYPE OF TRAINING:
This will be a special course open only to a limited number of students who are qualified and who subsequently plan to begin virus work in their own laboratories. Two to 4 weeks will be devoted to personal instruction by members of the staff with whom the students will work closely. An attempt will be made to have the student learn and perform personally all of the various techniques employed in a virus laboratory.

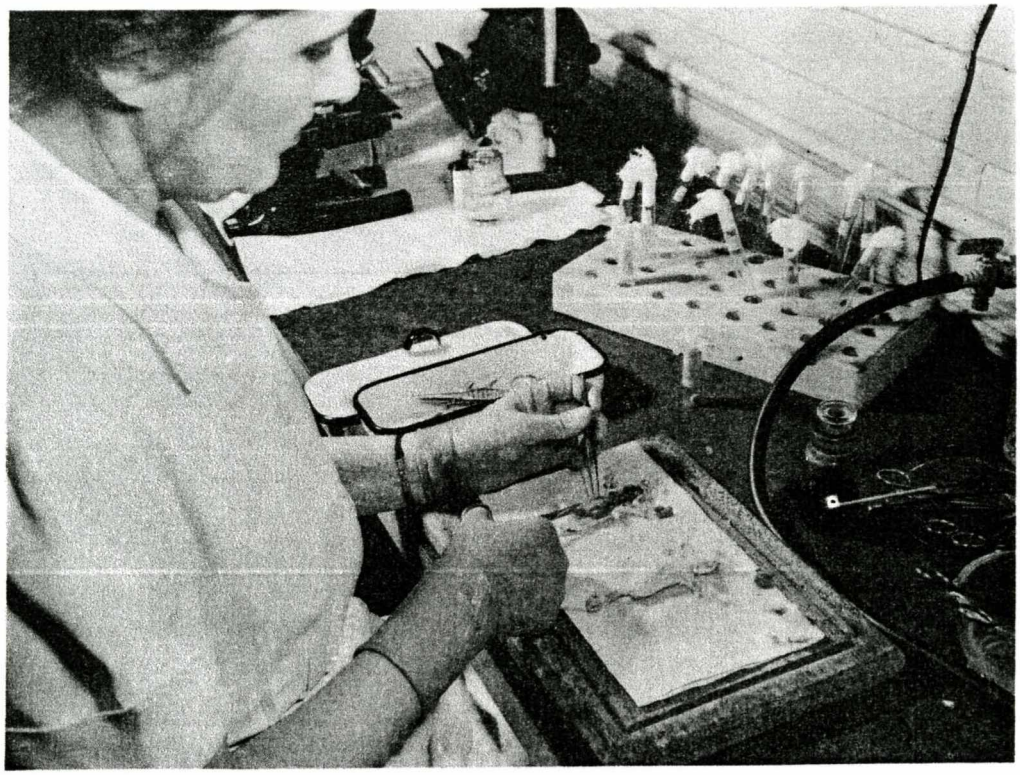
CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Virus Isolation and Identification Techniques

(8.22-9)

DATES:	November 13 — 17, 1950
LOCATION:	Virus and Rickettsia Laboratories, Laboratory Division, Communicable Disease Center, Federal Dr., Montgomery, Ala.
STAFF:	Morris Schaeffer, M.D., Ph.D. Beatrice F. Howitt, M.A. Rachel Gorrie, A.B. Robert E. Kissling, D.V.M. Roy W. Chamberlain, Sc.D. Earl H. Arnold, C.E., M.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Examination of mice following virus inoculations.

Virus Isolation and Identification Techniques (contd.)

TYPE OF TRAINING:

This short course is designed to illustrate by demonstrations and discussions the various general techniques and methods employed in the isolation and identification of viruses responsible for diseases of man. Only a few of the simpler procedures will actually be carried out by the students themselves. The remainder will be demonstrated by the staff.

It is not intended nor expected that this course will make virologists of those who complete it. Rather it is hoped that familiarity with the techniques and problems involved in virus work will enable the students to give more intelligent assistance and advice in the proper collection, preservation, and shipment of specimens to virus diagnostic laboratories, and in interpretation of the results obtained from them.

OUTLINE OF COURSE:

First Day — General considerations of the characteristics of viruses and virus diseases.
Second Day — Sources of material, collection, preservation, and shipping. Selection of suitable animals for inoculation. Methods and routes of inoculation.
Third Day — Observation of clinical picture in inoculated animals, symptoms, time of sacrifice, autopsy with aseptic techniques, selection of tissue material for passage; virus maintenance techniques.
Fourth Day — Immunologic procedures for identification; neutralization, complement fixation, red cell agglutination, and cross infection techniques.
Fifth Day — Pathologic changes, inclusion bodies, and other aids in virus identification. Recapitulation. Summary and discussion.

CERTIFICATES:

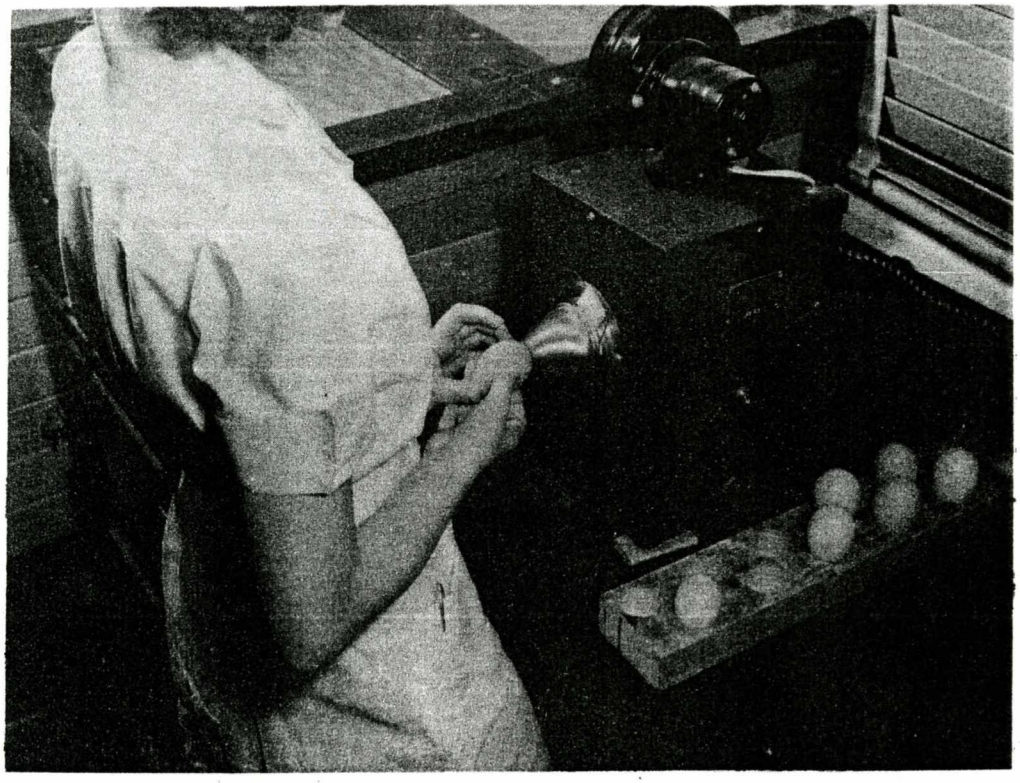
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:

Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Influenza (8.25-9)

DATES:	November 20 — November 24, 1950
LOCATION:	Virus and Rickettsia Laboratories, Laboratory Division, Communicable Disease Center, Federal Dr., Montgomery, Ala.
STAFF:	Morris Schaeffer, M.D., Ph.D. Beatrice Howitt, M.A. Rachel Gorrie, A.B. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Candling eggs to determine location and size of chick embryo.

