

MEDICAL MISSION TO GREECE AND ITALY

APRIL 15 — JUNE 7, 1948



UNITARIAN SERVICE COMMITTEE, Inc.



Group picture of the Mission: from left to right, front row: Miss Fuller, Drs. Jones, White, Van Dyke, Howes; back row: Drs. Sognnaes, Pappenhjerner, Dripps, De Wilde, Pratt, Elvidge and Mr. Cairns.

Abridged Report

Submitted by PAUL D. WHITE, M.D.,

Clinical Professor of Medicine,

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Chairman of the U S C Medical Mission

to Greece and Italy

Edited by Eunice Stunkard

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Medical Projects

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DR. WHITE receives honorary degree at Salonika.



An audience at Salonika.

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General Information

THE Medical Mission to Greece and Italy was organized by the Unitarian Service Committee to do the same kind of work that had been done in Czechoslovakia and Austria in the two previous summers. Plans were made for a more extensive stay in Greece than in Italy.

The composition of the Mission was as follows:

Chairman: DR. PAUL D. WHITE

Vice-Chairman:

DR. CHESTER M. JONES

TEACHING STAFF:

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Associate Professor of Dental Medicine, Harvard School of Dental Medicine, Boston, Mass.

DR. HERMAN DE WILDE

Associate in Clinical Dentistry, Harvard School of Dental Medicine, Boston, Mass.

Executive Assistant to the Chairman — The Reverend Fred I Cairns

Secretary — Miss Shirley Fuller

Preliminary arrangements for the Mission were made with the U.S. Department of State, Greek and Italian diplomatic representatives in the United States, U.S. diplomatic representatives in Greece and Italy and with the American Mission for Aid to Greece prior to the departure of any of the Mission personnel.

The Executive Assistant and the Secretary arrived in Athens on March 31st to make preliminary arrangements and to work with the preparatory committees composed of Greek professors in both Athens and Salonika. On April 10th they were joined by Dr. Paul White, Chairman of the Mission. Nine doctors arrived on April 15th and Dr. Jones on May 1st. Dr. Gerard left the Mission in Salonika on May 11th to return home and the rest left Athens for Rome on May 19th.

The stay in Greece was divided into four periods: 1) First Athens Phase, beginning with official re-

ceptions on April 17th and ending with lectures, hospital visits and conferences on May 1st and 2nd; 2) Mt. Athos visit, May 3rd to 6th; 3) Salonika program, May 6th to 16th; and 4) Second Athens Phase, May 16th to 19th inclusive. During the last period the Mission was received by the King and Queen who evinced considerable interest in the work of the American doctors.

Interpolated in the first Athens phase was a day's trip to Megara for two members of the Mission on April 14th to see the malarial DDT spraying by plane, to Corinth for all the doctors on April 29th to see the excavations and the local hospital, to Crete for Drs. Gerard and Pappenheimer for two days from May 1st to 3rd to visit the local physicians and medical society, and to Thasos for Dr. Sognnaes for a day or two at the end of the Salonika program to study the teeth of the children there.

The daily schedules of the doctors included as a rule one or two lectures or other teaching activity, such as a panel discussion; visits to hospitals and ward rounds; informal discussions with Greek doctors; daily Mission staff conferences; and interviews with private patients, who were seen by Mission doctors with the consent of their own physicians. In the case of the surgeons, a number of operations were performed demonstrating new surgical techniques, the use of different types of anesthesia, and, especially, the team work practised between surgeon and anesthetist.

To facilitate the work of the Mission in both Athens and Salonika each American doctor was provided with a Greek counterpart, who was a specialist in the same

field, and a student guide who spoke English and served as a personal interpreter.

While in Greece the Mission worked closely with the American Mission for Aid to Greece. Dr. O. F. Hedley, Director of the Public Health Department of AMAG, and his staff were at all times most cooperative, generous and enthusiastic in their attitude toward the Medical Mission. Special mention should be made of Dr. Paul Lindquist of AMAG, who was assigned to the Mission in Athens, and Dr. L. L. Scranton, in charge of the AMAG office in Salonika, who proved to be most helpful to the administrative part of the Mission during its stay in Greece.

The Italian phase of the Mission's work was much briefer than the Greek phase, and neither the arrangements nor the timing could be organized and carried out as well as might have been possible had there been more time to plan for this phase.

Before the Mission left the United States, several Italian professors, including Dr. Puddu of Rome, Dr. Posteli of Bologna, Dr. Favilli of Modena, Dr. Dogliotti of Turin and others were contacted, and preparatory committees made up of Italian professors were established in various universities that were to be visited by the Mission, just as had been done in Athens and Salonika. These committees undertook the greater part of the work of arranging the program of lectures and other activities of the Mission. The Unitarian Service Committee office in New York also was in contact with Professor Morey, Cultural Attache of the American Embassy in Rome. He and his staff were most

cooperative in helping to make arrangements and in facilitating the work of the Mission in Italy.

The Mission arrived in Rome by plane from Athens on May 20th. After an initial reception, the members of the Mission spent two days visiting clinics and laboratories with their Italian counterparts, and in the case of the surgeons, attending some of the exercises of the International Surgical Congress then in session in Rome.

On May 22nd the Mission left for Naples, where they visited the Naples Marine Laboratory, the Policlinico and attended the opening of the Hydrological Congress being held there. Several doctors also visited the extensive tuberculosis hospital at Camaldona, on the hills above Naples. After excursions to Pompeii and Capri, the Mission re-

turned to Rome on May 24th and spent the next three days giving lectures, going on ward rounds and having conferences. An audience with the Pope was granted the Mission during this part of their stay in Rome.

On May 28th the Mission went north in three groups: Drs. Jones, Pappenheimer and van Dyke to Florence; Drs. Pratt and De Wilde and Mr. Cairns to Milan; Drs. Howes, Elvidge, Dripps, White and Miss Fuller to a surgical convention in Turin. The group gathered in Milan on May 30th and then on June 1st all but Dr. Sognnaes, who had left for Norway on May 31st, arrived in Bologna for two busy days of lectures and clinics. The program was completed by two days of lectures and conferences in Florence on June 4th and 5th.

Summaries of Reports of the Teaching Staff

GREEK PHASE

DR. PAUL D. WHITE, Clinical Professor of Medicine, Harvard Medical School, Boston, Mass.

There is a close resemblance between the medical schools at Athens and Salonika and various other major medical schools in Europe in three particulars, although the difficulties are probably somewhat greater in Greece than in most other countries on the continent, in large part because of the greater disruption of life there during the war and of the guerilla warfare that has been in progress since the war. These three particulars consist of: 1) too many students; 2) too few and too poorly paid able teachers, and 3) serious neglect of the pre-

clinical sciences. Under political pressure between five and ten times too many medical students crowd the inadequate buildings to overflowing, especially in Athens. So far as I could tell, there were no full time teachers in either medical school, and yet, such are absolutely essential in all fields, especially in the preclinical sciences which should be much more vigorously supported both morally and physically than has ever been the custom.

One other administrative difficulty in both medical schools and, in fact, elsewhere in Europe arises

from the old custom of appointing a new dean every year.

The hospitals which I visited in Greece varied considerably in their efficiency and equipment which usually went together. All were quite uniformly overcrowded. However, it may be said that under the present difficult circumstances, the hospital staffs were doing a satisfactory job. The hospitals that seemed to be having the hardest time were the large public hospitals in which were situated the university teaching clinics, such as the Laikon Nosokomeion, while the private hospitals, like the Evangelismos, and the semi-private, such as the Red Cross, were much better equipped and often more fully staffed.

One other gross defect in the clinical teaching was the tremendous overcrowding of medical students in the wards, making it impossible to give anything like adequate instruction in physical diagnosis or medical practice.

The Pasteur Institute was found to be in a very sad state and should either be properly supplied or abandoned altogether.

We saw one small hospital in Corinth which, although inadequately equipped, was clean and apparently doing a good job. On the other hand, we visited miserable little dispensaries and small wards in the monasteries at Mount Athos, where only the most primitive care was possible.

Finally, perhaps the greatest lack of all in the hospitals of Greece and in practice, otherwise, is the almost total lack of well-trained nurses.

The health of the Greek people was adversely affected in several important respects from that with

which I am acquainted in New England, but otherwise, the diseases are much the same. Heart disease seems to be about as common as it is with us, but, in contrast, is overshadowed by other troubles. Rheumatic and coronary types of heart disease are preponderant; hypertension, though fairly common, may not be so frequent as with us. Adequate statistics along this line are lacking. One is impressed by the very great amount of tuberculosis of all kinds, pulmonary, bone and meningeal included, for which there is very inadequate bed space, also by the frequency of reports of diphtheria, and especially by the common finding of echinococcus cysts, for which much unnecessary spectacular surgery is done for a readily preventable disease. Fortunately, two great scourges of the past, which I encountered in severe form on a previous medical mission to Greece in 1919, namely malaria and exanthematic typhus, have been almost wiped out everywhere in Greece with the help of DDT. Malnutrition we saw but little of, perhaps because we did not get into the small villages in the back country where it was said that there was a good deal. With the invaluable aid of AMAG, food has become more and more adequate throughout most of Greece.

War wounds, old and new, were common, especially wounds to the face, eyes, hands and feet from landmines planted on many roads by the guerillas.

Finally, I would express my grateful appreciation to all who helped to make this Mission a success — the Greek doctors, students, and laymen themselves, the American Mission for Aid to Greece, the

American Embassy, my colleagues of the Medical Mission, the Unitarian Service Committee at home,

and the American people who have aided in the work by word and deed.

DR. CHESTER M. JONES, Clinical Professor of Medicine, Harvard Medical School, Boston, Mass.

The medical situation in Greece was colored by various developments in Greek history and tradition. This applied not only to the critical situation existing in the country at the time of our visit, but also, to a marked extent, I believe, to previous political, social and economic factors dating back to the beginning of the present Greek nation and its varied course under kings, republics and dictators since that time. Economically poor, politically unstable, and rarely organized from the point of view of efficient government, Greece has lacked opportunity to establish sound medical traditions such as have obtained in places like Vienna and other continental centers, where a greater degree of stability over a longer period of time made it possible to establish great academic customs and advantages.

The University of Athens has been in existence only since 1837, and the medical school for a much shorter period of time. The medical school at Salonika was established during the German occupation and, therefore, is an entirely new and still not fully organized school. It has not yet established its own medical traditions, and it is possible that this lack of dependence on its own past may represent a potential opportunity for the future if facilities can be provided. Since both institutions are government bodies, university appointments become at times political posts, and in

Athens in the past there have been numerous occasions when changes in government have resulted in the ousting of certain faculty members who may have been valuable men, to be replaced by others whose political affiliations were somewhat different. This situation, however, is not limited to Greece.

The situation in the last few years since the Italian attack on Greece from Albanian territory has been disastrous from the point of view of normal academic function, particularly so because of the lack of adequate facilities or opportunity for the training of younger men in the fundamental details of medical and surgical practice. In addition, the faculties at both Athens and Salonika are concerned about the immediate future, and such a state of mind is not conducive to forward-thinking. The faculties are also involved in the monetary inflation, which makes it almost impossible for men in the preclinical sciences to gain an adequate livelihood. This has resulted in many instances in which individuals have had to do outside work of a non-medical nature in order to support themselves and their families, or have been obliged to practise medicine in place of confining all their attention to their scientific work. The clinical professors are able, by virtue of their private practice, to maintain themselves in a much better fashion, and for the most part, are financially stable.

In Greece as in most continental clinics, the professor is not only the head of a department, but dominates it to such an extent that there is little opportunity for younger men to find free expression of their ideas and ambitions. Both because of this rather dominating position and because of the number of students in the schools of medicine, individual students have little or no contact with the best trained men, except at long range via the lecture route.

As far as the student body is concerned, the attitude of the faculty is essentially one of professorial aloofness, although there are certain individual exceptions among the faculty. In Salonika some of the professors and their wives were interested in trying to improve the lot of the students to the extent of getting them some common rooms where they could assemble, eat together and discuss various matters. Active discussion of fundamental subjects between students and faculty is not encouraged, and this applies equally to open discussion and disagreements between various departments. Our panel discussions, which brought out a good many arguments and disagreements, were astonishing events as far as student and faculty audiences were concerned, there being nothing comparable in Greek teaching methods. They were extremely surprised to hear such open and frequently heated disagreements without anyone's losing face.

In none of the various departments was there a really satisfactory situation as regards physical equipment, books, laboratory facilities, space and research facilities. In Salonika this was even more marked

than in Athens, much more space still being needed for the actual requirements of the medical school. In the case of one of the two professors of medicine, for example, there were actually no hospital wards where he could teach students.

Not only were the two schools lacking in physical equipment, but they were overcrowded as well. Although the total number of students was not actually known, there was a registered total of somewhere between 4,000 and 6,000 medical students in the two schools, which at best were equipped to take care of not more than 750 to 1,000. There was no adequate opportunity for more than a very few of the students to get personal bedside training in handling patients. Elimination of the tremendous overload of students becomes at once a political issue, and it is only at the top political level that proper influences could be brought to bear to correct this situation.

The medical school at Athens, as well as that at Salonika, has received meager rather than generous support. This situation is intensified at the present time because of the necessity of devoting government funds to the exigencies of the present political situation. There is practically no financial help at all to universities from the funds contributed to Greece by the United States.

One fact should not be overlooked in discussing the faculties of the two medical schools, namely, that nepotism is very obvious. Personal, family, social and political influences undoubtedly play too important a role in the staffing of the faculty, and this, I think, is an im-

portant defect because it penalizes to a very unfortunate degree certain individuals who have no adequate connections.

Library facilities were far from being adequate. There was a good faculty library in Athens and another in Salonika, although there were obvious omissions in periodical literature because of the war and lack of funds for subscribing to foreign journals. For the use of the medical students, however, the number of available reference books, to say nothing of current periodicals, was woefully lacking.

The administration of the schools and for that matter, of the hospitals as well, is poorly organized. There seems to be no adequate administrative board or governing board at either university, such as can be found in any of our medical schools. Annual rotation of the dean's office permits of no well organized policy-making body headed by a responsible person, and is a source of weakness to the Greek schools, as it is to the other continental schools that have the same system.

The preclinical sciences are very poorly taught and very poorly considered from the point of view of their importance in both Greek medical schools. An intensive study of the physiological processes underlying disease does not receive prime consideration in medical school teaching. The preclinical men have inadequately staffed and budgeted departments, and do not command the attention or respect that they should receive from their clinical colleagues. If a few men of the caliber and scientific ability of Professor Ioakimoglou, for example, could be given the opportunity

to reorganize the departments and occupy a rightful place in the framework of the medical school, I believe that the situation could be tremendously improved, but this demands money, education, and a break from many of the old traditions.

With respect to the medical school at Salonika, which needs funds badly, I think that energetic attempts should be made to support it. It would be a very valuable thing, not only for northern Greece, but also for Greek medicine as a whole, to have two competing schools. Because the Salonika school is only a few years old, with attention to careful selection of personnel and adequate although minimal financial support, it might develop its own traditions and its own policies with very real benefit to the entire situation in Greece.

With regard to medical teaching, one further comment may be proper. Years of fighting in the Balkans, culminating in the catastrophic results of the German occupation and subsequent complete dislocation of normal economy of the state because of guerilla warfare, has resulted in a good deal of fatalism and apathy toward human suffering and the importance of human life. This is certainly not limited to Greece. It is apparent, I think, as one goes further and further east from Western Europe. This was definitely reflected in the attitude of the doctors that we met in Greece. There is no doubt that they were strongly attached to their families, to their friends and to some of their private patients. It certainly can be said that they carried out many of the splendid traditions of medicine in the care of in-

dividual patients. The fact remains, however, that even some of the outstanding men were completely apathetic as regards the lot of the individual in ordinary circumstances. This attitude, in turn, must be reflected in the teaching and training of younger doctors.

Hospital facilities varied tremendously. In general, it can be said that they were overcrowded and lacked many essential supplies. The overcrowding was due to a variety of causes. There were probably 600,000 refugees in Athens and Salonika. In addition to undernutrition, the effects of crowding and lack of sanitation were operative, and to these were added the civilian casualties of guerrilla warfare.

The lack of effective sanitary measures was evident by the large rabies clinic in Salonika and the numerous cases of echinococcus disease. Tuberculosis was rampant and posed a continuous threat to large numbers of people.

In Athens hospitals such as the Evangelismos and the Red Cross were better equipped for diagnosis and treatment than the university hospital. In Salonika many of the hospitals were almost primitive in fundamental facilities, and laboratory equipment was limited to the most simple materials and instruments, with few exceptions. Diagnosis in private practice depended on the clinical skill and experience of the practitioners rather than on good laboratory procedure.

Psychotherapy was marked by its absence. Personnel trained in dietetics and physiotherapy were rare, although in Athens some careful nutritional studies had been carried out. Obviously intensive dietary

therapy was not to be expected on account of serious food shortages, but an understanding of modern methods in handling nutritional problems was almost universally lacking. Preoperative and postoperative care, as practised in American clinics, was unknown. Nursing training was not at all standardized, and adequate nursing was not available, because of the lack of personnel and proper training programs. Many essential medicines were unavailable or could be obtained only in limited amounts either from regular sources or the black market. Many medicines, however, were used without real knowledge of their action, and no medicine was administered by mouth if it was possible to give it by injection. Hospital records, for the most part, were poor, and follow-up equally so. This is due in part to the present lack of secretarial and technical help, and in part to a lack of critical, high-standard training of physicians.