Laboratory Diagnosis of Influenza (contd.)

TYPE OF TRAINING:
The course will be devoted to the study and practice of laboratory procedures presently available for the detection of influenza virus infections. In addition the students will be guided by lectures, demonstrations, and discussions. This class will be limited to 12 students.

OUTLINE OF COURSE:

The first part will be devoted to demonstration and practice in the technique of red blood cell agglutination test, egg candling, fertile egg inoculation of virus by allantoic and anniotic routes, and the hemagglutination inhibition test.
The second part will cover method of obtaining throat washings and isolation of unknown virus, practice with egg inoculation, agglutination tests, strain determinations, etc.

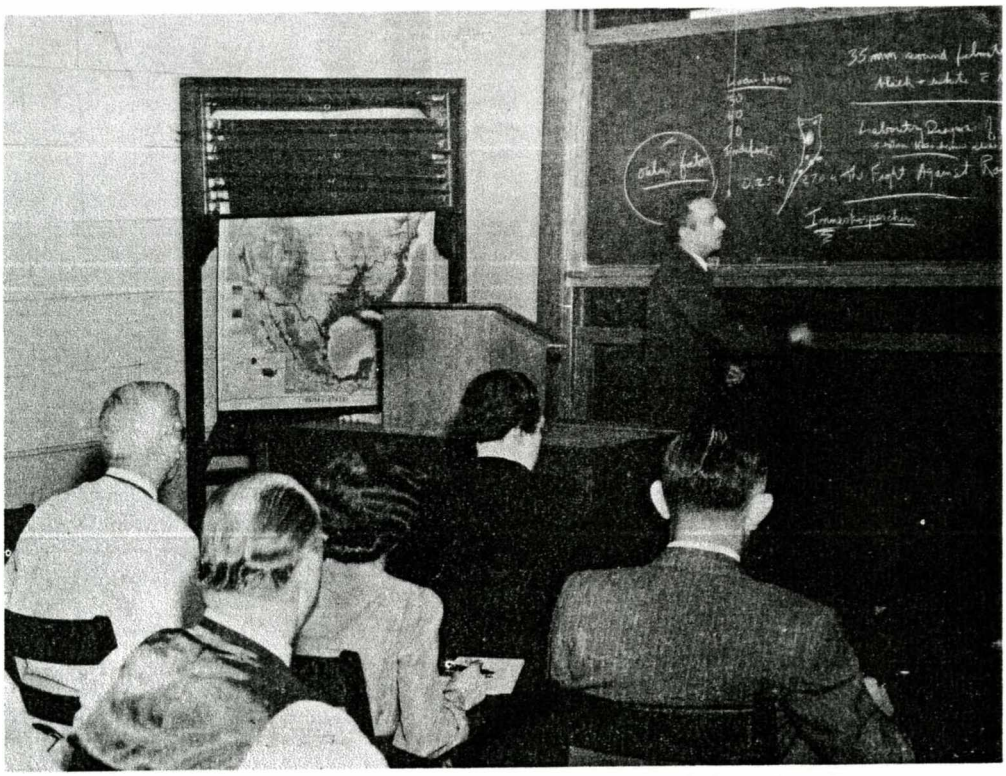
CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Rabies (8.26-1)

OFFERED IN COOPERATION WITH THE
VETERINARY PUBLIC HEALTH DIVISION, COMMUNICABLE DISEASE CENTER

DATES:	May 8 — May 12, 1950
LOCATION:	Laboratory Division, Communicable Disease Center, 291 Peachtree St., N.E., Atlanta, Ga.
STAFF:	Ernest S. Tierkel, V.M.D., M.P.H. Robert E. Kissling, D.V.M. Martha E. Eidson Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Lecture session in rabies course.

Laboratory Diagnosis of Rabies (contd.)

TYPE OF TRAINING:
The course is essentially practical laboratory training, enabling the students to carry out the various procedures themselves to insure proficiency. It is supplemented by lectures and demonstrations.

OUTLINE OF COURSE:

First Day — Discussion, background, and orientation Preparation of stains
Second Day — Techniques for gross brain dissection (dog and other species) Smears and staining
Third Day — Mouse inoculation and symptomatology Mouse brain smears and staining
Fourth Day — Microscopy—the Negri body and differential diagnosis—other inclusion bodies
Fifth Day — Cost and materials Review and unknowns

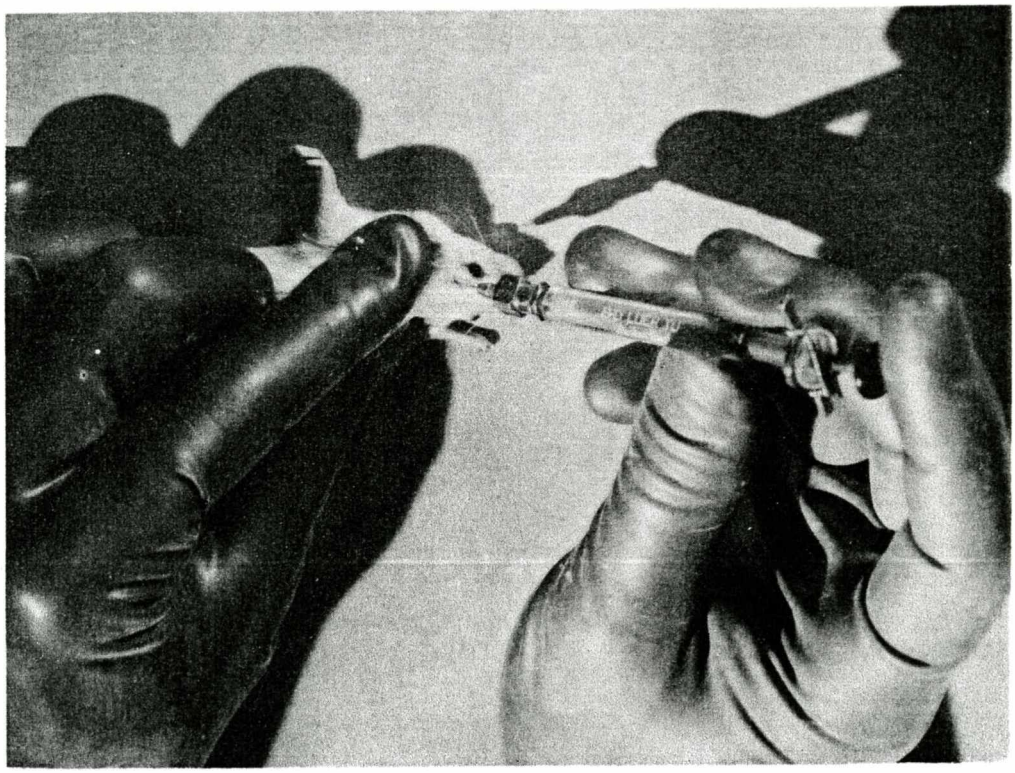
CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:
Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Rabies (8.26-9)

OFFERED IN COOPERATION WITH THE
VETERINARY PUBLIC HEALTH DIVISION, COMMUNICABLE DISEASE CENTER

DATES:	November 27 — December 1, 1950
LOCATION:	Virus and Rickettsia Laboratories, Laboratory Division, Communicable Disease Center, Federal Dr., Montgomery, Ala.
STAFF:	Morris Schaeffer, M.D., Ph.D. Ernest S. Tierkel, V.M.D., M.P.H. Robert E. Kissling, D.V.M. Martha E. Eidson Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Intracerebral mouse inoculation for the diagnosis of rabies.

Laboratory Diagnosis of Rabies (contd.)

TYPE OF TRAINING:
The course is essentially practical laboratory training, enabling the students to carry out the various procedures themselves to insure proficiency. It is supplemented by lectures and demonstrations.

OUTLINE OF COURSE:

First Day — Discussion, background, and orientation Preparation of stains
Second Day — Techniques for gross brain dissection (dog and other species) Smears and staining
Third Day — Mouse inoculation and symptomatology Mouse brain smears and staining
Fourth Day — Microscopy—the Negri body and differential diagnosis—other inclusion bodies
Fifth Day — Review and unknowns

CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:
Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Bacterial Diseases
General Bacteriology, Part 1. (8.40-8)

DATES:	September 11 — September 22, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Martin Frobisher, Jr., Sc.D. Joseph H. Schubert, Ph.D. Elaine L. Updyke, Sc.D. Martha K. Ward, Sc.D. Margaret I. Nickle, M.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.

Serological typing of streptococci

Laboratory Diagnosis of Bacterial Diseases
General Bacteriology, Part 1. (contd.)

TYPE OF TRAINING:
The course is intended to acquaint the student with approved and accepted methods for laboratory diagnosis of important communicable diseases and to develop his proficiency in this work. The course includes lectures, demonstrations, quizzes, seminars, and discussions. In the laboratory, entire procedures are carried through and as many unknowns as possible are worked out, thus giving the student valuable experience.

OUTLINE OF COURSE:

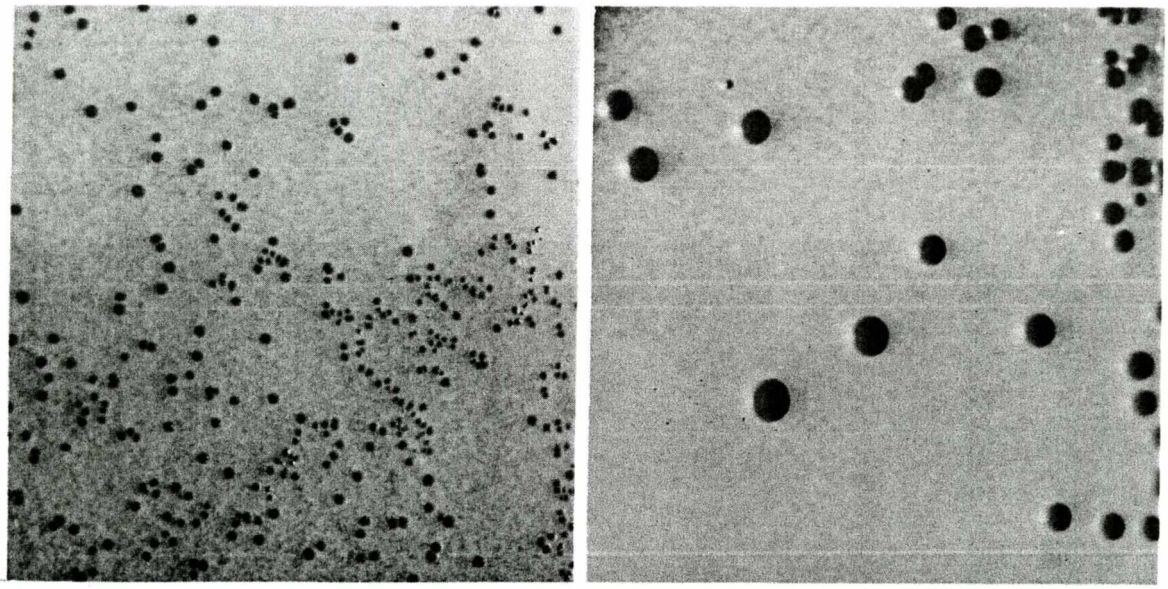
The work begins with cultural and serological studies of streptococci and includes pneumococcus typing which is still a valuable diagnostic aid and should not become a lost art. The main emphasis of this part of the course is upon isolation and identification of blood-type and serological grouping and typing. The liberal use of unknowns is an important part of the work.
Studies of the spirochaetes include a general survey of spirochetal diseases with later concentration on the diagnosis of the leptospiroses and of borreliosis.
Two important groups of organisms, the Mimeae and *Brucella*, are taken up in the last week of the course; the former because of their importance as a source of confusion in many bacteriological diagnostic problems, especially in relation to the *Neisseria* and *Shigella*. The *Brucella* are dealt with from both cultural and serological standpoints and the latest information on each is given in detail.
In addition, several supplementary demonstrations and lectures are given which round out the student's experience.

CERTIFICATES:
A certificate will be awarded for completion of Parts 1 and 2 of this course, provided grades are outstanding.

OTHER INFORMATION:
Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Bacterial Diseases
General Bacteriology, Part 2. (8.41-8)

DATES:	September 25 — October 6, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Martin Frobisher, Jr., Sc.D. Elizabeth I. Parsons, Sc.D. Elizabeth O. King, M.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Comparison of minimus with mitis type colonies of *Corynebacterium diphtheriae* (5x).

Laboratory Diagnosis of Bacterial Diseases
General Bacteriology, Part 2. (contd.)

TYPE OF TRAINING:

As in Part 1 of this course, the lecture and conference room is much used for formal and informal talks, discussions, quizzes, etc. In the laboratory the newest and best available methods for the indicated purposes are demonstrated, and the student has ample opportunity to try out the procedures on practice specimens and unknowns so that he should gain some familiarity with them. As a new and unique teaching experiment, several appropriate unknown organisms from pathological specimens are worked out by the instructor, who reports results to the class and consults and discusses with them the various steps in the work as he carries it on.

OUTLINE OF COURSE:

The first part of the course is devoted mainly to demonstrations of methods for isolation and identification of *C. diphtheriae*. The isolations are followed up by type and virulence determinations. The student has ample opportunity to examine "unknown" smears and gain useful experience with morphological diagnosis of diphtheria.
Later in the course the genus *Neisseria* is studied, with special reference to neisserian infection of the genitourinary tract, including isolation and identification of the infecting agents.
The problems of food intoxication are also taken up during this course, with demonstrations and exercises in anaerobic methods, isolation and identification of botulinal toxin, and preparation of staphylococcal toxin.
Incidental lectures on various topics, and demonstrations of procedures of general interest to laboratory workers round out the program.

CERTIFICATES:

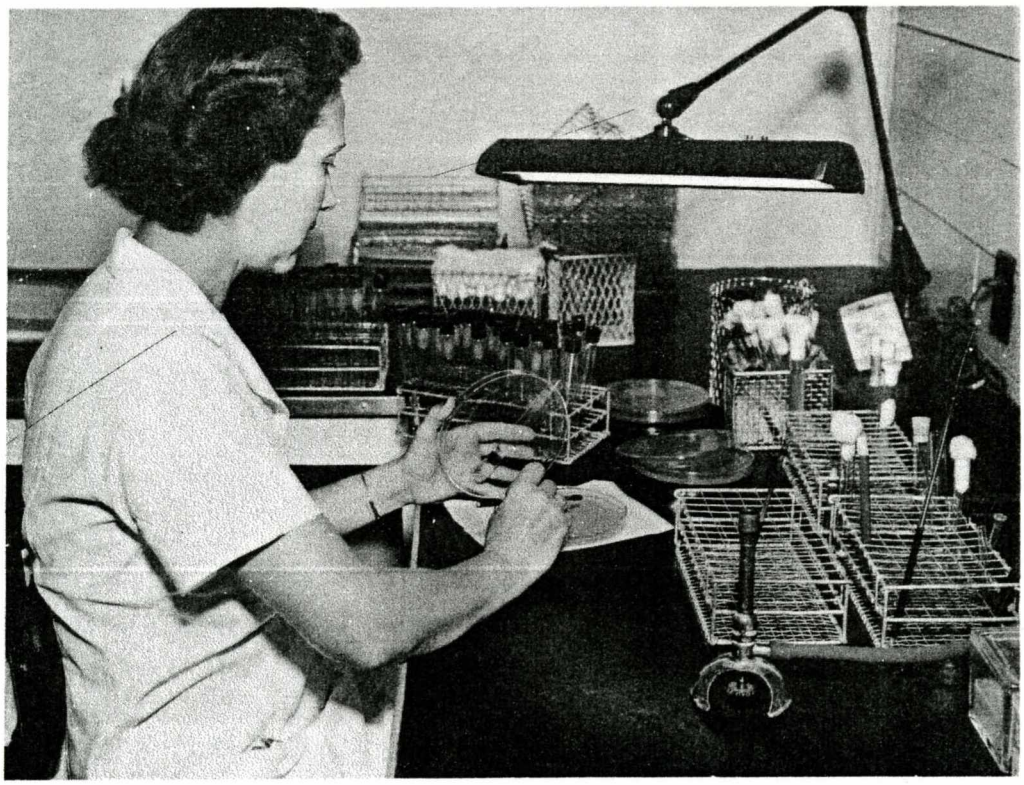
A certificate will be awarded for completion of Parts 1 and 2 of this course, provided grades are outstanding.