I would like to comment also on many of the excellent features of Greek medicine that we were able to observe. There can be no doubt that there are many individual physicians who are good clinicians, particularly as diagnosticians. These men, as a rule, have received an important part of their training in Paris, Berlin or other European centers, and are familiar with the diseases endemic in Greece. As technicians, many of the individual surgeons are extraordinarily clever. Some of the gastric surgery in Athens was as good as anywhere in this country, and might possibly have been better than that seen in many places in the United States. Their surgical skill was limited by

two factors: a lack of newer methods of anesthesia, which prevented them from carrying out certain forms of surgery, such as thoracic surgery, and a lack of profound knowledge of physiology and biochemistry that might direct their thinking.

Many of the physicians we encountered were fully aware of the necessity for better control of sanitation and nutritional requirements and the control of infectious disease. With outside help, including the widespread use of DDT, they have made a most remarkable attack on malaria, one of the major medical problems in Greece. According to fairly reliable statistics, they have cut down the census of malaria cases from a possible level of around 2,000,000 to one of only a few thousand. The tremendous incidence of tuberculosis is not a reflection upon the medical schools or the attitude of the profession, but rather is due to social and economic factors at present beyond their control. Leprosy is recognized and is understood clinically. How-

ever, the segregation and treatment employed in the leprosarium in Athens may be open to some criticism. Echinococcus disease is well understood, as is Kala-azar and the dysenteries of various types.

The underlying causes of the present condition of Greek medicine are obvious: chaotic postwar conditions, dislocation of academic and governmental services, monetary inflation, lack of supplies, lack of high standard academic traditions, uncertainty, fatigue and apathy. Some brilliant, well trained individuals stand out clearly, but progress in the immediate future cannot be obtained without outside aid, material and otherwise, and without a determined effort and drastic reorganization at high academic levels. Although the need for material aid is enormous, the need for a change in academic attitudes is equally or even more important. Many Greeks are actually energetic and vigorous individualists. Given effective aid and opportunity, there is little doubt that important progress could be made.

DR. RALPH W. GERARD, Professor of Physiology, University of Chicago, Chicago, Illinois

Broadly speaking, preclinical science in the Greek universities is largely non-existent at the research level, and, at the teaching level, these departments are working with excess of students and woefully inadequate means.

In Athens, the medical school buildings are good. The cadaver storage in anatomy is as fine as I have seen, but most of the space is now occupied by the army for a hospital and related services. Rooms

still in academic hands are largely bare of furniture and equipment. Students in physiology have only eleven two-hour laboratory sessions in the entire year, and two-thirds that they work in this subject.

Salonika seems alert and bustling. The university, though new and small, is clean and alive. Of the medical school property, I saw only the Institute of Physiology and Pharmacology, located in an old building without gas, some dis-

tance from the main university. There is little equipment as yet, but a number of newly bought English items have arrived and others are on order. Physiology laboratory work is taught to ten groups of thirty each. In each group ten students do some experiment while twenty sit in front and watch. Three sessions a week allow each ten students one experiment among them.

Greek medical practice, I understand, is quite respectable, but the preclinical work is small and impoverished. There are some good young men, mostly trained, if

abroad at all, in Germany. These men and their future successors are now turning to America for scientific education and leadership. This should be encouraged and fellows brought over. But unless the government, aided at first by the American Mission for Aid to Greece, the Rockefeller Foundation, or others, gives the university far stronger financial support and far more autonomy in handling its educational problems, such as the size of the student body, individual fellowships or grants-in-aid will have minor permanent value.

DR. HARRY B. VAN DYKE, Professor of Pharmacology, Columbia University,
College of Physicians and Surgeons, New York, New York

The University of Athens was founded in 1837 and received much enthusiastic support in its early days. It was made a state university, as a matter of prestige, at first with no state financial support. As a result, professors had the rank of generals and justices of the Supreme Court. The University of Salonika is little more than a quarter of a century old and the medical school was founded during the German occupation of Greece.

At present, at both Athens and Salonika, administration resembles that in other continental universities in that the deans of the medical schools and the rectors of the universities hold office for only one year. The Ministry of Education decides matters such as student fees, the size of the student body and the extent of government support. Both universities are in a serious financial situation. Student fees, on which the University of Athens places great dependence, are equivalent

to \$35 per student per year, whereas the prewar fee was about \$100. In addition, sixteen categories of students are exempted from payment of fees without any compensation to the university. Income from valuable property owned by the university is inconsequential owing to stringent regulations on rent.

The universities had an enormous increase in the student body during the war and the present number of medical students cannot be justified in terms of Greece's requirements and the universities' facilities for training. For example, at the Athens medical school in 1947, only 9 per cent of the original class graduated, and an estimated 27 per cent of the class entered in 1942 were expected to graduate in 1948.

The educational policies are badly in need of revision. The total course is six academic years, corresponding roughly to two years of

college work and four years of medical school in this country. However, there is no provision for cultural courses at a college level. Teaching is predominantly didactic and a great deal of the teachers' time is required for the oral examinations, which failing students may take repeatedly. Fundamental courses in physics, chemistry and biology should be greatly enlarged and revised. Part of the course in human anatomy is taught in the first of the six years, but in Athens military use of part of the anatomy building permits the offering of anatomy courses to only a fraction of the students who may be taking clinical courses without having had anatomy. There is little provision for biochemistry in Athens and none in Salonika. Pathology cannot be taught in Salonika owing to the failure of the Salonika professor to return from the United States after a year's study there.

The preclinical sciences greatly need strengthening. The financial support is very meager and teaching is very inadequate by American standards, although some textbooks, such as the Pharmacology of G. Ioakimoglou, are excellent. Salaries and budgets are extremely low. For example, the Department of Pharmacology in Salonika has available for 12 months a total of \$2,108 to cover the salaries of the professor, the assistant, the technician and also the provision of equipment and supplies. (Before the war, a professor's salary was

equivalent to about \$1,000 a month.) There is no need to emphasize that research would have to be on a very modest scale. Unfortunately, few of the staffs have the time or inclination for this most important phase of a true university obligation, since they are obliged to do outside work to secure income for living expenses. It is my opinion that first consideration should be given to adequate support of the preclinical sciences, without which the clinical work will continue to be below modern standards.

The libraries need reorganization and provision for growth. What books and periodicals are available apparently are little used except at Salonika. In neither Athens nor Salonika is there decent provision for student work in the library. A relatively small expenditure would provide a small number of important foreign periodicals and standard textbooks which would be of inestimable value to both the students and the staff.

It is probably wise to maintain both the Athens and Salonika medical schools. Our group feels that Salonika should have the greater share of any outside support, since her school is younger and more adaptable. Salonika, by evolving into a modern school on a modest scale, could furnish Athens with a competitive example, which would be of great benefit to the older school.

DR. ALWIN M. PAPPENHEIMER, JR., Associate Professor of Bacteriology,
New York University, College of Medicine, New York, New York

The present condition of the University of Athens and its medical school is critical. Years of al-

most continual warfare have impoverished the government which gives but little support to an essentially

destitute university. At one time the university owned a good deal of property, from which it derived rent and securities which furnished additional income. At present the income is virtually nil, and because of the government ceiling on rents, the income from property has shrunk to almost nothing. Tuition, which was very low before the war, has not been raised to meet the inflation, and the income from this source is very small. The government will not permit the university to raise its fees, nor will it provide funds for improving facilities or increasing salaries. Moreover, there are a great many categories of students who are not required to pay tuition or to take entrance examinations. These "free" students include not only those who served in the army, but children and relatives of servicemen, among others.

Unfortunately, no strong, continuous administrative program can be initiated in the university because of the annual election of a new rector of the university and dean of each school. As far as the staff is concerned, it was my definite impression that proper connections are of great importance in obtaining a professorship in the university. There are a good many instances of nepotism.

The salaries of professors and assistants are so low that they must carry outside positions in order to live. One other bad consequence of the poor university salaries is that most professors write textbooks in order to provide themselves with additional income. These books are very expensive, ranging between \$15 and \$25, and in many courses the students are obliged to buy them in order to pass the course.

Before the war the medical school had about 900 students, 150 per class. At present there are several thousand. The faculty has attempted to cut the number of entering students to 100 per class and has succeeded in cutting the number to 350-400. Furthermore, it is difficult to expel students from the medical school for failure to pass examinations. Dr. Ioakimoglou told us that he has failed students as many as fourteen times and that they still remain in the school. There are about 7500 doctors in Greece, or 1 per 1000 population, and about 200 die or retire per year. It is obvious that most of the present graduates will not find a remunerative practice, especially since most of them desire to remain in Athens.

Facilities for teaching preclinical science are extremely poor. There is almost no laboratory space and the lecture halls are not large enough to hold more than part of the students. The equipment and apparatus left after looting by Germans and destruction by Communists is ancient and very scanty. I feel quite strongly, however, that the main reason for the very poor condition of the preclinical departments is the complete failure on the part of the faculty, with one or two exceptions, the government and the Greek medical profession to realize the importance of basic science and the laboratory in the practice of medicine. As a result of this shortsighted policy, if any part of the medical teaching program is to be sacrificed for economical reasons, it must be the preclinical departments.

Students enter medical school at an average age of 17-18 and receive

the diploma which enables them to practise after a six year course. The first year they take biology, inorganic and organic chemistry, physics and osteology; the second year, gross anatomy, physiology and biochemistry; and the third year, pharmacology, general pathology and microbiology. It seems probable that anatomy is the one basic science which is adequately taught and is not entirely didactic. The dissection room is very large and well lighted. There are plenty of cadavers available and they are well preserved. Four to six students work on a cadaver.

Because of the illness of the chemistry professor, the whole responsibility of the department has fallen on the Assistant, Dr. Logothetis. He has to teach about 1000 first and second year students almost without assistance. The chemistry and biochemistry laboratories were occupied by the military hospital as a ward until this spring. As a result, the courses in organic and inorganic chemistry for first year students and biochemistry for second year students have consisted of two lectures per week for two months with no laboratory. A small laboratory has just become available which can hold 60 students with crowding, and the plan is to give three lectures and six hours of laboratory per week from November to June to all chemistry students.

Dr. Zervas, Professor of Organic Chemistry under the Faculty of Physics and Chemistry, worked with Max Bergmann for ten years in Germany and two years at Rockefeller Institute in New York. He is about 45 years old and is unquestionably one of the great scientists

in Greece. Despite incredible difficulties, Dr. Zervas manages to give an excellent laboratory course in organic chemistry, and is turning out original work on the phosphorylation of amino acids and synthesis of peptides under conditions simulating those in the body. He has some excellent assistants working with him. We left the Annual Reviews of Biochemistry for 1946 and 1947 for Professor Zervas' library and one may be sure that they will be read from cover to cover.

Almost no research is being done in the Microbiology Department. In the microbiology course there are eight laboratory sections because of lack of space, and five students share a microscope. At most, the students do a few simple stains and look at a few smears. The departmental library contained only ancient books and no modern journals. There seemed to be no knowledge of modern theoretical work in bacteriology, only the dramatic effect of penicillin and streptomycin.

There are several departments of hygiene. The Professor of Epidemiology had a rather nice laboratory where he was carrying out bacteriological examinations of milk and water. He had a homemade warm stage and an improvised apparatus for testing heat loss of clothing at different temperatures, humidities and wind velocities.

The problem of distributing the medical books brought by the Mission as gifts to the university was solved by allowing each member to assign the books in his own special field to whichever library he thought would profit most by them.

The students' library was very

overcrowded and contained very few books of any kind. There were a few battered, ancient and outdated Greek scientific and medical texts, but no foreign books. The library was used only by the very poor students who could not afford to buy their own texts or outlines of texts.

The faculty library was theoretically open to all, but practically it was inaccessible to most assistants and students. There were virtually no foreign journals; the total number of books was small and consisted, for the most part, of outdated Greek texts. However, there was one fairly large section of recent American medical books, willed by a Dr. Roccas of New York. It did not appear that these books had been read.

Most of the departmental libraries were very poor, but in exceptional instances an effort was being made, at the professor's personal expense, to obtain a few foreign periodicals and books.

The best Greek medical libraries were in the private hospitals.

The Athens City Library has a beautiful reading room and a large number of books. There were very few modern foreign books on science or medicine, although there were a good many old ones.

One of the best and most used libraries was run by the British Institute of Studies which had a good selection of modern British texts, but little on the natural sciences or in the preclinical fields. This library was used a good deal by Athenian doctors. There was also a good library with medical books at the American Y. M. C. A.

In addition to the university, we visited a number of other institutions in Athens. There is a School of Hygiene, run by the government for post-graduate students, which is separate from the university. At the school Dr. Belios is doing a fine job directing malaria control, a continuation of the UNRRA program, and Professor Hadjinicolaou is working on the development of resistance in flies to DDT. He has also devised methods for testing susceptibility of insects to DDT.

Very little work was going on at the Pasteur Institute of Athens, despite the fact that neither the Germans nor the Communists had disturbed the staff. The mother institute in Paris furnishes the name, the director and his salary, but the Greek government is responsible for supplying equipment and other salaries.

We visited the Leprasorium on the outskirts of Athens. Dr. Markinos has been working with the lepers for twenty years. He has done some interesting work, and is devoted to his job. One new observation of interest which he has made is as follows: if 30-40 cc. of 1% methylene blue is injected into lepers, the dye concentrates in the leprous patches in the skin and persists for weeks. Smears taken from these blue patches always show Hansen's bacilli which have taken up the dye. Four hundred lepers in all stages were in this colony. More doctors and nurses are needed and the quarters should be improved. Dr. Markinos estimates that there are two thousand lepers in Greece, 50% of whom are in leprasoria.

The Sismanoglion is an enormous modern tuberculosis sanatorium near the foot of Mt. Pente-

likon. It is built almost entirely of marble, and has more modern and shiny equipment than any other institution I visited in Greece. There are five hundred patients, 50% of whom are free patients. There are radio earphones on every bed, and there is even a small department for occupational therapy. A big streptomycin program is under way, supervised by the Director General. The library contains many French, English and American books and journals. The laboratory, which is large and fairly well equipped, is run by Miss Evangelinos. She is carrying out culture work and has started fair sized colonies of mice, guinea pigs and rabbits. She has found that certain strains of mice are more susceptible than others to tuberculosis infection, an observation which independently confirms the recent work of Dubos in New York.

Other hospital laboratories were small and poorly equipped. Although there was much talk about culture work, the incubators were usually empty. Blood chemistry was poor and the most frequent laboratory test was blood urea level. Fairly good culture work on the tuberculosis meningitis cases studied by Dr. Choremis was being carried out at Goudi, the children's hospital. Nothing whatever was known about the new media of Dubos or development of resistance to streptomycin. The Greek doctors and laboratory men were all most interested in the information we brought with us on these aspects. Our lectures were enthusiastically attended. As was to be expected, the greatest interest was in practical and technical problems. My most successful lecture was on the cultivation of the tubercle bacillus, and

one of the most popular panel discussions was on tuberculosis, in which the Greek doctors took an active part.

I did not meet a single professor at the university who had not been trained for several years in foreign laboratories or hospitals. This applied also to those who were in charge of hospital laboratories or private laboratories. In general, the preclinical men were trained in Germany and the clinical men in France. All successful practising physicians and surgeons that I met were also foreign trained.

The University of Salonika is only twenty-five years old, and the medical school was formed in 1944, during the German occupation. There is also a military school of medicine in Salonika. The students at the military school take the university courses and one year extra of military medicine. They possess the advantage that their living quarters and food are all paid for, and even more important, they are supplied with books. After completion of their studies, they are bound to serve for twenty years in the army.

The problems at Salonika are again those encountered at Athens, namely, too many students, insufficient funds, lack of equipment and a very small number of underpaid professors and assistants.

The total number of medical students at Salonika is 618, 505 in the university and 113 in the military school. Eighty per cent of all those students are in the first two years.

The pathology professor, who went to America a year ago, has taken a permanent position in Texas. At present what little path-

ology is taught is given by the professor of legal medicine.

The course in microbiology consists of three lectures per week during the third year and a total of twenty hours laboratory work. The laboratory for the students is a single small room which also serves as diagnostic laboratory for the Military Hospital. This year there were twenty students and two microscopes. Next year there will be 350 students.

The university library is excellent, well staffed, well catalogued and much used. The staff claim with pride that it is the best university library in the Balkans, and I have no doubt that their claim is justified. The library contains many foreign books, mostly French and German, and there are several current scientific and medical journals, English, American and French.

The British Institute of Studies also contains a small library with a few current British medical journals, British scientific and medical books and is much used.

We were all impressed by the more energetic spirit of Salonika, as compared with Athens. The professors were younger, and although poor, there was a genuine striving to improve the situation. I encountered a small group of English-speaking students in Salonika who were much interested in basic sciences. They had learned English

at the British Institute of Studies and had done a great deal of reading there.

The Director of the Rabies Clinic studied at the Pasteur Institute and in Milan, and has been working with rabies for thirty years. At present 150-300 patients are being treated for dog-bite daily at his institute. He believes that the virus reservoir is maintained in wolves which are still numerous in the mountainous frontier regions.