OTHER INFORMATION:

Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Enteric Diseases (8.50-8)
Part 1. Introductory Enteric Bacteriology

DATES:	October 9 — October 13, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Philip R. Edwards, Ph.D. William H. Ewing, Ph.D. Mary G. West, M.S. Ann C. Arnold, A.B. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Isolation of enteric bacteria.

Laboratory Diagnosis of Enteric Diseases
Part 1. Introductory Enteric Bacteriology (contd.)

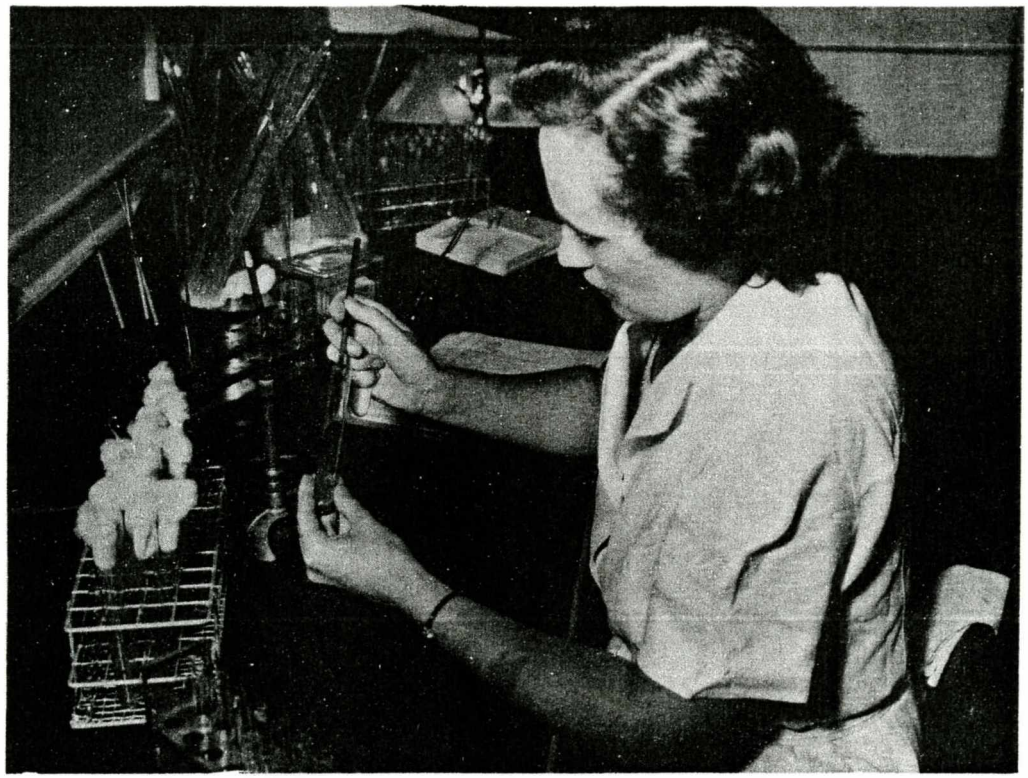
TYPE OF TRAINING:
The course is designed for students who desire instruction in the fundamental aspects of enteric bacteriology. Attention is given to proper methods of collection of specimens, their preservation, and inoculation into differential, selective, and enrichment media. Students inoculate media with known and unknown specimens, make isolations, and maintain and identify the significant bacteria. Various biochemical tests used for delineation of members of the several genera of enteric bacteria are stressed. Serological grouping of the bacteria into their respective genera through the use of polyvalent sera is studied. Specific identification of serologic types is not attempted in this course.

CERTIFICATES:
A certificate is awarded to students making outstanding grades in both Parts 1 and 2 of Enteric Bacteriology.

OTHER INFORMATION:
Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Enteric Diseases (8.51-8)
Part 2. Advanced Enteric Bacteriology

DATES:	October 16 — October 27, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Philip R. Edwards, Ph.D. William H. Ewing, Ph.D. Mary G. West, M.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Preparation of antigens.

Laboratory Diagnosis of Enteric Diseases
Part 2. Advanced Enteric Bacteriology (contd.)

TYPE OF TRAINING:

This course is designed to follow Part 1 of Enteric Bacteriology and is intended primarily for persons who have had considerable laboratory experience in enteric bacteriology and who desire instruction in the details of serologic typing of *Shigella* and *Salmonella*. The 2 weeks are devoted to an intensive study of these problems. Certain paracolon and coliform groups, the serology of which is known, also are considered.

The work includes serologic study of various micro-organisms using unabsorbed and absorbed typing fluids. Methods of preparation of specific sera for antigenic analysis are considered. The variational phenomena which affect serologic typing are stressed.

ELIGIBILITY:

Satisfactory completion of Part 1 of Enteric Bacteriology, or its equivalent in experience.

CERTIFICATES:

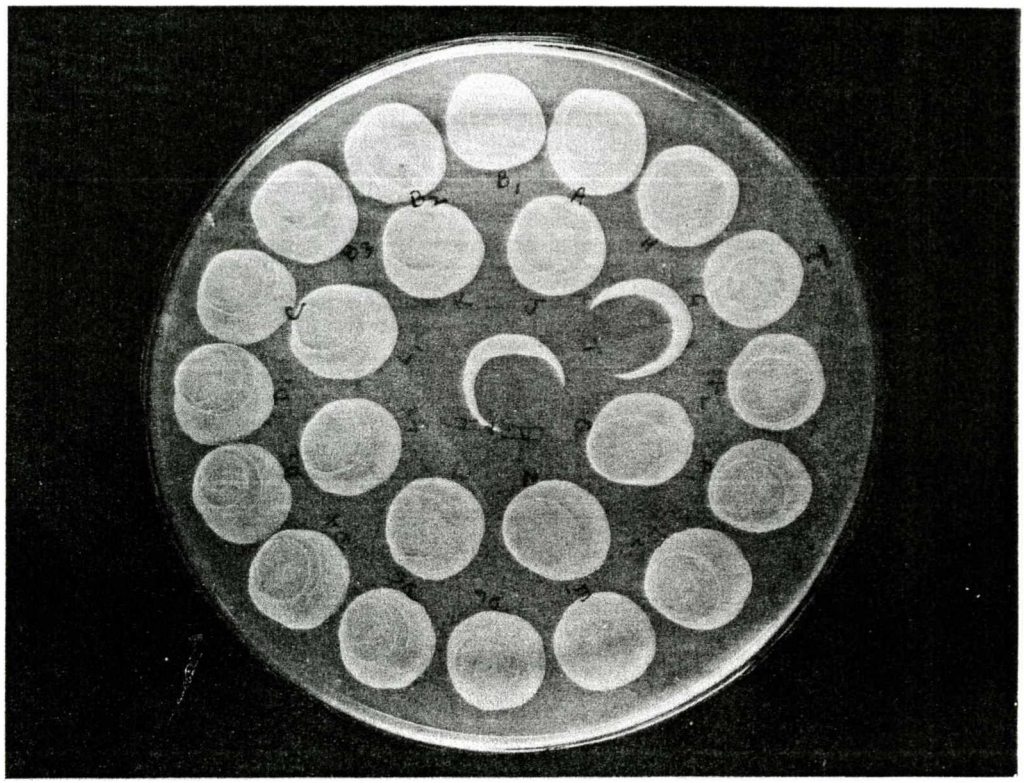
A certificate is awarded to students making outstanding grades in both Parts 1 and 2 of Enteric Bacteriology.