In summary, it appeared to me that, except for the efforts of two or three men who are doing the best they can under almost impossible conditions, there is no such thing as preclinical science in Greece. The preclinical departments must be built up and supported before improvement in the practice of medicine by Greek trained doctors can even begin. At present, practically no research is being carried out in the university preclinical departments, not only because of lack of equipment, but chiefly because of the tremendous teaching burden and the necessity to hold down a second paying position because of the low salaries. No adequate teaching department can exist in a modern medical school without research. Finally, the building up of strong teaching and research preclinical departments is hampered by the fact that only M.D.'s are eligible for professorships. This is true in all European medical schools.

DR. EDWARD L. HOWES, Associate Clinical Professor of Surgery, Columbia University College of Physicians and Surgeons, New York, New York

The instruction of medical students in surgery is poor and is carried on mostly through the media of

lectures and demonstrations because the groups taught are very large. There is little or no out-

patient instruction. Progress is recorded by both written and oral examinations. Students often have to take private tutelage to pass, but if they should fail, they may take the examination repeatedly.

Doctors wishing to become surgeons are appointed to hospitals as "internal physicians" by the Ministry of Health, but on selection of the surgeon in charge of the hospital. There are about five "internal physicians" assigned to each hospital, and the length of their service is five years, at the end of which time they receive a "certificate of surgery." At first they are assistants; then they do minor cases, but they never have full responsibility. The training given these young surgeons is fair to good, but none of those under 45 years of age can study abroad now, since they must remain in Greece for military duty.

In Athens the Laikon is the main teaching hospital. Large and overcrowded, it is a typical city hospital. Here the greatest number of students are taught by French-trained Professor Karayanopoulos and his staff, who have about eight to ten "internal physicians" to train. Many of the staff members are quite capable abdominal surgeons.

Hippocraton is the second largest teaching hospital in Athens. It is run by the Ministry of Health on a very small budget and contains two prison wards. Professor Alivisatos, the chief surgeon here, is younger than Karayanopoulos and was also trained in France. His wife has segregated the children into a special ward and personally attempts to obtain adequate supplies of food and proper diets for them. In all other hospitals the children

are kept on the general surgery wards with adults.

Areteion Hospital, run by the university, has only two services, namely, gynecology and general surgery. Dean Louros is director of the gynecological service, and Professor Harry Toul is head of surgery.

Talent found in private hospitals is as good as, if not better than, that found in the university. The doctors in private hospitals train internal surgeons, also, but unfortunately, have no contact with medical students. Dr. Maccas, who was trained in Germany, is head of the surgical service at the Red Cross Hospital and is also Dean of Surgeons in Athens. His hospital is well equipped and has excellent laboratory services. Anesthesia is poor, but, with the support of the Red Cross, he is sending a young man to this country to study the specialty. Dr. Manos at Evangelismos is one of the progressive younger men. A meticulous operator, he has excellent judgement and a good clinical sense. He follows the advances of surgery in all countries and for a time studied in this country. Last summer he studied in Sweden.

At Salonika Dr. Missirloglou, who was trained in the Middle East, is head of the surgical service of the Municipal Hospital, a large overcrowded institution run by the Ministry of Health. It is understaffed in all types of personnel and is poorly equipped. Dr. Sigalas, a younger professor at Salonika, was trained in France. He heads the service at the Central Hospital. He reads extensively and has British trained nurses in his operating room, which is one of the best in Greece.

In general the private and Red Cross hospitals are well equipped with instruments, lights and laboratories. On the other hand, hospitals run by the Ministry of Health, used principally for teaching, and the one University Hospital in Athens are poorly equipped. Instruments are few and in poor condition. Lights are inadequate; anesthesia machines are absent, and there is no suction machine, making it impossible to do thoracic surgery.

Considering the number of students, the nature of the teaching programs and scarcity of equipment and laboratory facilities in the teaching hospitals, the next generations of Greek medical students will be poorly trained.

Greek surgery today resembles French and German surgery of fifteen years ago. Surgery of the stomach is excellent; that of

echinococcus infestation is apparently good, but plastic surgery is poor. Intrathoracic surgery is not done, although at the National Tuberculosis Sanitorium, surgical collapse therapy was very well carried out. There were no blood banks. Orthopedics is poor, and many artificial limbs are needed. Nursing care is minimal. The outpatient clinics are crowded and poorly run; there is no social service and no convalescent care. I believe that isolation is the reason why the Greeks are far behind the Italian surgeons.

On the whole the Greek surgeons do a fair to good job with the meager facilities available, but breadth, scope and specialization are lacking. The Greek surgeons are willing, eager and anxious to learn, and they were most cooperative with the surgeons of the Mission.

DR. ARTHUR R. ELVIDGE, Assistant Professor of Neurosurgery, McGill University, Montreal, Canada.

The University of Athens is overcrowded with students. This was brought about largely as a result of wartime conditions. Many students were admitted without examination for patriotic and various other reasons. Medical classes have run as high as 1000 students, but the number in the first year class has already commenced to fall off, there being only 350 last year. One hundred to 150 medical students a year is generally thought to be sufficient to cover the needs of the country.

Preclinical salaries are so small that the professors have to seek extra remuneration from sources outside the university. This divides their time rather seriously. Pre-

clinical instruction is minimal and largely theoretical, with practically no laboratory work for students. The clinical teachers are, likewise, poorly supported by salary and facilities for work. There appears to be very little bedside teaching, although Greek doctors tell me that they do have it. Assistants work with professors for several years, after which they may be certified as specialists. Institution of some form of resident and interne services and improvement of nursing services would be a great help to Greek medicine.

The library for students at the University of Athens is extremely poor and contains only Greek

volumes of rather ancient date with a few old books in German and French. It was crowded with students. The library for the medical faculty in the university building proper, though rather well stocked with recent books and journals, many of them American ones, is, nevertheless, relatively small and private and inadequate to serve the needs of the students who may use it if they obtain special permission. Various laboratories have their own local collections, but a good central medical library for students and staff would be desirable in Athens.

The city hospitals seem to be the least well supported. The university hospitals are little better. The privately run, non-university hospitals, such as the Red Cross, Anti-Cancer and Evangelismos Hospitals, are the best equipped and some very good men are attached to them. A very large wing for four to five hundred patients is being added to the Evangelismos Hospital by the Greek War Relief with American support. The Anti-Cancer Hospital is small, well constructed and one of the best planned and equipped hospitals in Athens. It is supported from private sources and apparently well organized and well directed. There is space for a good library, though at present it contains very few books and journals. We saw also the beginnings of a very excellent small anatomical museum. There are surgical operating rooms and research laboratories in this building and a very satisfactory animal house on the roof. The x-ray equipment is very good. They have two or three large German 180,000 volt units, and are now setting up two

new 250,000 volt units recently received from Canada.

Specialists in both the university and non-university hospitals have well furnished and sometimes well equipped offices with personal libraries which are well stocked with books and current journals. A bacteriologist, for example, may have his own private bacteriological laboratory.

Since there are no private patients in the university hospitals, the surgeons are obliged to seek private clinics where they can do their work. Installation of private wards in university hospitals would be desirable, so as to increase the revenue and retain the specialists, rather than have them run their own private clinics.

General abdominal surgery is well done by the top surgeons in the university and the non-university hospitals. However, they do not have any trained anesthetists in Greece. The surgeons, for the most part, employ local and regional anesthesia. They do not generally use any intravenous infusions during operations and transfusions are not done. There is little pre- and post-operative treatment.

The general surgeons attempt spinal and brain operations, apparently with some success. At the Evangelismos Hospital this is done by a Greek surgeon with the help of a very well trained neurologist who studied in France. At present neurosurgery as a specialty is practised by Dr. Iliades at the Anti-Cancer and the Hippocraton Hospitals. There is as yet no representative of neurosurgery on the university staff, but the university professor of neurology refers patients to Dr. Iliades, who was trained by

the French neurosurgeon, Clovis Vincent. Dr. Katakousinos, who was also trained for several years by Professor Vincent in Paris, seems to have gone into neurology principally.

I would recommend that a strong department of neurology and neurosurgery be built up in the University of Athens. This could be done by creating a new department, staffed by members of the current Neurology Department plus some able neurosurgeon. The neurosurgical work could best be centralized in one of the better equipped hospitals. One strong department in the hospital, properly organized, might act as a leaven for the whole university, where diffusion of interest and personal independence are so great as to make organization and coordination of teaching difficult at the present time.

I visited several other institutions, including the Rimini Military Hospital. It has about 600 beds filled with men who have been injured in the current fighting. I saw a fair number of patients with fractures of the spine and paraplegia. Many others were blinded by exploded mines. The building which used to house the Department of Anatomy was taken over by the army from the university. The chief surgeon does a certain amount of traumatic neurosurgery, including surgery of the sympathetic nervous system. The operating room in the hospital consists of one small room with a primitive operating table and practically no instruments or facilities of any kind.

The state asylum at Daphne is a collection of low, single-story stone

buildings in a large enclosure in one of the valleys near Athens. It has not been well supported by the government. The inmates wander about the grounds without any particular supervision. My visit to the asylum was to witness a leukotomy. This operation was performed under very primitive conditions by a general surgeon in one of the stone houses which is used as an operating room. The surgeon had practically no instruments, and those that he did have were ancient. The anesthetic, which was ineffectual, was evipan. The sterilizing equipment was primitive, and consisted of an oil burner and container for the instruments. It would seem doubtful whether such operations should be done at all under these hazardous conditions. On the other hand, I saw what appeared to be a good result from at least one or two such cases. I would say the surgeon was rather courageous.

There are about 1000 lepers in Greece, about 300 of them in a colony I visited near Athens. They live in single-story stone buildings similar to those of the asylum. The inmates, as is to be expected, are discontented. The Director seems to have a great deal of interest in medical research on leprosy.

I visited, also, a huge, rather impractical tuberculosis sanatorium, built with the help of a large fortune from a private individual now living in Athens. It is an extravagant building and includes a modern department of occupational therapy and rehabilitation.

The Faculty of Medicine at the University of Salonika is very young, but it has a lively, loyal spirit. The school is also young,

and must serve a large population which does not have free communication with Athens. The only communication at present is by boat and plane. The faculty has a certain nucleus from which to develop, and I think that the university medical school should continue. However, the number of medical students requires limitation.

The university possesses a very good central library building for all faculties to use, though there are not many medical books in it. It does have, however, some good volumes and some journals. The library is principally for the faculty, but students may use it by special permission. The students have a university library of their own, but here, as in Athens, the books are almost all old Greek textbooks. For examination purposes, the students are apt to study from the professor's book, written in Greek, no matter how old it may be.

The students also have a club, organized by the Anatomy Professor and his wife, where those who need it are fed. There are recreation rooms with a few games and a library, which is still small.

The preclinical sciences at Salonika require further support. The Professor of Anatomy organized his own department from practically nothing. He has low, one-story stone buildings which serve as his dissecting rooms. The Departments of Physiology and Pharmacology are together in one small building about half a mile from the anatomy buildings. They have very little equipment for research, and none for the students. Teaching is by demonstrations largely. These three departments are, unfortunately, a considerable distance from the cen-

tral university building, which is well constructed and well located near the Kentrikon and Municipal Hospitals.

The Kentrikon Hospital has about 380 beds, which are also used for teaching. It is a government hospital with some pay cases also. The Municipal Hospital has about 460 public beds, 200 of which are used for teaching. It has services for medicine, surgery, eye, ear, etc. X-ray work is done fairly well in some of the hospitals, but still leaves a lot to be desired. Some of the best work is done at a private clinic.

Very little neurosurgery is undertaken in Salonika by the general surgeons. Professor Sigalas at the Kentrikon Hospital and Professor Missirloglou at the Municipal Hospital are primarily abdominal surgeons. They are very short of instruments, and the hospitals are obviously very short of linen and material for bandages and other supplies, although they do not complain about this.

There are two younger neurologists working in these two hospitals, Dr. Zerbopoulos and Dr. Diakolianis. Most of their cases consist of chronic neurological problems, Parkinson's Disease, muscular atrophies, etc. At the Municipal Hospital I saw several cases of gunshot wounds and fractures of the spine. A new batch of casualties from the front, which is only a few miles away, arrived at the Kentrikon Hospital just as we were leaving.

The Greeks would appreciate scholarships and opportunities to send students abroad, and I think this would be the best way of helping them on the academic level. As regards the problem of general

hygiene and general health, I think that much useful instruction and education could be given by local radio broadcasts and simple articles in the press for the lay public.

The Greek doctors are very anxious for peace after their many years of war and invasion, but they feel that the present problem is above them. Although they present

a smiling and optimistic countenance, they are basically tired and sad regarding the fighting that continues within their borders. After I returned to Montreal I asked a Greek graduate student what he thought was the greatest need in Greece today, equipment, money, books, or what. His answer was Peace.

DR. ROBERT D. DRIPPS, Associate Professor of Surgery (Anesthesiology), University of Pennsylvania, Philadelphia, Pa.

There are no trained anesthetists in Greece. Student nurses, orderlies or surgical assistants administer general anesthesia without considering any of the vital signs, such as blood pressure, pulse rate, respiratory rate and depth. Nor are any anesthesia records kept. The techniques are those of open drop ether and intravenous pentothal. There are many modern anesthesia machines, chiefly provided by UNRRA, but no one knows how to use them. There is no realization of the physiological or pharmacological basis for anesthesia. Partial asphyxia is common and the incidence of postoperative acidosis, atelectasis and pneumonia is high after general anesthesia.

The surgeons themselves are facile at a combination of abdominal wall block and direct injection of the celiac plexuses. They obtain excellent results with this method for gastric surgery. We can profit from their experience in this field.

In obstetrics there is no general anesthesia and only rarely are efforts made at providing pre-delivery analgesia. Episiotomies, repairs and forceps applications are made with no attempt at pain relief. The same is true for otolaryn-

gological surgery in children up to the age of ten. Tonsillectomies are performed with no anesthesia for these children.

The psychology of pre-operative medication is appreciated by the surgical profession. Morphine and scopolamine is most commonly used. It is interesting to note that the Greek patient reacts more profoundly to depressant drugs than do the patients we see in America. Small doses of opiates, for example, produce marked respiratory and circulatory depression.

Parenteral fluid therapy during or after operation is rare. Pyrogen-free tubing is unknown. There is no crossmatching of blood, no concept of the Rh factor and transfusion reactions are frequent whenever blood is used. There are no blood banks. We were told that the Greek civilian is loath to donate blood, and hence that blood banks as we know them may be difficult to establish.

The surgeons realize the inadequacies of their anesthesia service and are eager to have physicians trained in the specialty. Thoracic surgery is the field in which the need is most important. Attempts are made to perform ex-

tensive intrathoracic operations under regional anesthesia, but with little success. There is no comprehension of the alterations in respiratory and circulatory dynamics which accompany the opening of the thoracic cage. Hence paradoxical respiration, dyspnea, cyanosis and mediastinal flutter are common. It is doubtful if further progress in chest surgery can be made until better anesthesia is provided. Fortunately, this is recognized by the Greeks.

Six anesthetics were administered by the Mission in Greece: one spinal, one drop ether, one cyclopropane ether and three cyclopropane. The endotracheal technique was used in three patients. Demonstrations of the control of respiration during thoracic surgery were made on several occasions. The utility of supportive parenteral therapy was illustrated. The Greek surgeons were impressed with the low incidence and degree of postoperative morbidity following such methods.

Since the need for physicians trained in anesthesia is recognized by the surgeons, obstetricians and gynecologists in Greece, two things must be done. First, the two medical schools must agree to provide faculty appointments for anesthesiologists. Second, young Greek physicians must be trained in the specialty either by American or British anesthetists sent to Greece, or through one to two years residencies in these countries.

In the Greek medical schools the value of the physiological approach to medicine is neglected altogether. Lip service is paid to the basic sciences, but that is all. There is no liaison between clinicians and

the professors of the preclinical years. The latter are without laboratory facilities and receive starvation wages. The former have the financial advantage of a private practice. The future of Greek medicine, in my opinion, depends upon the recognition that the basic science departments must be supported and developed with some form of subsidy.

The number of students must be reduced. Politics must be divorced from the selection of students, and merit must replace influence as the standard for judging the individual's right to remain in school.

The quality of the faculty must also be improved. There is too much nepotism and too much dependence on antiquated French and German medical ideas and philosophies.

An interne-resident program should be instituted to replace the system of assistantships, which are obtained usually by influence, and can be used only by those who can afford to live without income.

The University of Salonika, being a relatively young institution, has the advantage that tradition is not deeply rooted. The spirit is good, and there is vitality in many of the faculty members. Support of this university might, therefore, pay dividends, since new ideas would find more ready acceptance. Such support must be sufficient to equip laboratories, to subsidize basic sciences, and to fill in great gaps which exist in the latter. For example, there is no pathologist at Salonika. In Athens the doctors live too much in the past and are unwilling or unable to face the future realistically. They need

stimulation, and I believe that this Mission provided considerable stimulus. They must clean up their own institution, rather than sit by passively and wait for some outside group to do the job for them. Local support is lacking. Wealthy Greek clinicians do little to put their funds or that of wealthy private patients into the university.

The philosophy of the Greek medical profession toward the

patient differs from that found in America. The rights and privileges of the individual are more or less ignored medically. With such an attitude of indifference or lack of awareness, many consequences are noted. It becomes less important that pain relief is not afforded. Also, for example, the medical treatment of peptic ulcer is non-existent, since a fundamental for the success of such therapy is warmth of understanding.

DR. EDWARD L. PRATT, Senior Fellow in Pediatrics, National Research Council, Yale University, New Haven, Connecticut.

The personal friendliness and spirit of cooperation of the Greek physicians greatly facilitated the gathering of the data for our reports.

P.I.K.P.A., the Patriotic Foundation of Social Welfare and Assistance, provides for a small proportion of the population antenatal care, well baby clinics, dispensaries giving medical and dental service to children, kindergartens for children of working mothers, summer camps, convalescent homes, preventoria and a special training service for P.I.K.P.A. assistants. Aside from the fundamental problems in Greece, those of disruption and insecurity caused by the war and inadequate facilities for distribution, this organization is most handicapped by a lack of adequately trained nurses and field social workers and by the delays and inefficiency resulting from the lack of coordination between the multiple bureaus of the government. Nevertheless, P.I.K.P.A. has demonstrated the ability of the Greeks to plan modern health measures for mothers and children. The

facts and statistics already collected should be powerful arguments for the support and extension of this work. For instance, the mortality of infants 0-2 years of age under supervision of the well baby clinics is 32 per 1000, as against 140 per 1000 for Athens in general. As yet, adequate appreciation of P.I.K.P.A.'s work is lacking.

Day nurseries, PEDIKI STEGI, formerly run by charity, but now under the Ministry of Welfare, are doing excellent work with infants and children of working mothers, despite the handicaps of crowding and inadequate staffs.

Social Insurance Polyclinics, refugee camps for children, orphan asylums and other similar institutions all contribute to the welfare of children, but they are also suffering from a lack of coordination and trained management and inadequate funds and facilities.

I was unable to make a real assessment of the health of the children, and I seriously doubt whether such information exists for

Greece as a whole. The growth of children 7-13 years of age in civilian areas prior to the war followed about the 15-20 percentile lines for American children, and rural children were in the 5 percentile rank. Children measured in 1945-46 in comparable areas and age groups showed little difference in height or weight from pre-war children in the 7 year old group, but the older children progressively lagged behind the pre-war group so that at 13 years, they were on the average 6 cm. shorter and 10 to 12 pounds lighter. On the Wetzel grid these two groups showed that physique (body build) had not changed significantly, but that developmental progress (auxodromes) was retarded by a full year at the age of 13 years. In the urban areas gross starvation was not seen, nor was there any evidence of vitamin deficiencies, except mild rickets. However, lack of sufficient calories and probably also protein was evident in the small size of the children.

Tuberculosis would appear to be the largest single problem. A good case-finding clinic is operating in Salonika under the direction of Dr. Pagiatake. Two per cent of 4000 refugee children, 6-16 years of age, examined there had active tuberculosis, as compared with a rate of one per cent for 40,600 Salonika children 6-18 years of age. The control of tuberculosis is almost impossible to accomplish until security, economic and social improvements and the possibility of isolating active cases can be attained. Even now, much that could be done through public education and even simple measures of isolation is not being done. Most hospitals make no attempt to prevent the

spread of tuberculosis on their wards. The large number of cases of tubercular meningitis being treated with streptomycin has filled the children's hospitals to the exclusion of patients with serious illnesses which respond more favorably to treatment. Very good work is being done on tubercular meningitis by Professor Choremis at the St. Sophia Children's Hospital. It would be of value to medicine if he could have a grant of newer drugs, such as promizole and para-amino salicylic acid for investigational purposes.

Diphtheria, enteric diseases, Kala-azar and echinococcus disease are frequent and capable of control, although little enthusiasm is being shown to effect this. Care of new born and premature infants is poor, for the most part, with little regard being given to prevention of infections in the nurseries. There were no incubators, even of simple home-made types, and there was little provision for oxygen administration. Yet in a few institutions, usually private or charity, conditions were quite good.

Eighty to ninety per cent of the infants are breast fed. Food mixtures, the introduction of solid foods and the psychology of infant feeding are those of 25-50 years ago. Vitamin D is not given because sunlight is considered sufficient, although I believe that rickets is fairly common. There is need to popularize the use of lactic acid milk mixtures, inasmuch as refrigeration is almost non-existent. A more favorable attitude towards the use of powdered skimmed milk, soy beans, and canned foods should result in better diets for older infants and young children. A start

is being made towards public education in regard to nutrition and should be encouraged and extended.

Pediatric practices are practically entirely those of the French and German schools of 10 to 30 years ago, and, whereas clinic observations are good, the treatment is, for the most part, poor. The use of numerous medicines, all by injection, and many of them of no value, prevails. The use of oral medications, even vitamin C or iron, is almost never seen. With but few exceptions the modern concepts of pathological physiology are unknown. Contributions of clinical and experimental research as applied to management of sick patients are not understood, and there is even skepticism that such work can be applied to practical problems.

Medical education is poor because of the excessive number of students, the absence of practical laboratory work and modern teaching methods in preclinical sciences, the absence of practical work by the students with patients, inadequate salaries for full time teachers, too advanced retirement age and the system of nepotism in appointing professors. In addition, the ever-changing administrative board of the Medical Faculty and the financial control by the Ministry of Hygiene contribute to the difficulties.

Besides the inadequacies of training in medical schools, there is an equal, if not more serious, lack of training of young doctors in supervised internships and residencies.

There is a need to coordinate the university teaching services. Hospital laboratories should be avail-

able at least for routine laboratory examinations, and an effective outpatient and ward teaching program for students and interns should be initiated. The development of post-graduate training is also badly needed. The establishment of a model hospital unit for post-graduate teaching might prove a real stimulus to setting up such a system.

Perhaps a research group with its own laboratory could profitably make a clinical investigation of certain diseases and, at the same time, demonstrate the value of supporting preclinical sciences. This might engender enthusiasm for clinical investigation and show the practical usefulness of correlating pathologic physiology, pharmacology and clinical observations.

There are very few well trained graduate and even too few practical nurses; many of the latter are poorly trained. Steps are being taken to improve the situation by training more graduate and public health nurses and by requiring a one-year course for all practical nurses. Psychological and vocational guidance for institutionalized children is practically nil, partially from lack of education in this field, but more immediately because the problems of housing, feeding and clothing are all that can be managed for the foundlings, orphans, refugees and displaced children. By contrast, the wife of one of the professors has established a children's surgical ward in the Hippocraton Hospital and one in the Polyclinic of Athens, so that the children would not be mixed with adult patients, and so that education, occupational

therapy, additional food and drugs might be provided for them. These wards are in dire need of assistance

to provide teachers, occupational therapists and means to purchase food and drugs.

DR. REIDAR F. SOGNAES, Associate Professor of Dental Medicine, Harvard School of Dental Medicine, Boston, Mass.

Greece has one dental school, situated in Athens. The building suffered considerable destruction in December 1944 during the civil war. The equipment is old and quite insufficient, there being no electrical engines, no dental units, and not even cuspidors. The students have to provide their own foot engines for operative work.

Before the war this school was supposed to take care of 50 students a year. It was closed during part of the occupation, from 1940-43, but today 1900 students are enrolled, about half of them women. As a result of the overcrowding, they work in shifts of as little as two hours per week with two students at each chair.

The dental school has only four professors (of Prosthesis, Surgery, Orthodontia and Operative Dentistry), and even these are part-time teachers, who do not hold full professorial rank. Preclinical subjects are taught in short courses at the university by the professors of the basic sciences, who appeared to take minor interest in the dental students or the dental school. The practical clinical teaching takes place at the dental school, and the following work is required from each student before examination: 4 dentures, 10 gold inlays, 30 amalgam fillings and 30 silicate fillings.

I was told that dentists in Greece receive little stimulation to do research because of a lack of recognition on the part of the univer-

sity. For instance, dentists cannot work for PhD training, as they can in other branches of the university. Furthermore, there are appointments available for only four special dental professors in the entire university.

In summarizing the dental education in Greece, it is fair to say that nothing can be done efficiently without a drastic reduction of the student body to about 50 students a year, and without an increase of the teaching staff, to be composed of the best men available in Greece today, supplemented by young men for whom further training abroad would be made possible. Also, the most essential equipment for the clinics is needed immediately. As the situation is today, the students are getting a very inadequate training, and it was felt that even if they should graduate, they would probably not stay long in practice.

There are about 2,000 dentists in all Greece. With a population of a little more than 6,000,000 people, that gives a ratio of one dentist to every 3,000 people, which is not too bad, considering the dental needs of the country. Outside the dental school, there are in Greece a number of very well qualified dentists, many of whom have received training abroad, in the U. S. A., France and Germany, and some with a combined medical and dental training.

One disheartening observation I made in Greece was the lack of

team work among dentists working in the same fields. An illustration of the dilution of professional activities is the fact that there are five different dental societies in Athens. This was also exemplified by the various people examining the interesting dental conditions (fluorosis) in the town of Lavrion, where each one was working independently of the others.

There is no dental school in Salonika, but we met several interested colleagues there, and of 100 dentists in that city, 75 attended each one of our lectures. In Salonika Dr. De Wilde and I visited two of the polyclinics for factory workers. One of these was entirely devoted to the tobacco industry. These clinics have from one to several dental offices where dentists work half time. They claimed that about 50% of the population is covered by such dental treatment or insurance through their employers. However, the dental work consists mainly of emergency treatment, extractions and, to a lesser extent, fillings, but no prosthetic work.

During my stay in Greece, I was able to obtain a few publications on the prevalence of dental disease in that country, and to see some of the conditions for myself. From this it may be concluded that generally there is less dental decay in Greece than in central and northern Europe. But even within Greece itself there are differences. In one community near Athens, the village of Lavrion, nearly all the children have maintained a full complement of teeth, with hardly any need for fillings. This community is extremely interesting because it is the only one in Greece

with a significant amount of mottled enamel (dental fluorosis). Nearly all the children present evidence of opaque spots on the teeth, but relatively few have sufficient pigmentation of the enamel to be aesthetically detrimental. From the clinical appearance, I judged that there might have been about three parts per million of fluorine in the drinking water, which comes from an artesian well, 35 meters deep. One part per million of fluorine is supposed to be sufficient to give considerable protection to the teeth against dental decay without the additional effect of mottling of the enamel. A filter of the excessive fluorine might, therefore, be worth considering in Lavrion.

In contrast to this community, I had the opportunity to visit the Island of Thasos, outside Cavalla City, and to examine about half the number of children in two of its ten villages. The two villages were Thasos and Panagia with populations of 1,600 and 1,400 respectively. The children had never had any dental treatment, and my Greek colleague and I extracted about 100 rotten deciduous teeth. Almost every child had decay in the deciduous dentition, while a number of them had quite good permanent dentitions. The people in these two communities were extremely poor and the children seemed to be under-developed or retarded in development. From the height records of about 70 children, whom we measured in Panagia, this was confirmed when plotted against the standards given in the Harvard School of Public Health charts. On these charts the children fell on about the 10% level. Other height records ob-

tained from the nutrition consultant to the Greek government in Athens on about 14,000 Greek children fell on about the same level.

The Island of Thasos is not the only Greek community which offers valuable material for epidemiological studies of dental conditions, nutrition and water supply. On Gavdos Island, the most southern point of Greece, with a population of 300, only one child was said to have been found with obvious cavities in the teeth. It seems to me that Greece, especially the communities still untouched by dentistry, may be an ideal place for study, but so far there have been only a

very few Greeks who have been compiling information from this material.

If further research on dental caries and the mapping of the incidence of dental decay in Greece could be encouraged, and if this would lead to better cooperation among interested dentists in Greece, it should yield fruitful results locally and interesting information for research workers in other parts of the world.

The future of Greek dentistry will depend upon the solution of its problems of dental education, and improvement in the facilities for teaching, research and practice.

A Survey of Dental Caries in Greece

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WHILE SERVING as a member of the Unitarian Service Committee's Medical Mission to Greece and Italy during April and May 1948, the writer made an attempt to gather some information regarding dental conditions in these countries. It was of particular interest to observe and survey locally available data on dental caries in Greece, very little of which has been recorded in the English literature.

It soon became apparent that Greece represents a virgin field for caries surveys. There are still islands with inhabitants untouched by dentistry, in search of which the writer once traveled half way round the world (Sognnaes 1939-1941).¹

Greece offers the additional interest of a long and well-known history, from which comparisons can be made between the teeth of anthropological material several thousand years old and the teeth of recent and present times. It was through such a comparison that Krikos (1935) came to the pessimistic conclusion that dental caries is on the increase towards complete destruction of the teeth of civilized man. In terms of centuries, his figures are, indeed, suggestive of such a course of events. This can best be seen if one makes a graph from Table I, showing Krikos' figures. Should the recent sharply increasing trend continue unchecked by preventive dentistry, then one would dread to think of the result in terms of dental health, looks and cost by the year 3000. Indeed, it may take less time than that, if there is to be a continuation of the much sharper rise in caries during recent centuries as compared to earlier periods. This major change from century to century is not significantly altered by the local and temporary caries reduction observed in several other European countries in connection with the recent wars (Sognnaes 1948).²

Krikos (1939) reports in more detail the incidence of caries in pre-war Greece, shown in Table 2. The 5,000 individuals examined are said to be representative of 31 different districts of Greece. Considerable carious destruction is already evident at a young age. When broken down by geographical areas, it is interesting that the highest caries incidence among the children was found in country towns of 2,000-8,000 inhabitants with 29% carious teeth, as compared to a total average of 20% in ten year old children. This is in contrast to the general belief that

¹ Sognnaes, Reider F., A recent dental study of the inhabitants of Tristan de Cunha, *J. Dent. Res.*, 18:243, 1939; and A condition suggestive of threshold dental fluorosis observed in Tristan da Cunha, *J. Dent. Res.* 20:303, 1941.

² Sognnaes, R. F., Analysis of a wartime reduction in dental caries in European children, *Am. J. Dis. Childr.*, 1948 (in press).

children of large cities suffer most from caries. Krikos attributes the Greek caries ratio to the greater poverty in the small towns, as this reflects itself in diet and mode of life in general.

In view of the caries reduction observed in northern European children during the war,² it was of interest to search for similar data in Greece. Unfortunately, I could find only two comparable surveys, both from Athens, collected by Krikos and shown in Table 3. These figures, too inadequate to be representative of Greece, do not suggest any change in the dental caries frequency during the war years. Both the pre-war and post-war figures are below the average for central and northern Europe for the same age group. The only other pre-war publication, which I was able to find regarding caries in Greece, was written by Zissi (1940), and covers the district of Karditza in continental Greece. His figures, presented in Table 4, show a relatively low caries incidence in the permanent teeth, as compared to the deciduous teeth. Even at the age of 14-18 years, half the boys are free from caries in the permanent dentition, which would be unusual in any group of American children.

The impression that teeth in Greece, in general, show less incidence of dental decay than in northern Europe has recently been confirmed by the observations of Coumoulos, a worker who has had direct experience with caries surveys in England as well as in Greece. From a recent report by Coumoulos on dental caries in six year old public school children in Greece, it appears that the incidence of caries in the communities which she has observed is somewhat less than in other European countries. In 1947 she inspected the teeth of children in several Greek cities and towns, namely, Athens (25 schools, 678 children), Athens districts (16 schools, 603 children), Piraeus (18 schools, 293 children), and finally, Volos (12 schools, 451 children). An average of 73.6% of all these six year olds had carious deciduous teeth. Athens showed the highest and the Athens districts the lowest caries frequency. A total average of 25.2% of the teeth of all children showed caries, with the lowest 18.9% in the Athens districts, where, incidentally, she had noted an occasional child with mild mottling of the enamel. From similar surveys in London, England, she quotes 19.3% caries-free five year old children, as compared to 26.4% in six year old Greek children. While an average of 73.6% of the Greek six year olds had caries, the comparable figures from England range anywhere from 80% to 90% of the children. In Scandinavian countries it is even higher, with figures close to 100%.

During my stay in Greece, I had the opportunity to see for myself some of the dental conditions in various parts of the country, to make some direct observations on diet and general health of the children, and to take some samples for examination. My general impression was that, by and large, the teeth of the children in Greece are suffering somewhat less from dental decay than those in central and northern Europe, while on the other hand, some communities showed considerable gingival inflammation, calculus accumulation around the teeth, and general lack of oral care.