OTHER INFORMATION:

Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Phage Typing of *Salmonella typhosa* (8.52-8)

DATES:	By special arrangement only.
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Philip R. Edwards, Ph.D. Ann C. Arnold, A.B.



Bacteriophage typing of *Salmonella typhosa*.

Phage Typing of *Salmonella typhosa* (contd.)

TYPE OF TRAINING:
Special instruction is offered in the use of specific bacteriophages in the typing of *S. typhosa*. The exercises cover about 1 week and are designed for persons of broad experience in enteric bacteriology who are familiar with the characteristics and handling of *S. typhosa* and who wish to engage in phage typing of that organism.

Instruction in phage typing will be given only by special arrangement.

ELIGIBILITY:
Satisfactory completion of Parts 1 and 2 of Enteric Bacteriology or its equivalent in experience.

CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:
Refer to "General Information on Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Tuberculosis (8.55-8)

OFFERED IN COOPERATION WITH THE TUBERCULOSIS CONTROL DIVISION,
BUREAU OF STATE SERVICES, U. S. PUBLIC HEALTH SERVICE

DATES:	August 14 — August 31, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Charles H. Fish, M.D. Alonzo W. Jones, M.P.H. George C. Klein, B.A. Jerrydean H. Robinson, B.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.

Trainees in the class on diagnosis of tuberculosis examine a dead guinea pig.

Laboratory Diagnosis of Tuberculosis (contd.)

TYPE OF TRAINING:
The course emphasizes practical laboratory training in all phases of tuberculosis bacteriology, including preparation of culture media, microscopy, cultural procedures, diagnostic use of animals, and testing of drug sensitivity. Ample pathologic material is provided to enable each student to develop proficiency in performing the various techniques. The laboratory exercises are supplemented by demonstrations, lectures, discussion periods, and frequent practical and written examinations.

OUTLINE OF COURSE:

Preparation of Culture Media Practice in making currently recommended diagnostic media.
Microscopic Techniques Training in preparation and staining of smears and the interpretation of microscopic findings. Demonstrations of various staining procedures, including fluorescent microscopy. Examination and interpretation of "unknown" smears.
Cultural Techniques Demonstrations and training in various digestion and concentration methods for sputum, gastric washings, and other body fluids with particular emphasis on interpretation of cultural findings. Training in identification of types of organisms by their colony morphology. Includes practice in subculture techniques and the isolation of tubercle bacilli from animal tissues.
Diagnostic Use of Animals Training in techniques of inoculation and autopsy of guinea pigs, rabbits, chickens, and mice. Preparation and standardization of suspensions of tubercle bacilli for animal inoculation. Tuberculin testing of animals.
Sensitivity Testing Training in testing the sensitivity of tubercle bacilli to streptomycin and para-aminosalicylic acid.

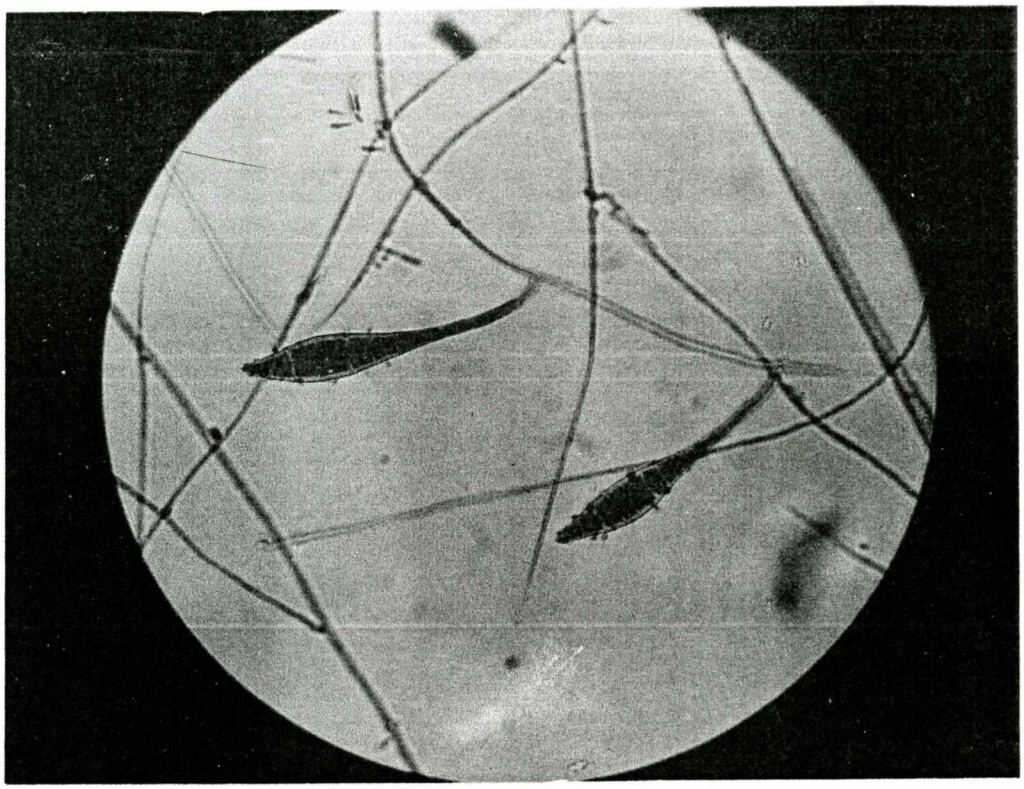
TUBERCULIN TEST:
It is desirable that students be tuberculin positive. Tuberculin negative individuals who come for the training will assume all responsibility of possible conversion to tuberculin positivity.

CERTIFICATES:
A certificate will be awarded for completion of this course, provided the grades are outstanding.

OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Mycotic Diseases (8.60-8)
Part 1. Cutaneous and Subcutaneous Fungi

DATES:	July 24 — August 4, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Libero Ajello, Ph.D. Lucille K. Georg, Ph.D. Morris A. Gordon, Ph.D. Virginia Q. Grant, B.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Microsporum canis macroconidia.

Laboratory Diagnosis of Mycotic Diseases
Part 1. Cutaneous and Subcutaneous Fungi (contd.)

TYPE OF TRAINING:
Students are introduced to the fundamentals of general mycology and acquainted with the position of fungi in the plant kingdom. Study of common saprophytes enables the students to recognize contaminants and to become familiar with techniques used in the study of pathogenic fungi. The fungi causing cutaneous and subcutaneous diseases are studied in tissue and in culture. In lecture, the clinical aspects of these diseases are discussed and illustrated. Students are taught, by lecture and laboratory work, methods of diagnosis including culturing, animal inoculation, biochemical tests and other procedures. Materials supplied to students consist of cultures of the pathogenic fungi, cultures of common saprophytes, histological preparations, fresh clinical material when available, infected laboratory animals for study, laboratory manual and necessary laboratory equipment.