One interesting little island which I had the opportunity to visit with my Greek colleague and interpreter, Dr. Efthivoulides from Thessaloniki, was the Island of Thasos outside the city of Cavalla. Once an island fortress which dominated the mainland (some 2,000 years ago), this island today is suffering from considerable poverty. It has a total of ten small villages, two of the largest ones being Thasos and Panagia. These two villages have a population of about 1,500 people each, and about 100 children in each community were examined. The fact that none of the children examined had ever had any dental care should be kept in mind when considering the caries figures. The average number of decayed and missing deciduous teeth in the age group from 6 to 10 varied between 4 and 6. The age group of 6 to 13 showed an average number of decayed and missing permanent teeth per child from $\frac{1}{2}$ in the youngest to 4 in the oldest. It was of interest that deciduous teeth seemed to suffer more than did permanent teeth. In the seven year old age group in the village of Thasos, there was only 1 out of 11 boys who had caries-free deciduous teeth, and only 1 out of 15 girls. On the other hand, if we consider the permanent teeth alone, there were only 2 out of 11 boys and 6 out of 15 girls who had any decay at all at this same age. A relatively better permanent dentition was also observed in older children, even in the village of Panagia, which was supposed to be among the worst in Greece with regard to dental caries. Thus, at the age of 12, there were 3 out of 9 boys and 4 out of 14 girls with sound permanent teeth, with a total average of only 1.6 and 2.3 carious permanent teeth in the boys and girls, respectively. This means that on an average, only 2 of the generally very caries-susceptible six year molars had become decayed after six years of exposure in the oral cavity. In the deciduous dentition of the same age group, all except 2 of the total of 32 children had caries by the seventh birthday, i.e. after a similar exposure time in the mouth. Some of these youngsters had as many as 9 deciduous teeth completely destroyed with a total average of 4 decayed and missing teeth per seven year old child. In the village of Panagia the average number of carious deciduous teeth was 4.1 in six year olds, 3.8 in seven year olds, and 3.6 in eight year olds, suggesting an increase in decay in the youngest group, i.e. children born in 1942. In this youngest group, every child had carious deciduous teeth in both villages surveyed.

A few height measurements were made of the children on this island because they appeared either undernourished or retarded in development. When plotted against the standards worked out by the Harvard School of Public Health, it was found that the measurements of these children at the age of 7 were below 3% of the above standard, rising to about the 10% level at the age of 11. Height-weight measurements, obtained from other sources in Greece,³ showed also that they were nearer the 10% level, rather than the average 50% level from the Harvard School of Public Health standards. It was obvious that a calorie deficit existed in many places.

From a dental standpoint, one of the most interesting communities

³ Miss Tsongas, personal communication.

which I had the opportunity to visit during my stay in Greece was the town of Lavrion. This little town of about 5,000 is situated south of Athens. Almost 20% of its population succumbed to starvation during the German occupation of 1941-1942. In Lavrion, every child that has grown up locally has very definite clinical evidence of mottled enamel. They receive their water supply from a well 35 meters deep, and two water samples brought to the U.S.A. were found to contain 3 parts per 1,000,000 of fluorine (see Table 6). Examination of some 100 children in this town showed that below the age of 13, the teeth were essentially free from dental caries of an acute or severe character. Several Greek doctors have taken an interest in this community, but so far very little, if anything, has been published from the surveys. Through the kindness of Dr. Mavrokordato, my interpreter in Athens, I was able to obtain some figures which he and his group have collected on the caries incidence in this community. Among 273 children, six to twelve years of age, they found mottling in 93% and caries in only 4.7% of the children, counting the permanent teeth only. Among 118 children aged twelve to eighteen, they found 94% with mottling and 21% with caries. If some questionable pits and fissure lesions were added, the figures would be increased to 14.2% and 39.1%, respectively, which is still an extremely low figure at these ages. In Athens where they had examined a similar number of children of similar age groups, the comparable caries frequency ranged from about 60% to 70%, which is 2-3 times as much as in the town of Lavrion.

A report by Miss Tsongas, nutrition consultant to the Greek government, suggested that on Gavdos, the southernmost Greek island with a population of 300, only one child, thirteen years old, had obvious cavities in the teeth. Between Thasos Island in the north and Gavdos in the south are numerous communities still untouched by dentistry, but needing its services to an as yet unknown extent. On the whole it seems that Greece would be a goldmine for further carious surveys, nutritional studies, and studies of water supply, etc., in connection with the problem of dental decay. Such surveys should not be postponed to the day when it will be too late, which, as suggested by Table 1, may not be very far off.

TABLE I
DEVELOPMENT OF CARIES IN ADULT GREEKS

<i>Period examined</i>	<i>No. of teeth examined</i>	<i>Percentage of teeth found carious</i>
Protohellenic: before 2300 B.C.	96	0.0
Prehistoric: 2300 B.C.-1700 B.C.	706	7.9
Hycenean: 1700 B.C.-700 B.C.	724	8.4
Classical: 700 B.C.-300 A.D.	518	9.9
Medieval: 300 A.D.-1300 A.D.	63	20.0
Recent and present times:	3,801	48.0

TABLE 2
AGE DISTRIBUTION OF CARIES IN MODERN GREECE

<i>Number examined</i>	<i>Age</i>	<i>People with caries</i>	<i>Carious permanent teeth</i>	<i>Carious permanent teeth per individual</i>
		(%)	(%)	
3000	10	87	20	3.5
1000	21	97	27	7.6
1000	41	99	48	12.0

TABLE 3
COMPARISON BETWEEN PREWAR AND POSTWAR
DENTAL CONDITIONS IN ATHENS PUBLIC SCHOOL NO. 12

<i>Year of examination</i>	<i>No. of examined children</i>	<i>Age</i>	<i>% children with caries*</i>	<i>% of carious perm. teeth</i>	<i>No. of car. perm. teeth per child</i>
1936	206	10	86	17	2.6
1946	140	10	84	16	2.5

* permanent teeth only

TABLE 4
CARIES INCIDENCE IN DISTRICT OF KARDITZA, GREECE, 1940

<i>Age</i>	<i>Dentition</i>	<i>% children with caries</i>		<i>No. of carious teeth per child</i>	
		<i>boys</i>	<i>girls</i>	<i>boys</i>	<i>girls</i>
7-9	Deciduous	74.64	70.0	3.8	3.6
7-9	Permanent	9.3	17.4	2.0	2.0
10-13	Permanent	26.8	31.1	2.2	2.5
14-18	Permanent	51.3	74.7	3.4	4.8

TABLE 5
CARIES FREQUENCY OF DECIDUOUS TEETH OF 6 YEAR OLD CHILDREN
IN POSTWAR GREECE (FROM COUMOULOS 1948)

<i>District</i>	<i>No. of schools</i>	<i>No. of children</i>	<i>% of children with caries</i>	<i>% carious teeth</i>
Volos	12	451	71.6	29.2
Piraeus	18	293	78.1	25.2
Athens	25	678	78.2	28.0
Athens districts	16	603	63.3	18.9
Total	71	2,025	73.6	25.2

TABLE 6
ANALYSIS OF WATER SAMPLES COLLECTED DURING THE UNITARIAN SERVICE
COMMITTEE MISSION TO GREECE AND ITALY—APRIL-MAY 1948*

<i>Source of water samples</i>	<i>Total p.p.m. dissolved solids</i>	<i>Calcium p.p.m.</i>	<i>Magnesium p.p.m.</i>	<i>Fluorine p.p.m.</i>
<i>Continental Greece</i>				
Town of Lavrion (deep well)	1340	60	20	3.56
City of Athens (tap water)	540	42	7.2	.04
<i>Thasos Island</i>				
(spring water)				
Panagia Village	228	41	12.5	.00
Thasos Village	168	33	8.8	.00
Naples, Italy (tap water)	260	49	5	.16

* The chemical determinations were kindly carried out by Mr. L. Rubin, chief chemist, Massachusetts State Water Laboratories, Boston, Mass. (Values expressed as parts per million.)

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The only Greek dental school, located in Athens, was set up to handle approximately 50 students, and there are now 1800 enrolled. Equipment is practically nil, and students cannot buy their own because it is too expensive or not available.

The dental staff consists of four dental professors and about eight professors from the medical faculty who teach some anatomy, histology and similar courses. Administration is rendered difficult by the fact that the medical members outnumber the dental members of the staff. I feel that the dental school should be independent of the medical faculty.

The two professors of oto-rhino-laryngology on the faculty of medicine are scientifically well up to date. Professor Dimitriades was trained in Vienna and has his clinic at the Red Cross Hospital; Professor Xrisikos received his training in Paris and his clinic is at the Hippocraton Hospital.

I was invited to visit also the Blue Cross Hospital, a private clinic for oto-rhino-laryngological patients. In contrast to most public hospitals, this one seems to be supplied with modern equipment. To qualify as a specialist in oto-laryngology, a recent graduate has only to attend a clinic in the specialty for two to three years.

Bronchology in Greece is still in an embryonic stage, not only because of a lack of instruments and other facilities, but also because of a lack of knowledge and real interest. A few men do a minimum

of bronchoscopies, mainly for the removal of foreign bodies.

Other fields of oto-laryngology are in their very early stages or non-existent, such as the problem of deafness, the study of allergy, anesthesia in operations of the upper respiratory tract, etc. In many places tonsillectomies and adenoidectomies are performed in small children without any anesthesia. Operative medications are inadequate and there is little follow up. Medicine is given by needle. No occupational therapy is provided for patients hospitalized over a long period of time. Asepsis in surgical operations is not very well taken care of, and too much is expected of chemotherapy. Plastic surgery is practically unknown in Greek hospitals. Very little is done, and what I saw of it was poor.

Maxillo-facial surgery is well represented by Dr. Mavrokordato, who is a graduate of and former instructor at Columbia University in New York. Although not connected with the University of Athens, he is a maxillo-facial consultant and surgeon for the Greek Army and has a clinic at the Evangelismos Hospital.

There is no dental school at Salonika, but there is a dental society of Salonika and northern Greece. Seventy-five per cent of the members of this society were present at our lectures. They had been completely cut off from outside contacts for practically ten years and were eager to learn about new developments. There are about 125 dentists in that region. Their equipment is limited. For example,

in Salonika there is only one dental x-ray unit, and none in hospitals or clinics. The society has started to organize a small library, and books and scientific journals would be most welcome.

Different labor unions or trade groups have established dental clinics in the city as part of a general out-patient clinic for the members of the various trades and their immediate families.

In Athens the dental profession seems to be divided into two groups. The Hellenic Stomatological Society includes most of the American and European trained dentists. They are well informed and hold regular meetings and discussions, in some of which we participated. The other group includes mostly Greek trained dentists. There does not seem to be much cooperation between the two groups.

ITALIAN PHASE

DR. PAUL D. WHITE, Clinical Professor of Medicine, Harvard Medical School, Boston, Mass.

The Italian phase of the work of the Medical Mission was brief and sketchy in contrast to the Greek phase, but it was, nevertheless, worthwhile. Its chief value lay in helping to re-establish friendly relations between the medical professions of Italy and the U.S.A. which had been interrupted for a period of five to ten years.

Because of the brevity of our stay in Italy, we were unable to study in detail either medical education or health conditions in the country. The one great difficulty with the medical schools that we saw in Italy (in Rome, Naples, Turin, Bologna and Florence) was the over-crowding with students, as it was in Greece. There were at least five times as many students as there was adequate provision for. Everywhere the faculties were cognizant of this unfortunate situation, but declared that they could do nothing about it because it was a political impasse for the time being. In general, the professors and their staffs seemed able and energetic, but still

handicapped by the old continental traditions that prevent satisfactory cooperation between various departments and clinics and establish a great gulf between the professor and his students. There is naturally a gap of several war years in medical advances and in foreign medical literature, as there was also in Greece. Many of us came to realize that we in the United States have been neglectful of Italian medical literature during the past generation, probably more than they have been of ours. In fact, we have paid more attention to the great Italian medical exploits of the time of the Renaissance than to anything medical that has happened in Italy in modern times.

We visited in particular two types of hospitals, the large "poli-clinicos," covering all fields of medicine and surgery and containing upwards of 2,000 to 3,000 beds, and the large government hospitals and sanatoriums for tuberculosis, such as the handsome Forlanini Institute with its wonderful anatomical mu-

seum at Rome. Most of the hospitals were fairly well equipped, much better than we had found in Greece, and although by no means adequate, the nursing staffs were also better trained and better filled. The Catholic Church sisters are apparently gradually being replaced by our type of trained nurse.

Health conditions in Italy seemed reasonably satisfactory so far as we could judge during our short stay in the country, especially in view of the serious situation that had existed there three years ago. There was very little evident malnutrition, and the only outstanding health problem was the considerable increase of tuberculosis following the recent war. It is said that now the incidence is again decreasing. As in Greece, we saw

many cases of tuberculosis meningitis, in the treatment of which streptomycin has proved of some definite value. Cardiovascular diseases appear to be much the same in frequency and in type as in the United States; rheumatic heart disease is fairly common.

During our stay in Italy we contributed some information by lectures and conferences, and we left over 100 recent American medical books, mostly in Rome and Bologna. Finally, as I had done in Athens, I demonstrated and left an excellent new direct writing electrocardiograph, the Sanborn Visocardiette, at the Policlinico in Rome, where much instruction and research in electrocardiography are carried out.

DR. CHESTER M. JONES, Clinical Professor of Medicine, Harvard Medical School, Boston, Mass.

The medical situation in Italy appeared to be better than that in Greece. In the first place, Italy, although in the process of reconstruction, was essentially at peace, and had made definite and important strides in recovering from the effects of the war. In the second place, excellent medical traditions had been established for centuries in various Italian university centers. Although the time spent in the Italian universities and clinics was compressed into a fairly short period, my feeling was that the general standard of academic medicine was distinctly better than that encountered in Greece as regards organization, traditions and personnel.

As far as equipment was concerned, there could be little doubt

that many of the Italian institutions were housed in superior buildings, with very adequate or fairly satisfactory arrangements for the treatment and study of disease. The tuberculosis hospitals in Naples and Rome (Piedmont and Forlanini) were two superb buildings, housing 2,000 and 3,000 patients respectively. They were well equipped, and in the Forlanini Institute, not only was the entire collection of the anatomical museum excellent, but here we saw also well-equipped and well-run animal farms for experimental and laboratory work. The buildings at the Policlinico, attached to the Medical School of the University of Rome, were, for the most part, older, but were in good general condition and compared well with the average

continental hospital. In Bologna, the buildings were well constructed, and one building housing private patients was extremely well planned and equipped. The buildings at the University of Florence were not entirely completed, but were largely of recent construction, with much projected building, the erection of which had been interrupted by the war. Here again the planning was good and quite adequate for a reasonable number of medical students. Laboratory facilities were available, with the possibility of some good animal and bacteriological work. Some very fine equipment for precise scientific investigation was available, but throughout the institutions that I visited there were many gaps resulting from the loss or wearing out of equipment, which had not been replaced. This applied also to x-ray films, x-ray tubes, medical supplies and the like. Library facilities were fairly adequate, but showed many gaps because of the absence of periodicals from various countries during the war years. At the time of our visit, there was still a lack of American and English literature because of the inflation and devaluation of the lira.

Judging from discussions with medical men, there appeared to be less interest in the application of physiological principles to medical and surgical problems than there is in this country. This is, I think, a general and fundamental difference between continental and American medicine at the present time.

The situation as regards students was similar to that noted in Greece. The actual load was out of all proportion to the facilities for teaching, with the result that, for the

most part, teaching had to be didactic in nature in order to cover the material. In Rome, for example, there were said to be something like 6,000 medical students. There was overcrowding also in Bologna and in Florence, although the situation was somewhat easier in the latter two cities, and attempts were being made to correct it. In Florence there were 500 students in medicine.

The same difficulty as regards faculty salaries was true in Italy as it was in Greece. Budgetary appropriations were also on a very low scale. In those instances where the preclinical professors were not men of independent means, it was impossible for them to maintain themselves solely on university salaries, to the detriment of their department work. The clinical men and heads of departments were financially independent because of large private practices.

I am sure that the physicians that I had the opportunity to meet in Italy could do excellent work if they were not so pushed by the duties attendant upon an overload of teaching and some of the physical difficulties extant in the post-war period. For example, the excellent new Manaldi Procedure was being used in Naples, Rome and some other centers for the drainage of tuberculous cavities in the lungs. This method, originated in Italy in recent years, had been developed to a very high degree. Fundamental work in malariology had been done in Rome, which was not even known in this country.

Sanitation still left much to be desired, except in the homes of the wealthy, the luxury hotels and some of the hospitals. Malaria appar-

ently had been very successfully attacked. Tuberculosis still was a big threat. Poliomyelitis had been of real importance, at least during the past year. Physiotherapy and group training were understood to some extent in various institutions. We saw good examples of this in the Forlanini Institute and in the poliomyelitis institute outside Rome. On the other hand, excellent physiotherapy and occupational therapy as we understand it in this country lacked properly trained personnel.

The general nutrition of the patients in Italy was undoubtedly better than that in Greece, but still left much to be desired. The well-to-do could get any quantity or quality of food they desired, but the average person had difficulty in obtaining really adequate amounts, except in the country districts, and I think the supply in the north was greater than that in the south, which seemed rather poverty stricken. Hygiene and nutrition seen in the streets of Naples was frightful.

In closing, a few comments might

DR. HARRY B. VAN DYKE, Professor of Pharmacology, Columbia University, College of Physicians and Surgeons, New York, New York

During our short stay in Italy, I visited Rome, Naples, Florence and Bologna. Lectures on antimalarial drugs and new drugs affecting the autonomic nervous system were delivered in Rome and Florence. Only the first lecture was given in Bologna and none was scheduled for Naples. The lectures were very well received, especially in Rome and Florence, where there was ample time for discussion with the professors and their staffs.

The medical curriculum in Italy

is similar to that in Greece, and the major educational problem is the tremendous number of students. The members of the teaching staffs whom I met are excellently qualified, but are hopelessly overburdened by the teaching load. Libraries and equipment appear to be good, and there is much enthusiasm for research.

There can be no doubt that we were favorably received, both in Greece and in Italy, wherever we went. I am sure that the tangible results of the Mission to Greece and Italy are still to be looked for in later months, but I believe that a real contribution was made during our stay abroad.

Some of the research institutes are especially fine. For example, Dr. G. Daddi's microbiological unit in the Forlanini Institute, a tuber-

culosis hospital in Rome, is excellent. The finest institute I visited is the Istituto Superiore di Sanita, directed by Dr. Marotta. Dr. Bovet heads the pharmacological division there, which has a scientific staff of about ten, of whom five are organic chemists synthesizing new drugs.

DR. ALWIN M. PAPPENHEIMER, JR., Associate Professor of Bacteriology, New York University College of Medicine, New York, N. Y.

As we had expected, conditions in the Italian universities were far better than in Athens and Salonika. Buildings, lecture halls and laboratories were nearly always in good repair, and in general, were fairly well equipped. Library facilities were usually excellent, and most of the men whom I met were familiar with recent advances in America and other western countries with respect to their particular fields. I met a number of younger professors and their assistants who were keenly interested in the theoretical and academic aspects of medical science, as well as in the more practical aspects. In Greece the greatest interest was always shown in the practical and technical applications of microbiology, and my most popular lecture was on the cultivation of tubercle bacilli. The Italians, on the other hand, requested lectures on subjects such as bacterial genetics, chemistry and pharmacology of bacterial toxins and on theoretical aspects of immunity.

The same fundamental difficulties exist in the Italian universities that we observed in Greece. The salaries of professors are inadequate, and the preclinical faculty members must engage in private practice in order to meet living expenses. The departmental budgets

Teaching and research in the medical sciences in Italy are rapidly recovering since peace was established. However, progress will not be great until some means of reducing the student body can be found.

are also entirely inadequate and barely cover teaching expenses. It is becoming extremely difficult to obtain funds for research of any kind.

There are far too many students, and for political reasons, the government is unwilling to allow the medical schools to limit their number. Departments are badly understaffed because of lack of funds and there are insufficient numbers of teachers to handle the large number of students. This results in a great burden on the professors. For example, Professor Margaria at the University of Milan is obliged to give oral examinations to some 1500 first and second year students in physiology and biochemistry.

There is a failure to recognize the importance of basic preclinical sciences and the laboratory in the practice of medicine. Thus, both biochemistry and microbiology are optional, and only 25%-40% of the medical students take these courses. No laboratory work is given in organic and inorganic chemistry. Those students who are interested in an academic career or medical research, work towards what corresponds to a doctor of science degree after completion of their regular medical training.

Finally, there is a lack of an effective

tive administrative branch in the universities.

In Rome the medical school now has some 6000 students, about 1000 per class. Before the war classes were limited to 150, and certainly the existing facilities were inadequate even for the pre-war number. I was informed that the situation in anatomy is poor because there is an insufficient supply of cadavers. In gross pathology the situation is better. The students see plenty of autopsies, since they are compulsory in Italy. The optional biochemistry and microbiology courses consist of two hours of lecture and one hour of laboratory work per week from November to June. The laboratories and lecture halls are excellent, but of course fail to provide space for the enormous number of students. Only 40-50 students can be accommodated at one time in the biochemistry and microbiology laboratories, and, therefore, at least five to six sections are required per class.

The chair of hygiene ranks much higher than that of microbiology. Microbiology consists merely of a study of the micro-organisms themselves. The infectious disease process, immunity and epidemiology are subjects dealt with in the Department of Hygiene and are not considered in the microbiology course, as is the case in the United States.

Dr. Cimmino, Professor of Microbiology, was a student of Quagliariello, Italy's most distinguished biochemist. His appointment is an interesting one, since it is in line with the recent tendency in this country and England to appoint biochemists to chairs of microbiology.

The laboratories in hygiene, mi-

crobiology and chemistry are well equipped, and work is actively in progress. However, much of the newer apparatus which we now regard as very desirable is still lacking, such as glass electrodes, Coleman and Beckman spectrophotometers, etc. In addition to laboratories for regular medical school courses, there are a number of smaller rooms in each department which provide space for eight to ten advanced students working for their theses.

The library is excellent and contains most of the American and British journals. Although the current numbers are coming in, the library is still missing numbers published during the war years.

One of the most interesting departments which I visited was that of the History of Medicine. The museum and library of ancient medical books, both built up by Professor Pazzini, must rank among the best of their kind.

I visited various other institutions in Rome, including the Poliomyelitis Clinic at Ariccia in the Alban Hills and the Forlanini Institute, an enormous 3000 bed tuberculosis sanatorium. The laboratory at Forlanini is very large and well equipped. A tremendous amount of culture work is carried out there under the direction of Dr. G. Daddi, bacteriologist in charge. Dr. Daddi, who before the war spent a year at the Rockefeller Institute, is doing first-class work on the development of resistance to streptomycin by the tubercle bacillus during treatment. He has a great deal of interesting data on the step-wise development of resistance and on rate of development of resistance as a function of dose, etc.

I did not visit the University of Naples, but spent the entire time there at the Istituto Seraterapeutico. The Institute is well equipped and appears to be efficiently run. It prepares diphtheria toxoid and antitoxin, tetanus toxoid and antitoxin vaccine and other biologic products. Diphtheria immunization is now compulsory in Italy. This measure has resulted in a marked fall in the rate of the disease during the last year or two. In Greece, however, there is a great deal of diphtheria and almost no immunization.

In Milan I visited the Istituto Seraterapeutico. Dr. Paulo Pauli is preparing large amounts of diphtheria toxin on the chemically defined medium of Mueller and Miller. He is also working on the factors necessary for tetanus toxin production on a simplified medium. Pauli expressed the view that scarlet fever is caused by a virus in obligatory association with hemolytic streptococci, possibly as a bacteriophage. I encountered similar opinions expressed regarding the virus etiology of scarlet fever several times during our stay in Europe. I found this view surprising, since I do not think the streptococcal origin of scarlet fever has been seriously questioned in our country

since the Dicks' work over twenty years ago. I also visited Dr. R. Deotto's laboratory at the Institute. His recent work has been on respiration of R and S variants of *E. coli*.

Dr. Margaria, Professor of Physiology and Biochemistry at the University of Milan, is interested in electroencephalography, but, with an extremely limited budget and an enormous teaching load, he is not able to do much. His departmental budget amounts to some \$1200 a year, which barely covers costs of teaching.

We were particularly well received at the ancient University of Bologna. The lecture halls are very modern and beautiful, and our lectures were well attended. The medical school has about 4000 students, including about 20 Americans. There are 20,000 students in the whole university.

There are about 1200 medical students at Florence. Dr. Davoli, Professor of Microbiology, is almost the only individual I met in Greece or Italy who is working on viruses. He is interested in influenza virus, and has been studying the effect of adaption of virus to different species and its relation to the specificity of the Hirst red cell agglutination reaction.

DR. EDWARD L. HOWES, Associate Clinical Professor of Surgery, Columbia University College of Physicians and Surgeons, New York, New York

At Rome thoracic surgery was being carried out, and general anesthesia was being given by a trained anesthetist. In all Italy, in fact, surgery is far advanced over that seen in Greece. Orthopedics, urology and plastic surgery are specialties, and the first is especially well

developed at Putti's Hospital in Bologna. Neurosurgery and thoracic surgery are still being done by the general surgeons. At Turin, for example, it was voted that neurological surgery should not be considered a specialty. In Rome and Milan there are special hospitals to

treat cancer. Unlike the circumstance in Greece, cancer is one of the main therapeutic problems. In Italy, as in Greece, peptic ulcer is the second most important problem. Fluid and blood therapy is well advanced. The surgery of inflammatory diseases is well cared for by antibiotics, and the present interest in this field in Italy, as in Greece, centers in the treatment of tuberculosis by streptomycin. It is said that the complication of middle ear disease is seldom seen, that the results are good, and that smaller and less frequent doses are given, chiefly because of the lack of supply.

Except for Rome, surgery in Italy is also done largely under local anesthesia. The surgeons work rapidly and complete difficult procedures in a very short time. Their work thereby seems to lack attention to details, and in general there appears to be less regard for the welfare of the patient than we are accustomed to.

There are many medical stu-

dents. About 30 of these, in Bologna and Rome, are Americans who were not accepted at home. The nature of the training of the student follows the continental system as does the training of the surgeon. The former have only minimal contact with patients, while the latter suffer a long and protracted service as assistants.

Clinical surgery has not advanced into the chemical and physiological phases as at home, but the anatomical and pathological components are at a high level. At Florence and at Turin fine laboratories are available. Until the war, the libraries of the Italian universities were excellent in all languages.

The physical plants are large and excellent and are rapidly recovering their organization of before the war. Progress of surgery is again well under way. Italian surgeons are very imaginative; they have the will and the genius to make advances and to contribute as they did before the war.

DR. ARTHUR R. ELVIDGE, Assistant Professor of Neurosurgery, McGill University, Montreal, Canada

In Italy the means, the equipment and the number of trained people are much greater than in Greece. The hospital buildings, for the most part, are very good and sometimes extremely fine. Although surgical equipment is not in abundance, it is sufficient, and x-ray equipment is adequate in most places and generally of Italian manufacture. Laboratories in the universities are lacking greatly in all types of experimental apparatus and equipment for teaching and research. However, I am told that

the departments require money rather than equipment, which is available if they had the money with which to buy it.

The Italian doctors are very interested in research and are working hard. They are anxious to renew their contacts with America, to send young men abroad to study and receive exchange students in return.

Students everywhere are very numerous. In Rome there are six times as many medical students as

before the war, about 1000 to 1500 per class. In Bologna there are about 3000 medical students in the six years, and in Naples there are also great numbers of students. However, the over-crowding will probably lessen.

In Italy one finds the transition phase from that of the general surgeon who does some neurosurgery to the well-trained specialist in neurosurgery. The general surgeons still cling to this specialty where possible, just as they did not long ago in America. But I believe that neurosurgery will eventually develop into an important specialty in Italy, as it has in America. The most significant sign of this development is in the recent formation of an Italian Society of Neurosurgery at Turin. This is a limited society, initiated by nine members who represent the best in specially trained Italian neurosurgery. The members are located in Turin,

Rome, Milan, Genoa and Bologna.

Dr. Milletti is a young neurosurgeon at Bologna who has done good clinical research. He also has organized a good neurosurgical department in the Department of Neurology and Psychiatry at Bologna. The Professor of Neurology and Psychiatry is interested in electroencephalography. He lacks funds for electrical equipment, etc., but his institute has 150 beds, and he has space for research.

The most important contribution to Italy from the medical point of view would be the exchange of students and the holding of international meetings together with a general exchange of information between the professors and doctors. It might be worth while, also, for some of our young men to work here in selected institutes, such as the Orthopedic Institute of Rizzoli in Bologna.

DR. ROBERT D. DRIPPS, Associate Professor of Surgery (Anesthesiology),
University of Pennsylvania, Philadelphia, Pa.

In Italy there is the beginning of medical anesthesiology as we know it in America and Britain. Tosotti and young Valdoni in Rome, Ruggero in Naples and Cura in Milan have all received training in other countries (England and Switzerland), and have returned to their respective university hospitals. These men will form the nucleus of the specialty in Italy if they receive sufficient encouragement from the university faculties. Our visit helped in this regard, since it called attention to the value of anesthesiology and the regard held for the specialty in the United States. In Bologna there is

no one particularly interested in the field, and I believe that this university will lag behind as far as anesthesia is concerned.

In Florence Professor Antonio Comoli, Director of Surgery, is interested in research and is a careful worker. He expressed the desire to found a new medical journal which would publish carefully screened and edited articles. A young assistant at Florence, Dr. Aldo Bolletti, is interested in anesthesiology. He has adequate equipment, subscribes to American anesthesia journals, and with help can develop into a creditable specialist. This university is alert and progressive. It de-

serves encouragement and support.

I should say that the recognition of the need for physicians trained in anesthesia exists, and that, contrary to Greece, something has been done about it. Many more individuals are needed, however. I hope that our visit will provide a stimulus to the medical profession in this direction.

The actual practice of anesthesia in Italy leaves much to be desired. The patient is not regarded primarily as a human being, and, hence, relief of pain is less important than it is in this country. There is no anesthesia for childbirth, nor for tonsillectomy in young children, for example. Open drop ether is most common, but it is administered without regard for oxygen lack or carbon dioxide accumulation. In short, physiological principles of anesthesia are neglected. Supportive therapy during operations is uncommon. No anesthesia records are kept, nor has any post-operative follow-up been instituted. Anesthetic complications cannot, therefore, be analyzed.

As is common in Europe, regional anesthesia is highly developed, and many major procedures are attempted with such techniques. The needles are crude, the aseptic technique is poor, and the inhumanity of repeated needle punctures is unrecognized or ignored. Spinal anesthesia is used sporadically, but again with no attempt at analysis of complications. I saw one patient whose spinal cord was punctured by the needle at the level of thoracic 8.

Unfortunately, the chief surgeon is the absolute ruler in many clinics. No one dares question him; his

word is final. It is an unhealthy condition, for it tends to eliminate self-questioning and progress. In general, however, there is more vitality to the medical profession in Italy than in Greece. Research is being carried out. There are many young professors on the faculties, and they are eager to visit the United States and to develop themselves. Moruzzi leaves this summer for one year at Northwestern in neurophysiology and Margaria, physiologist at Milan, also leaves soon for a year at Yale.

I believe that Italian medicine needs much less support than Greek medicine, but that with a given amount one could undoubtedly accomplish more in Italy than in the latter country. Since the liberation many of the scientists have experienced their first freedom of thought as well as of action. With proper direction, Italy should soon move ahead and contribute to the world's knowledge as it has done in the past.

The problems of medical education were similar to those in Greece, but less acute. The schools all have large, rather impressive physical plants. The hospitals are large and have ample space for teaching, practice and research. Equipment is needed, as are also funds for the maintenance of laboratories.

There are far too many medical students. These have been admitted through laws originated by the Fascists to make entrance easier for the "average man." This fault is recognized, and the examinations are now more difficult; students are being failed, and within a few years the situation should improve. Unlike Greece, there are some laboratory courses for the stu-

dents. Unfortunately, there are still too many didactic lectures and there is too little bedside training.

The responsibility for appointing medical school professors has been transferred from the government (Ministry of Public Instruction) to the medical faculties. When a professorship becomes vacant, a committee of five professors is elected by a majority vote of all the medical school professors, each one in Italy being eligible to cast a bal-

lot. This committee judges the qualifications of the applicants and rates them according to ability—1, 2, 3, 4, and 5. The medical school involved must select its new professor from the first three, ranked as above.

We saw better medical libraries in Italy than in Greece. There were current periodicals in most libraries, and fortunately, students were apparently permitted to use these facilities.

DR. EDWARD L. PRATT, Senior Fellow in Pediatrics, National Research Council, Yale University, New Haven, Conn.

Medical education in Italy is poor because of several factors. The number of medical students per class is far too large to allow for training in the laboratory or clinical aspects of medicine. The chief method of teaching is the lecture system with little or no opportunity to deal with patients. The autonomy and apparent lack of cooperation between departments within the university, and also between universities, limit the coordination of various aspects of medical teaching and research. Frequently good work being carried out in the basic sciences is not being mentioned in clinical teaching.

The lack of an adequate interne and resident system to provide supervised hospital training is all the more serious because the medical students have practically no contact with patients during school work. There is also great need for postgraduate education involving hospital work with patients to bring practitioners up to date in recent techniques and newer therapeutic agents.

There is a need throughout Italy for a great deal of general education and publicity in the interests of improved medical care, not only curative medicine, but especially health supervision and disease prevention programs. Ignorance of the advantages of medical care and fear of doctors and hospitals are widespread in Italy and deprive many people, particularly children, of the facilities available. For instance, the poliomyelitis sanatorium at Ariccia had only one half its capacity utilized because parents would not leave their handicapped children there. A large public demand for better medical care, which can come only from better medical training, is probably necessary to change the existing university system.

There was little opportunity to observe much of pediatric practice, but it is evident that the excessive number of doctors being turned out cannot help but produce a very acute competitive aspect to practice, with the result that the best men will not be attracted to prac-

tice, and that the temptation for unethical procedures will be greatly increased. The abuse of drugs, polypharmacy and the widespread use of subcutaneous medications are prevalent. The lack of fundamental clinical investigative work contributes to the isolation of clinical medicine from the basic sciences and delays the application of discoveries in other fields to the treatment of patients.

Physical facilities in the hospitals seemed quite adequate, except as regards equipment for prematures and functioning laboratories for either routine or research measurements. It is difficult to appraise the quantity and quality of nursing. The mothers who remain with the smaller infants probably contribute to the nursing care.

Italian medicine has not been completely isolated from the rest of the world, and apparently many professors read journals and texts from England and America. The libraries were more complete and up to date than in Greece.

Undoubtedly reflecting the serious social and economic disruption of the country as a whole, especially in the rural areas, is the large amount of tuberculosis. It is the major pediatric disease, and a large proportion of pediatric beds are devoted to miliary and meningeal tuberculosis. Much valuable information regarding the best program of therapy for these patients might be obtained if a more co-operative system of comparing results among the various clinics were in effect.

DR. REIDAR F. SOGNAES, Associate Professor of Dental Medicine, Harvard School of Dental Medicine, Boston, Mass.