OUTLINE OF COURSE:

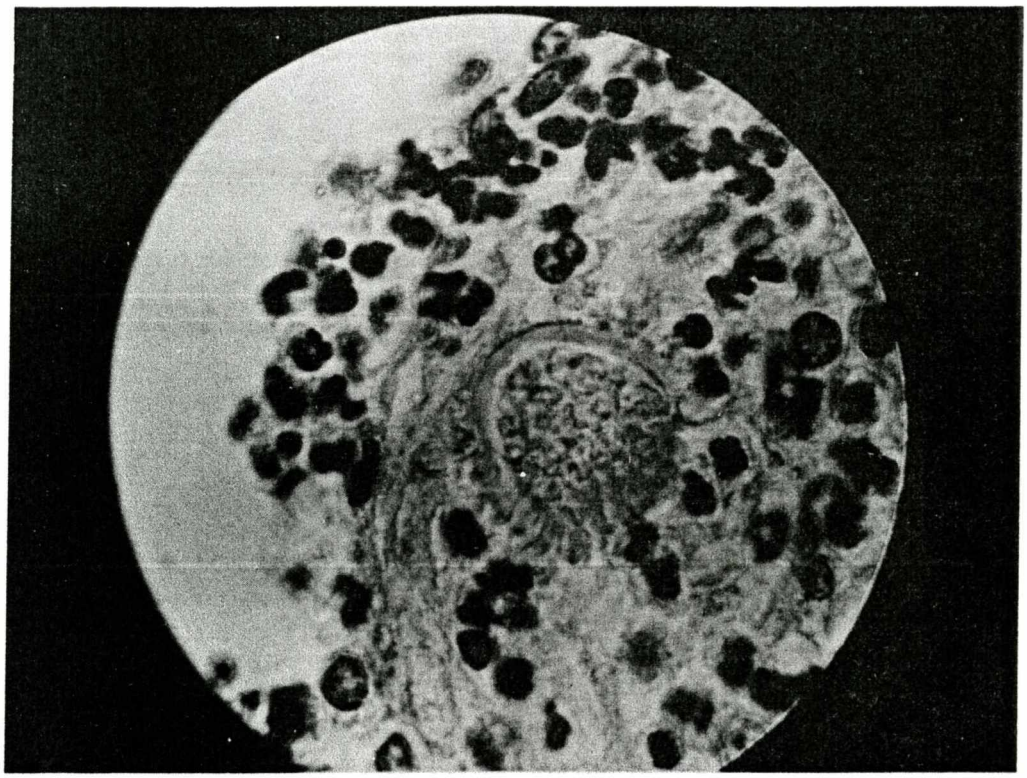
Identification of common saprophytes. *(Aspergillus, Penicillium, Alternaria,* etc.*)*
Identification and culturing of the dermatophytes. *(Trichophyton, Microsporum, Epidermophyton).*
Identification and culturing of the subcutaneous fungi. *(Sporotrichum, Phialophora, Allescheria,* etc.*)*

CERTIFICATES:
A certificate will be awarded only for completion of both Parts 1 and 2 of Laboratory Diagnosis of Mycotic Diseases, provided grades are outstanding.

OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Mycotic Diseases (8.61-8)
Part 2. Systemic Fungi

DATES:	August 7 — August 17, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Libero Ajello, Ph.D. Lucille K. Georg, Ph.D. Morris A. Gordon, Ph.D. Virginia Q. Grant, B.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Tissue phase of *Coccidioides immitis.*

Laboratory Diagnosis of Mycotic Diseases
Part 2. Systemic Fungi (contd.)

TYPE OF TRAINING:
The fungi causing systemic infections in man are studied in tissue and in culture. In addition, the clinical aspects of the systemic mycoses are discussed and illustrated. Methods of diagnosis involving isolation techniques, culturing, animal inoculation, biochemical, and other procedures are taught, used, and demonstrated. Materials supplied to students consist of cultures of the fungi causing systemic infection, histological preparations, fresh clinical material when available, infected laboratory animals for study, laboratory manual, and necessary laboratory equipment.

OUTLINE OF COURSE:

Identification and culturing of the pathogenic fungi causing systemic diseases in man. (*Actinomyces bovis, Blastomyces dermatitidis, Coccidioides immitis,* etc.)
Discussion of the incidence and geographic distribution of the mycoses.
Discussion of serologic procedures in medical mycology and their use.

ELIGIBILITY:
Applicants for Part 2 are required to have completed Part 1 of the Laboratory Diagnosis of Mycotic Diseases or to have its equivalent in training or experience.

CERTIFICATES:
A certificate will be awarded only for completion of both Parts 1 and 2 of Laboratory Diagnosis of Mycotic Diseases, provided grades are outstanding.

OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Serological Diagnosis of Rickettsial Diseases

(8.75-8)

DATES:	January 9 — January 13, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Joseph H. Schubert, Ph.D. Sara Stanford, B.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.

Preparation of serum dilutions.

Serological Diagnosis of Rickettsial Diseases (contd.)

TYPE OF TRAINING:

The course will be devoted to the study and practice of procedures and techniques presently available for the serological diagnosis of rickettsial infections. The Weil-Felix and complement fixation tests will be considered with respect to indications, advantages, techniques, conservation, and titration of reagents, and to the limitations inherent in the serological approach to diagnosis. Students will be given practice and experience in all the procedures involved in performing the tests. Unknown specimens will be used extensively.

CERTIFICATES:

No certificates are awarded in this course. A letter of attendance will be issued.

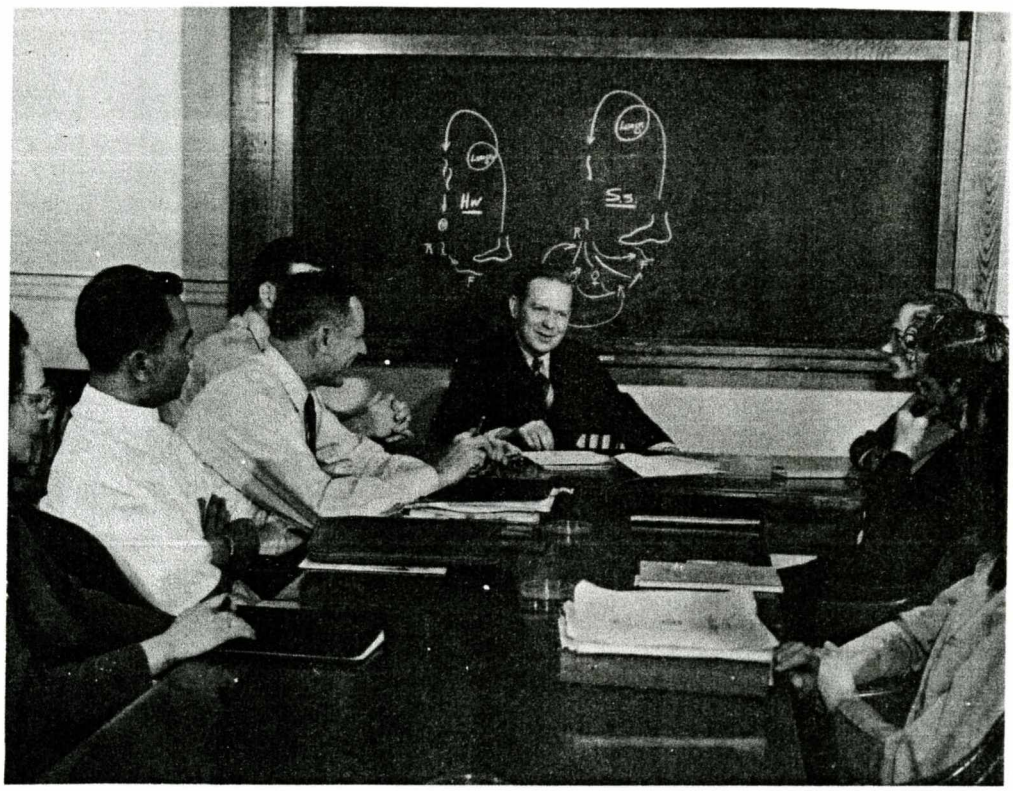
OTHER INFORMATION:

Refer to "General Information on the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Parasitic Diseases (9.33-1)

FOR LABORATORY DIRECTORS, SENIOR LABORATORY STAFF MEMBERS, PHYSICIANS, AND OTHERS OF COMPARABLE PROFESSIONAL STANDING

DATES:	June 12 — June 16, 1950
LOCATION:	Parasitology Laboratories, Laboratory Division, Communicable Disease Center, 291 Peachtree St., N.E., Atlanta, Ga.
STAFF:	Marion M. Brooke, Sc.D. Alan W. Donaldson, Sc.D. Harry D. Pratt, Ph.D. Morris Goldman, M.S. Paul L. Guptill, M.A. Lois Norman, A.B. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Round-table discussion on interpretation of diagnostic procedures.

Laboratory Diagnosis of Parasitic Diseases (Directors) (contd.)

TYPE OF TRAINING:

A course similar to the courses in Laboratory Diagnosis of Parasitic Diseases, Parts 1 and 2 (8.00-1) and (8.01-1), but concentrated and particularly adapted for laboratory directors, senior laboratory staff members, physicians and others of comparable professional standing. The primary purpose is to familiarize the students with the available diagnostic techniques and thus enable them to better evaluate the laboratory results. Only individuals indicated above should apply for this course. Laboratory personnel actually performing examinations or determining final identification should apply for the longer technical courses in which development of proficiency is possible.

OUTLINE OF COURSE:

Discussion of Parasitic Diseases of Major Importance
Demonstration of Procedures and Diagnostic Stages of Organisms
Evaluation of Available Parasitological Techniques

CERTIFICATES:

No certificates are awarded in this course. A letter of attendance will be issued.

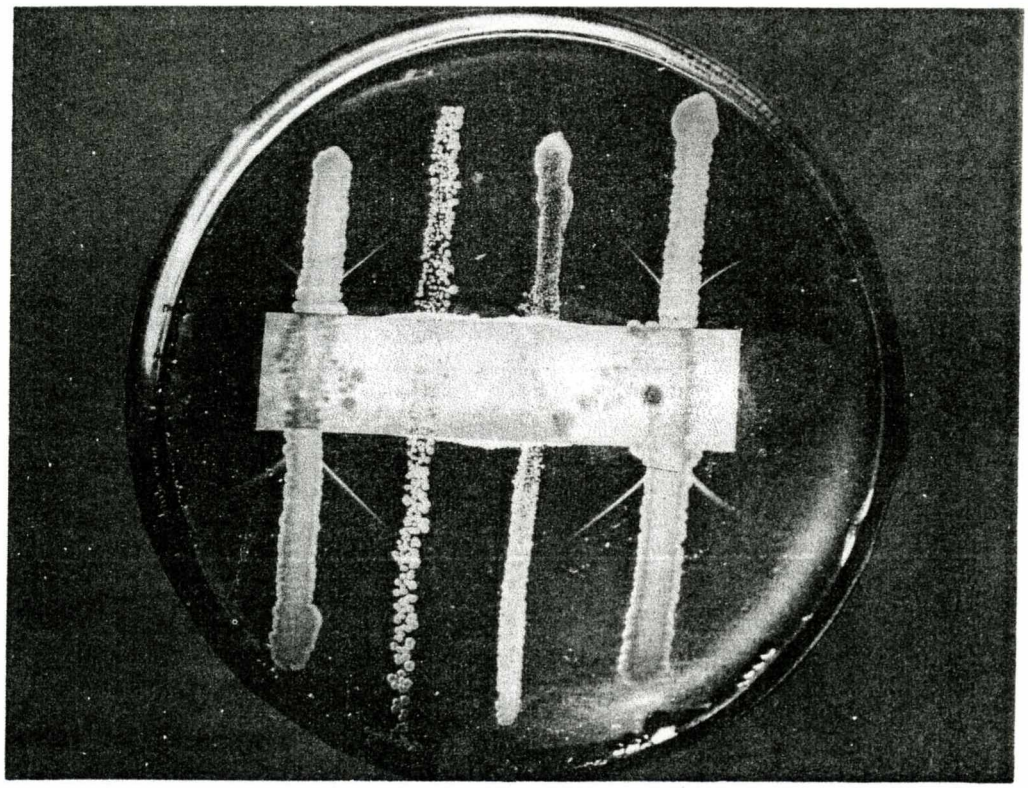
OTHER INFORMATION:

Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Bacterial Diseases (9.34-8)

FOR LABORATORY DIRECTORS, SENIOR LABORATORY STAFF MEMBERS, PHYSICIANS, AND OTHERS OF COMPARABLE PROFESSIONAL STANDING

DATES:	May 22 — May 26, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Martin Frobisher, Jr., Sc.D. Philip R. Edwards, Ph.D. William H. Ewing, Ph.D. Elizabeth I. Parsons, Sc.D. Joseph H. Schubert, Ph.D. Elaine L. Updyke, Sc.D. Martha K. Ward, Sc.D. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



The *in vitro* test for virulence of *Corynebacterium diphtheriae*.

Laboratory Diagnosis of Bacterial Diseases (Directors) (contd.)

TYPE OF TRAINING:
The course is similar in content to the courses in Laboratory Diagnosis of Bacterial Diseases (8.40-8 and 8.41-8), Laboratory Diagnosis of Enteric Diseases (8.50-8 and 8.51-8), and Serological Diagnosis of Rickettsial Diseases (8.75-8), but concentrated and particularly adapted for laboratory directors, senior laboratory staff members, physicians, and others of comparable professional standing. The primary purpose is to familiarize the students with the available diagnostic techniques and thus enable them to better evaluate the laboratory results. Only individuals indicated above should apply for this course. Laboratory personnel actually performing examinations should apply for the longer technical courses in which development of proficiency is possible.

OUTLINE OF COURSE:

Streptococcal and related infections
The spirochetoses
Diphtheria
The enteric infections
Organization and Administration of the Public Health Laboratory
Food poisoning
Neisserian infections
Brucellosis
Rickettsial serology

CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

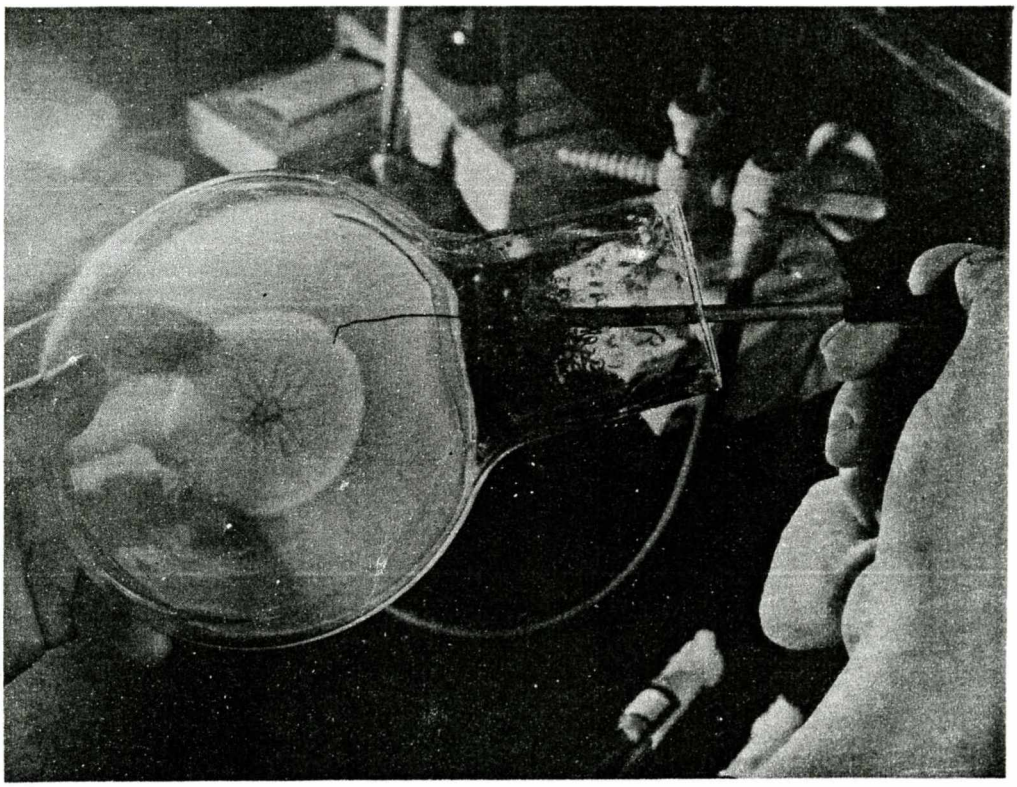
OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Mycotic Diseases

(9.35-8)

FOR LABORATORY DIRECTORS, SENIOR LABORATORY STAFF MEMBERS, PHYSICIANS, AND OTHERS OF COMPARABLE PROFESSIONAL STANDING

DATES:	May 29 — June 2, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Libero Ajello, Ph.D. Lucille K. Georg, Ph.D. Morris A. Gordon, Ph.D. Virginia Q. Grant, B.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



Examination of a giant colony of a fungus in the diagnosis of mycotic infection.

Laboratory Diagnosis of Mycotic Diseases (Directors) (contd.)

TYPE OF TRAINING:

The course is similar in content to the courses in Laboratory Diagnosis of Mycotic Diseases (8.60-8 and 8.61-8) but concentrated and particularly adapted for laboratory directors, senior laboratory staff members, physicians, and others of comparable professional standing. The primary purpose is to develop among these individuals a greater appreciation of the need for medical mycologic service in their institutions and to acquaint them with the latest developments in this rapidly expanding field of medicine. Only individuals indicated above should apply for this course. Laboratory personnel actually performing examinations should apply for the longer technical course in which development of proficiency is possible.

OUTLINE OF COURSE:

Techniques used in the study of pathogenic fungi (diagnostic procedures, culture media, etc.)
Identification and culturing of the Dermatophytes. *Trichophyton, Microsporum, Epidermophyton.*
Identification and culturing of the subcutaneous fungi. *Phialophora, Sporotrichum,* etc.
Identification and culturing of the systemic fungi. *Coccidioides, Histoplasma, Blastomyces,* etc.

CERTIFICATES:

No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:

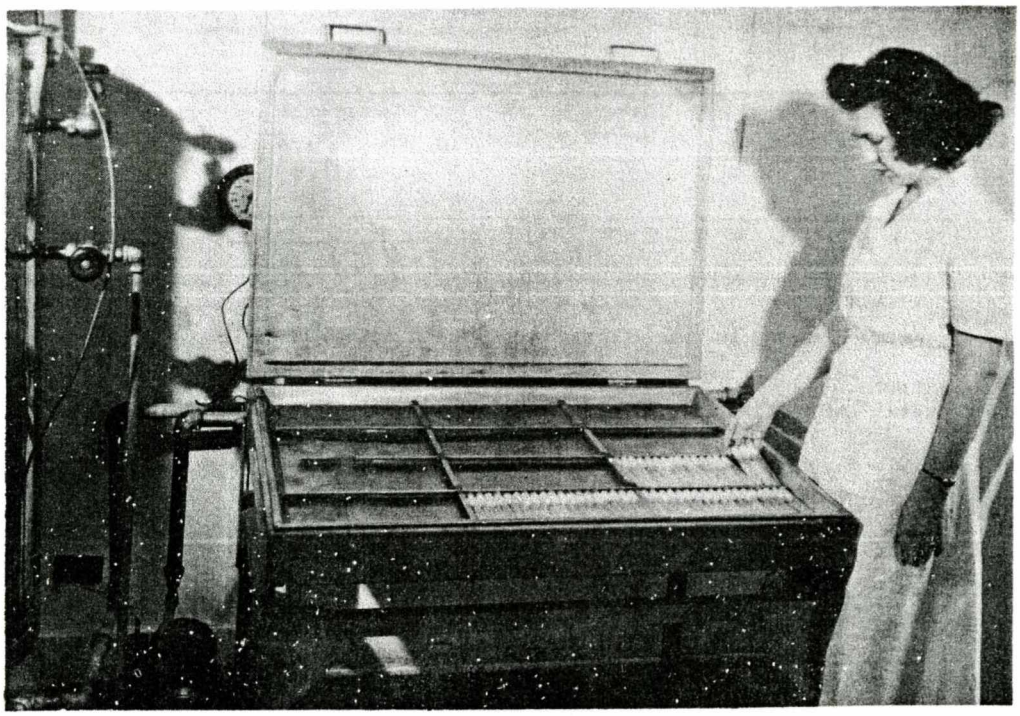
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.

Laboratory Diagnosis of Tuberculosis (9.36-8)

FOR LABORATORY DIRECTORS, SENIOR LABORATORY STAFF MEMBERS, PHYSICIANS, AND OTHERS OF COMPARABLE PROFESSIONAL STANDING

OFFERED IN COOPERATION WITH THE TUBERCULOSIS CONTROL DIVISION, BUREAU OF STATE SERVICES, U. S. PUBLIC HEALTH SERVICE

DATES:	June 5 — June 9, 1950
LOCATION:	Bacteriology Laboratories, Laboratory Division, Communicable Disease Center, Chamblee, Ga.
STAFF:	Charles H. Fish, M.D. Alonzo W. Jones, M.P.H. George C. Klein, B.A. Jerrydean H. Robinson, B.S. Guest lecturers, consultants, and staff members of the Communicable Disease Center.



A uniform-temperature inspissator for coagulation of egg media for cultivation of tubercle bacilli.

Laboratory Diagnosis of Tuberculosis (Directors) (contd.)

TYPE OF TRAINING:
The course is similar in content to the 3-week course, Laboratory Diagnosis of Tuberculosis (8.55-8), but concentrated and particularly adapted for laboratory directors, senior laboratory staff members, physicians, and others of comparable professional standing. The primary purpose is to familiarize the students with the available diagnostic techniques and thus enable them to better evaluate the laboratory results. Only individuals indicated above should apply for this course. Laboratory personnel actually performing examinations should apply for the longer technical courses in which development of proficiency is possible.

OUTLINE OF COURSE:

Microscopic techniques and interpretation of findings
Preparation of culture media Cultural techniques
Culture diagnosis Diagnostic use of animals
Pathogenesis of tuberculosis BCG vaccination
Sensitivity testing Clinical tuberculosis

CERTIFICATES:
No certificates are awarded in this course. A letter of attendance will be issued.

OTHER INFORMATION:
Refer to "General Information for the Group of Courses in Laboratory Diagnosis" on page 11.