In Italy dentistry is taught as a two year extension course after six years of medical training. If this were consistently required, it would seem like a fine system that should result in a uniformly high professional standard. There is, however, a wide range of quality within the dental profession in Italy. There are a great many who practise dentistry without medical or dental training, but who may be classed as dental mechanics. Some of these men are associated with doctors, running the surgical part of the practices. Furthermore, it is not compulsory for the physicians who want to practice dentistry to take any course in dentistry, and those who do attend the two year dental course, offered by several of the uni-

versities, suffer from the lack of teachers and facilities for specialized dental education. An Italian dentist estimated that approximately 10% of all medical school graduates plan to practise dentistry, either as their full time work or as part-time work to supplement their incomes.

At the present time there are extension courses given for M.D.'s in dentistry at the universities of Naples, Rome, Bologna, Milan, Turin and Florence. At each of these schools there are from 25 to 200 M.D.'s being trained in dentistry.

Some of the first measures to be taken to make the dental profession in Italy of a more uniform quality

would be legislation to prevent technicians and untrained physicians from practising dentistry, improvement of existing facilities, modernization of dental equipment, and increase and improvement in the staff of teachers at the dental schools. In the latter connection it may be very helpful if some young Italian doctors could come to the United States and be affiliated with American dental schools for a year or so.

In contrast to the group which practises dentistry with inadequate training, one will meet in Italy a great many eminent members of the dental profession, men who have a very broad education and a very sincere interest in and profound knowledge of dental problems. In Naples I was fortunate in meeting four brothers, all dentists and the sons of a dentist, by the name of DeFazio. They have an office together and divide their interest among the fields of orthodontia, prosthesis, operative dentistry and oral surgery. One of them is professor at the dental clinic of the University of Naples, and they are all engaged in research activities.

Likewise, I was impressed during the International Congress of Stomatology in Milan by the high standard of the presentations given. Here we met the top members of the dental profession in Italy, professors from various universities who took a very active part in the discussions of several basic questions. Following one of my lectures on fluorine, I was impressed by their up-to-date acquaintance with the problems and their cautious attitude towards the application of

fluorine to dentistry at the present stage.

While in Rome I had the opportunity to look over quite closely the two dental institutions there. The Eastman Dental Dispensary, one of several clinics built in Europe by George Eastman of Rochester, New York, is without doubt the best equipped and most outstanding dental institution in Italy. But it is no longer limited to work on children, for which purpose it was originally planned. They have removed all but 10 chairs from the main children's clinic and have divided them over various smaller rooms for different specialized purposes, such as orthodontic work, periodontal work, prosthesis and surgery. In these various departments dentists are taking specialized work on a part-time basis to boost their training and practice.

In contrast to this clinic I found the university clinic, the Clinica Odontoiatrica, very poorly equipped. Here M.D.'s are trained for dental practice. The condition of this clinic was not much better than the dental school in Athens. It had a few very old dental engines, and the chairs and cuspidors needed to be replaced.

I was informed that in Italy there are two regions with dental fluorosis: one near Naples, Marigliano, and one near Rome, Campagnano. In regard to the question of fluorine, I was told by the Director of the University Clinic at Rome, Dr. Benagiano, that they are carrying out a large scale study on the effect of topical application of fluorine on 2,000 children. From their results he felt that the treatment was not as efficient as had been indicated in American reports. A similar

statement was given to me by some of the Swiss dentists, who also have followed this work with interest.

This cautiousness, I think, is a healthy attitude on the part of the Italian dental profession.

DR. HERMAN DE WILDE, Associate in Clinical Dentistry, Harvard School of Dental Medicine, Boston, Mass.

Italy seems to have suffered much less than Greece from the burden imposed by war. The equipment of the hospitals is fairly adequate, and buildings have not suffered much.

A medical degree is required to practise dentistry, but a medical man does not have to attend dental school to have the right to practise the specialty. To obtain the title of "specialist," however, he has to attend a two years' dental course after obtaining his M.D. degree. At the end of two years he presents a thesis. The faculty consists usually of one professor and a teacher in prosthesis, surgery, orthodontics and operative dentistry, plus a few assistants and demonstrators. The number of students varies. Most of the schools have wards for facial surgery cases. For example, in Florence there are 16 beds for such cases. At the Eastman Clinic in Rome we saw a ward with maxillo facial cases, all casualties from the war.

The school in Florence had been destroyed during the war and just been rebuilt. The library is practically nil. The teaching staff consists of four professors and two instructors. The clinic has 14 chairs and 48 students. Gifts of books and

literature would be very welcome and really appreciated here.

The school at Bologna suffered very little from the war. It seems to be well staffed and equipped and has the greatest number of students of all the Italian schools.

In Italy the medical and dental professors are much better acquainted with American scientific literature than in Greece, and many international meetings took place in Italy during 1948. At the time of our arrival in Rome, the International College of Surgeons was meeting there, and we arrived in Milan in time to participate in the International Congress of Stomatology. This meeting was extremely interesting and of a high standard.

Pediatric oto-rhino-laryngology seems to be well up to date in Rome. At Bologna Professor Caliceti is the head of the oto-rhino-laryngology clinic and also the dean of the Italian teachers in this field. His younger staff members are required to read and study foreign medical literature.

The contacts we made in Greece and Italy are already bearing good results. Exchange of mail has started requests for information on scientific data.

Official Comments

2832 South 24th Street
Lincoln, Nebraska
December 3, 1948

Dear Mr. Bragg:

Please permit me at this late date to express my appreciation for the medical mission which you organized and sent to Greece during the time I was serving as Chief of the American Mission for Aid to Greece.

Your mission was very effective from the medical standpoint and was deeply appreciated by the medical leaders and by the people of Greece. Much good will continue to be felt for years to come.

In addition to its medical importance, I wish to assure you that your mission also had a very fine and wholesome effect on the spirit of the people of Greece. During the long years of occupation by the Germans, Greece had been cut off from the world, and the coming of the outstanding American doctors told the Greeks that they were again part of the civilized world. It revived their hope for the future — and hope is a precious element in the reconstruction of Europe.

Please extend to Dr. White and all members of the mission my very kind regards, and accept for yourself and the members of your committee my sincere thanks. May your work continue.

Sincerely yours,

DWIGHT GRISWOLD

Mr. Raymond B. Bragg,
Executive Director,
Unitarian Service Committee,
9 Park Street
Boston, Massachusetts.

Appraisal of the Unitarian Service Committee Medical Mission to Greece

By O. F. HEDLEY, *Medical Director, U.S.P.H.S.*
Director Public Health Division, ECA-MG.

THE UNITARIAN MEDICAL MISSION to Greece was an international goodwill expedition which resulted in much good to this war torn country. Let us briefly enumerate some of their major achievements during their stay in Greece.

First, it provided a badly needed inspiration to the medical profession. The well trained Greek physicians were stimulated and the others awakened to the realization that they must bestir themselves to the limit of their medical acumen or be lost in the passing parade of the world's rapidly advancing scientific knowledge. Practically all of the doctors were profoundly grateful that representatives of the medical profession of the United States came "to share their good luck" as Dr. Paul White so aptly described it.

Perhaps to even a greater degree the medical students were inspired. The democratic manner of the American physicians made a deep impression on the medical students. As a result of the close relations between the American professors, Greek professors and medical students it is apparent that students occupy a somewhat higher niche than prior to the coming of the Unitarian Medical Mission.

The Unitarian physician group has brought about more thought and interest in the University Medical School. At every opportunity they stressed the value of support to the School by the public, University professors and particularly the general medical profession.

The books and medical apparatus brought much approbation. The Greek medical profession appreciated the spiritual and educational gifts but still are more impressed with tangible expressions of good will.

The Mission in general helped develop an international feeling of goodwill among the professional people of Greece and the general public.

It will be well to enumerate a few of the excellent features and also suggestions for future missions of this kind.

First, it is a good idea to have as chairman a physician with such a wide reputation as Paul White. Everyone seemed to know about him and his writings. Mr. Fred I. Cairns made an excellent Executive Chairman. These two as well as the remainder of the Group worked incessantly to insure the success of the project.

The lecture schedule should be somewhat lighter to allow more time for ward rounds and conferences between the physicians of the two countries concerned.

Panel discussions were an innovation that drew much favorable comment.

In future missions, the Executive Chairman should be sent a full month ahead of the group. It would also be well to check carefully on the schedule so that holidays such as the Easter season in Greece would be avoided.

Certain specialties that a country needs particular consultation should be determined more accurately prior to the sending of a mission, e.g. orthopedic specialist would be of great value in the project in Greece.

All in all, the Unitarian Medical Mission was an outstanding success from the professional view as well as the international fellowship that it engendered.

COMMENTS OF GREEK PROFESSORS

(Excerpts from letters written by Greek doctors to DR. ERWIN KOHN, Director of Medical Projects of the Unitarian Service Committee, and to the Dean of the Medical Faculty of the University of Athens.)

Dr. N. A. Michaelides, *Professor of Microbiology, University of Athens:*

"Allow me to congratulate you on your wonderful idea of sending professors and doctors to our country.

"Most of the subjects dealt with by our American colleagues were known to us, but the details, which were so carefully expounded by the doctors, included new and interesting information."

Dr. I. Katsaras, *Professor of Clinical Pathology, University of Athens:*

"I believe that the Medical Mission of the Unitarian Service Committee was a complete success at the Medical School of the University of Athens.

"I, personally, shall remember especially how clinical pathology is taught in the United States. This was demonstrated to us by two famous professors, White and Jones, in their panel discussions. In fact, I had the great honor of being able to take part in the discussions dealing with the clinical pathology of different cases. This method of teaching proved very beneficial to the auditors as well as to the participants, since both parties joined in the discussions. I sincerely hope that this system of teaching will be introduced into our medical school."

Dr. I. Anagnostou, *Director of the Institute of Pathological Physiology:*

"The lectures delivered to the Greek medical profession dealt with the latest developments in medicine and gave us a clear picture of how research work is carried on in the United States.

"The panel discussions on clinical pathology, held by Drs. White, Jones, Howes, van Dyke, Gerard and Pappenheimer, were something altogether new to us and were followed by all with great zeal, profit and interest."

Dr. G. Ioakimoglou, *Professor of Pharmacology, University of Athens:*

"The greatest profit that we derived from the lectures was that they gave us the opportunity to become better acquainted with our American colleagues. This friendly personal contact with the American doctors was very precious to us. In addition, our students had the opportunity to attend the lectures which were really beneficial lessons given to them by American professors.

"I believe that it would be more profitable if the next visiting mission could stay longer in this country, so that the members of the mission could have a chance to demonstrate their theoretical courses in our laboratories, albeit they are poor in supplies and equipment."

Dr. V. Vlassopoulos, *Professor of Chemistry, University of Athens:*

"I take great pleasure in saying that all the lectures given by the Medical Mission of the Unitarian Service Committee last April and May were extremely successful, because they were based on the most modern discoveries of medical research in America. Their contribution to the cultural relations between America and Greece was tremendous."

TABLE
OF
MISSION ACTIVITIES

	GREECE	ITALY	TOTAL
Lectures	105	47	152
Confer- ences	129	52	181
Ward rounds	107	49	156
Surgical operations	10	1	11
Teaching films	8	5	13
Individual patients and misc.	166	6	172
Total	525	160	685

CHRONOLOGY OF MEDICAL ACTIVITIES

FIRST PHASE — GREECE

ATHENS

APRIL 19, MONDAY

- 9-10 DR. PAPPENHEIMER, Conference with Prof. Michaelides.
DR. WHITE, Lecture, "Congenital Heart Disease," at Laikon Hospital.
DR. GERARD, Visit to Microbiological Institute.
DRS. SOGNAES, DRIPPS, DE WILDE, ELVIDGE and HOWES, Ward Rounds, Laikon Hospital.
- 10-11 DR. HOWES, Lecture, "Preservation of Anal Sphincter in Operation for Carcinoma of the Rectum" at Laikon Hospital.
DR. SOGNAES, Visit to Microbiological Laboratory.
DR. PAPPENHEIMER, Lecture, "Bacterial Nutrition."
- 10-12 DR. WHITE, Ward Rounds, Laikon Hospital.
- 11-12 DR. GERARD, Conference at Microbiological Institute.
DR. DRIPPS, Ward Rounds with Dr. Manos, Evangelismos Hospital.
DR. ELVIDGE, Ward Rounds, with Dr. Patrikios, Evangelismos Hospital.
DR. HOWES, Conference with Greek Professor.
DR. DE WILDE, Visit to University of Athens.
DR. VAN DYKE, Conference with Prof. Pangalos and Prof. Ioakimoglou.
- 12-1 DRS. DRIPPS, HOWES and ELVIDGE, Ward Rounds, Evangelismos Hospital.
- 1-3 DRS. DRIPPS and ELVIDGE Witnessed Operation by Dr. Manos, Evangelismos Hospital.
- 2-5 DR. DE WILDE, Visit to Dental School with Dr. Papandoniou.
- 3-4 DR. WHITE, Visit to Red Cross Hospital.
- 4-5 DR. VAN DYKE, Conference with Dr. Michail and Dr. Contargyris.
- 5-6 DR. VAN DYKE, Conference with Dr. Maltesos.
- 6-7 DR. GERARD, Lecture, "Excitation and Inhibition."

- 7-8 DR. ELVIDGE, Lecture, "Fracture of the Spine and Paraplegia."
DR. VAN DYKE, Conference with Dr. Pangalos.

APRIL 20, TUESDAY

- 9-10 DR. PAPPENHEIMER, Visit to Microbiological Institute.
DR. WHITE, Lecture, "Subacute Bacterial Endocarditis," at Laikon Hospital.
- 9-11 DR. DE WILDE, Visit to Red Cross Hospital.
DR. ELVIDGE, Ward Rounds, Military Hospital.
- 10-11 DR. PAPPENHEIMER, Lecture, "Bacterial Genetics."
DR. WHITE, Ward Rounds, Laikon Hospital.
DR. HOWES, Lecture, "Pancreatic Surgery."
- 11-12 DR. HOWES, Conference with Prof. Karayanopoulos.
- 11-1 DR. DE WILDE, Visit to University of Athens.
- 12-1 DR. GERARD, Lecture, "Nerve Metabolism."
- 2-4 DR. ELVIDGE, Ward Rounds, Municipal Hospital.
- 6-7 DR. VAN DYKE, Lecture, "Pharmacological Aspects of the Therapeutic Use of Penicillin and Streptomycin."
- 7-8 PANEL ON ANESTHESIA: DRS. White, Gerard, Driggs, Howes and De Wilde.

APRIL 21, WEDNESDAY

- 9-10 DR. PAPPENHEIMER, Visit to University Students' Club and Library.
DR. SOGNAES, Visit to Physiological Institute.
DR. WHITE, Lecture, "The Early Recognition and Effective Treatment of Congestive Heart Failure," at Laikon Hospital.
DR. DE WILDE, Conference with Dr. Aspirides.
- 10-11 DR. PAPPENHEIMER, Visit to Libraries of University of Athens.
DRS. WHITE and DE WILDE, Ward

Rounds at Evangelismos Hospital.
DR. DRIPPS, Lecture, "Regional Anesthesia for Diagnosis and Therapy."

DR. ELVIDGE, Ward Rounds at Anti Cancer Hospital.

- 11-12 DR. PAPPENHEIMER, Conference with Mrs. Anagnostou, Director of General State Hospital Laboratory.
DR. GERARD, Visit to City General Hospital.

DR. HOWES, Conference with Dr. Karayanopoulos.

DRS. DRIPPS and ELVIDGE, Ward Rounds at Anti Cancer Hospital, with Dr. Cousis and Dr. Politis.

- 12-2 DRS. DRIPPS and HOWES, Ward Rounds, Anti Cancer Hospital.

- 1-2 DR. VAN DYKE, Lecture, "New Drugs Affecting the Autonomic Nervous System."

- 2-3 DR. HOWES, Conference with Drs. Politis and Cousis on Cancer Research and Care of Patients.

- 6-7 DR. PAPPENHEIMER, Lecture, "Active Immunization against Virus Diseases: Influenza and Mumps."
DR. SOGNAES, Conference with Dr. Mavrokordato.

- 7-8 DR. ELVIDGE, Lecture, "Head Injuries."

DR. PAPPENHEIMER, Conference with Dr. Cupsidas.

APRIL 22, THURSDAY

- 9-10 DR. HOWES, Conference with Dr. Karayanopoulos.

DR. PRATT, Ward Rounds, Children's Hospital.

DR. WHITE, Lecture, "Pulmonary Embolism and the Reversibility of Heart Disease," at Laikon Hospital.

- 9-12 DRS. GERARD and PAPPENHEIMER, Visit to Sismanoglion TB Hospital.
DR. DE WILDE, Ward Rounds and Witnessed Facial Surgery at Military Hospital.

- 10-11 DR. HOWES, Lecture, "Radical Gastrectomy for Carcinoma of the Stomach."

DR. PRATT, Lecture on Hematology, Children's Hospital.

DR. WHITE, Ward Rounds, Laikon Hospital.

- 11-12 DRS. DRIPPS and HOWES, Visit to Hippocraton Hospital.

- 12-1 DR. HOWES, Conference with Dr.

Alivisatos on Medical Education.

DR. DRIPPS, Visit to Hippocraton Hospital.

DR. PAPPENHEIMER, Lecture on TB Bacillus.

- 3-4 DR. PRATT, Conference with Dr. Varas.

DR. VAN DYKE, Consultation with Dr. Sofiriades on Malaria.

- 3-5 DRS. DRIPPS and HOWES, Visit to Military Hospital.

- 4-5 DR. VAN DYKE, Consultation with Dr. Dora Papara.

- 4-6 DR. SOGNAES, Conference with Dr. Coumolous.

- 6-8 DRS. ELVIDGE and PRATT, Visit to Libraries, Study of Material and Habits of Students.

- 7-8 DR. DRIPPS, Lecture, "Use of Curare in Medicine."

APRIL 23, FRIDAY

- 9-10 DR. GERARD, Lecture, "Muscle Tone."

DR. DRIPPS, Lecture, "Anesthesia for Thoracic Surgery."

DR. HOWES, Ward Rounds, Laikon Hospital.

DR. DE WILDE, Conference with Dr. Vrotsos.

- 9-11 DR. ELVIDGE, Ward Rounds, Observation of Operation, Demonion Psychiatric Hospital at Daphne.

- 10-11 DR. PAPPENHEIMER, Lecture, "Active Immunization against Bacterial Infections: Diphtheria and Pneumococcal Pneumonia."

- 10-12 DR. PRATT, Ward Rounds, Children's Hospital.

DR. HOWES, Visit to Private Clinic, Witnessed Operation.

- 10-1 DR. DE WILDE, Visit to Hippocraton Hospital.

- 10-12 DRS. PAPPENHEIMER and GERARD, Visit to School of Hygiene.
DR. DRIPPS, Gave Spinal Anesthesia at Laikon Hospital for Operation by Dr. Karayanopoulos.

- 11-1 DR. ELVIDGE, Ward Rounds, Red Cross Hospital.

- 12-1 DR. GERARD, Visit to School of Hygiene.

DR. HOWES, Lecture, "Use of Acids in the Treatment of Burns."

- 1-3 DR. DRIPPS, Conference with Royal Dentist.

- 2-4 DR. PAPPENHEIMER, Visit to Organic Chemistry Department.
DRS. SOGNAES, WHITE and GERARD, Visit to Anti Cancer Institute.
- 4-5 DRS. ELVIDGE and HOWES, Visit to Evangelismos Hospital.
- 6-7 DR. WHITE, Lecture, "Coronary Heart Disease."
DR. PRATT, Conference with Dr. Varas.
DR. SOGNAES, Visit to Stomatological Society.
- 7-8 DRS. PRATT, PAPPENHEIMER and WHITE, Panel Discussion on TB.
- 8-10 DRS. DE WILDE and SOGNAES, Visit to Stomatological Society.
- 8-9 DR. WHITE, Conference with Dr. Louros.

APRIL 24, SATURDAY

- 9-10 DR. PAPPENHEIMER, Visit to Pasteur Institute.
DR. SOGNAES, Visit to Children's Hospital.
DR. WHITE, Visit to Aretaion Hospital.
- 9-11 DRS. DRIPPS and HOWES, Ward Rounds, Aretaion Hospital, Witnessed Operation.
DR. DE WILDE, Lecture, "Broncoscopy" at Children's Hospital.
- 10-11 DRS. PAPPENHEIMER, SOGNAES and WHITE, Visit to Pasteur Institute.
DR. PRATT, Lecture, "Recent Concepts of Composition of the Body Fluids in Relation to Dehydration."
DR. VAN DYKE, Conference with Dr. Ypsilanti.
- 10-12 DR. ELVIDGE, Lecture, "Brain Tumor," Laikon Hospital.
- 11-12 DRS. SOGNAES and DE WILDE, Visit to Pasteur Institute.
DR. WHITE, Visit to Red Cross Hospital.
DR. HOWES, Conference with Dr. Toul.
DR. VAN DYKE, Conference with Dr. Pangalou.
- 11-1 DR. PRATT, Discussion with Miss Tsongas on Nutrition in Greece.
- 12-1 DR. DRIPPS, Ward Rounds with Dr. Toul.
DR. VAN DYKE, Lecture, "The Pharmacology of Drugs Used in the Treatment of Epilepsy."

- 2-5 DRS. SOGNAES, PAPPENHEIMER, PRATT and DE WILDE, Visit to Leper Colony.
DRS. GERARD, DRIPPS, HOWES and VAN DYKE, Conference with Dr. Louros on Problems of Medical Education.
DR. WHITE, Conference on Clinical Pathology Case.
- 6-7 DRS. WHITE, HOWES and DRIPPS, C.P.C. Experiment.
- 7-8 DRS. WHITE, PAPPENHEIMER, DRIPPS, HOWES and VAN DYKE, Panel Discussion on Antibiotics.

APRIL 26, MONDAY

- 9-10 DR. PRATT, Lecture, "Treatment of Diarrhea."
DR. PAPPENHEIMER, Conference with Dr. Capsides on Microbiology.
- 9-11 DR. SOGNAES, Visit to Dept. of Zoology of University.
DR. GERARD, Visit to Dept. of Physiology.
DR. DE WILDE, Lecture, "Mastoiditis," at Hippocraton Hospital.
- 9-12 DRS. HOWES and DRIPPS, Ward Rounds and Inspection, Red Cross Hospital.
- 10-11 DR. ELVIDGE, Lecture, "Subdural Haematoma in Infants," at Children's Hospital.
DR. PAPPENHEIMER, Conference with Drs. Michaelides and Alivisatos.
- 11-12 DR. PAPPENHEIMER, Conference with Dr. Moutoussis.
- 11-12 DRS. DE WILDE and GERARD, Visit to Military Hospital.
DR. PRATT, Conference with Dr. Choremis on the Treatment of Diarrhea.
DR. VAN DYKE, Conference with Dr. Ypsilanti.
- 12-1 DR. DE WILDE, Inspection of Military Hospital.
DR. VAN DYKE, Conference with Prof. Bensis.
- 12-2 DR. ELVIDGE, Lecture, "Low Back Pain and Sciatica — Ruptured Disc."
- 12-2 DR. GERARD, Visit to Anatomy Department and Students' Club.
- 1-2 DR. DE WILDE, Visit to Blue Cross Hospital.
- 3-4 DR. GERARD, Conference at Evangelismos Hospital.

- 4-5 DR. PRATT, Inspection of Surgical Ward for Children, Hippocraton Hospital.
DR. DRIPPS, Conference at Evangelismos Hospital.
- 6-7 DR. WHITE, Lecture, "Hypertension and Its Effects on the Heart."
- 7-8 DR. PRATT, Lecture, "Chemotherapy in Certain Pediatric Infections."
- 8.30-10 DR. PRATT, Conference with Dr. Vine on the Results of Prof. Choremis' Treatment of TB Meningitis.

APRIL 27, TUESDAY

- 8.30-9 DR. HOWES, Two Films, "Total Pneumonectomy" and "Radical Gastrectomy," at Laikon Hospital.
- 9-10 DR. VAN DYKE, Visit to Evangelismos Hospital.
- 9-11 DR. DE WILDE, Lecture, "New Protein Sponges for Bleeding Control."
DR. WHITE, Visit to Demonion Hospital and Ward Rounds.
- 9-1 DR. HOWES, Operation: Exploratory Thoracotomy, Removal of Lung Cyst; Attended Dr. Karayanopoulos — Operation: Gastric Resection, Laikon Hospital.
DR. DRIPPS, Anesthesia for above Operations, Laikon Hospital.
- 10-11 DR. PRATT, Lecture, "Investigation of Pediatric Diseases by the Metabolic Balance Technique."
- 10-12 DR. VAN DYKE, Visit to Medical School.
- 11-12 DR. PRATT, Visit to Hippocraton Hospital, Hematology Department.
- 11-1 DR. DE WILDE, Visit to General Hospital.
- 12-1 DR. VAN DYKE, Visit to Physiology Department.
- 12-2 DR. ELVIDGE, Lecture, "Arteriography and Cerebral Aneurysm."
- 2-4 DRS. PRATT, DE WILDE, ELVIDGE and VAN DYKE, Visit to Sismanoglion TB Sanatorium.
- 6-7 DR. WHITE, Conference with Dean Louros.
- 6-8 DR. SOGNAES, Lecture, "Experimental Caries."
- 7-8 DR. VAN DYKE, Conference with Dr. Fronimopoulos.
DRS. PAPPENHEIMER, WHITE and PRATT, Panel Discussion on Rheumatic Fever.

APRIL 28, WEDNESDAY

- 9-10 DRS. PAPPENHEIMER, WHITE and PRATT, Visit to Military Hospital.
DR. HOWES, Conference with Dr. Louros.
- 9-11 DR. SOGNAES, Lecture on Fluorine.
DR. DRIPPS, Visit to Madame Venezelos Hospital, (Private Hospital).
- 9-12 DR. ELVIDGE, Witnessed Gynecological Operations, Areteion Hospital.
- 10-11 DRS. PAPPENHEIMER and WHITE, Visit to Military Hospital.
DR. PRATT, Visit to Children's Hospital St. Sophia, Ward Rounds.
DR. HOWES, Demonstration of Myomectomy.
- 10-12 DR. VAN DYKE, Visit to University Laboratories.
- 11-12 DRS. PRATT and PAPPENHEIMER, Visit to Children's Hospital St. Sophia, Ward Rounds.
DR. SOGNAES, Field Trip to Lavrion with Dr. Caminopetrous of Pasteur Institute, Examination of Water Supplies, School Children, Factory Workers.
DR. DRIPPS, Lecture on Obstetrical Anesthesia to Staff of Madame Venezelos Hospital.
DR. HOWES, Demonstration of Radical Vaginectomy for Cancer of Vagina.
- 12-1 DR. PRATT, Lecture, "Current Practices in the Care of Premature and New Born Infants."
- 12-6 DR. SOGNAES, Field Trip to Lavrion.
- 2-4 DRS. PRATT and VAN DYKE, Visit to University TB Hospital.
- 3-5 DR. HOWES, Operation of Cancer of Pancreas, Evangelismos Hospital.
DR. DRIPPS, Anesthesia for Operation by Dr. Howes, Evangelismos Hospital.
- 4-5 DR. PAPPENHEIMER, Conference with Dr. Cotsias.
- 5-6 DR. VAN DYKE, Visit to Hospital of Divine Providence.
- 6-7 DR. WHITE, Lecture, "The Reversibility of Heart Disease."
- 6-8 DR. PAPPENHEIMER, Conference with Dr. Ioakimoglou.
- 7-8 DR. ELVIDGE, Lecture on Cerebral Abscess.

APRIL 29, THURSDAY

- 3-6 MISSION INSPECTION of Corinth Hospital.
7-8 DR. VAN DYKE, Conference with Dr. Casperonis on Therapy of Amebiasis.

APRIL 30, FRIDAY

- 9-12 DR. DRIPPS, Visit to Madame Venizelos Hospital, Observation of Childbirth without Anesthesia.
10-11 DRS. VAN DYKE and GERARD, Conference with Dr. Louros.
11-12 DR. GERARD, Conference with Dr. Spiliopolis on Pediatrics.
5-7 DRS. DRIPPS and SOGNAES, Conference with Dr. Krikos.
7-8 DR. SOGNAES, Conference with Dr. Louros.

MAY 1, SATURDAY

- 9-11 DR. GERARD, Visit to Heracleion Hospital, Crete.
9-12 DR. ELVIDGE, Operation of Spinal Tumor, Hippocraton Hospital.
DR. DRIPPS, Spinal Anesthesia for Operation by Dr. Elvidge.
10-11 DR. PRATT, Ward Rounds, Children's Hospital.
DRS. HOWES and VAN DYKE, Visit to TB Hospitals.
10-12 DR. SOGNAES, Conference with Dr. Falange.
DR. WHITE, Visit to two Children's Hospitals.
11-12 DR. PRATT, Visit to two Maternity Hospitals.
DR. DE WILDE, Visit to Anti Cancer Hospital.
11-1 DRS. HOWES and VAN DYKE, Visit to Leprosarium.
12-1 DR. PAPPENHEIMER, Visit to Heracleion Hospital, Crete.
DR. WHITE, Visit to Sotiria Hospital.
1-2 DR. WHITE, Visit to Leper Hospital.

MAY 2, SUNDAY

- 12-2 DRS. WHITE, JONES, DRIPPS and ELVIDGE, Inspection of Hospital of Divine Providence, Ward Rounds.

MAY 3, MONDAY

- 10-12 DR. VAN DYKE, Conference with Dr. Pangalou on Plasma Proteins.

MAY 4, TUESDAY —

MAY 5, WEDNESDAY

Mission Trip to Mount Athos, Visiting Monasteries; Medical Examination of Monks and Civilian Workers at the Various Monasteries.

SALONIKA

MAY 7, FRIDAY

- 9-10 DR. WHITE, Lecture, "Congenital Heart Disease."
DR. VAN DYKE, Visit to University Hospital.
9-11 DR. DRIPPS, Ward Rounds, Kentrikon Hospital.
9-12 DR. ELVIDGE, Ward Rounds, City Hospital.
10-11 DR. WHITE, Conference with Dean and Rector of University.
DR. JONES, Conference with Dr. Veros.
DR. GERARD, Visit to Physiology Institute.
DR. HOWES, Lecture, "Preservation of Anal Sphincter in Operation for Carcinoma of the Rectum."
11-12 DR. PAPPENHEIMER, Lecture, "Recent Studies in Nutrition of Pathogenic Bacteria."
11-1 DRS. JONES and PRATT, Visit to State Communicable Disease Hospital.
12-1 DR. VAN DYKE, Lecture, "The Function of Anterior Pituitary Hormones."
3-6 DR. VAN DYKE, Visit to Department of Pharmacology and Physiology.
7-8 DR. GERARD, Lecture, "Excitation and Inhibition."
DR. ELVIDGE, Lecture, "Cervical Fracture, Dislocation and Paraplegia."

MAY 8, SATURDAY

- 9-10 DR. JONES, Lecture, "The Mechanism and Clinical Aspects of Variations in Pain Thresholds."

- DR. HOWES, Ward Rounds, Central Hospital.
- 10-11 DR. HOWES, Lecture, "Management of Surgical Diseases of the Pancreas."
- DR. PRATT, Interview with the Director of ICEF on Milk Program for Children.
- DR. PAPPENHEIMER, Conference with Prof. of Horticulture.
- 10-12 DR. DE WILDE, Ward Rounds, Central Hospital.
- 11-12 DR. GERARD, Lecture, "Degeneration and Regeneration in the Nervous System."
- DR. PAPPENHEIMER, Lecture, "Recent Studies in Nutrition of Pathogenic Bacteria."
- 11-1 DR. PRATT, Visit to State Maternity Hospital and School of Midwives.
- 5-7 DR. GERARD, Visit to Physiological and Pharmacological Laboratories.
- 7-8 DRS. SOGNAES and DE WILDE, Conference with Dr. Kondulis, President of Salonika Dental Association.
- 7-9 DRS. WHITE, JONES, DRIPPS, HOWES and ELVIDGE, Panel Discussion on Choice of Anesthesia.

MAY 9, SUNDAY

- 9-10 DR. WHITE, Lecture, "Pericarditis, Acute and Chronic."
- DRS. DRIPPS and HOWES, Ward Rounds, Municipal Hospital.
- 9-11 DR. DE WILDE, Lecture to Dental Society, "New Protein Sponges for Bleeding Control."
- DR. JONES, Visit to Red Cross Hospital.
- 10-11 DR. DRIPPS, Lecture on Spinal Anesthesia.
- 10-12 DR. PAPPENHEIMER, Visit to Laboratory of Military Hospital.
- DR. SOGNAES, Lecture, "Experimental Caries."
- DR. GERARD, Lecture, "The Rise and Fall of Acetyl Choline."
- DR. VAN DYKE, Conference with Dr. Klissiunis.
- 12-1 DR. PAPPENHEIMER, Visit to Military School for Medicine.
- DR. VAN DYKE, Lecture, "New Drugs Affecting the Autonomic Nervous System."
- 3-6 MISSION VISIT to Anatolia College.

- 7-8 DR. WHITE, Lecture, "Coronary Heart Disease."
- 8-9 DR. ELVIDGE, Lecture, "Head Injuries."

MAY 10, MONDAY

- 9-10 DR. GERARD, Lecture, "Muscle Tone."
- 9-11 DR. DE WILDE, Lecture, "Operative and Surgical Dentistry," at Dental Association.
- DR. HOWES, Ward Rounds with Surgery Professor, Municipal Hospital.
- 10-11 DR. VAN DYKE, Conference with Prof. Klissiunis.
- 10-12 DR. PAPPENHEIMER, Lecture, "Active Immunization against Bacterial Infections: Diphtheria and Pneumococcal Pneumonia," and Discussion.
- DR. ELVIDGE, Ward Rounds, Kentrikon Hospital.
- 11-12 DR. SOGNAES, Lecture, "Fluorine and Dental Caries," Film and Discussion.
- DR. DRIPPS, Lecture, "Anesthesia for Thoracic Surgery."
- 12-1 DR. HOWES, Lecture, "Use of Acid in the Treatment of Burns."
- 7-9 DRS. PAPPENHEIMER, PRATT, DRIPPS and VAN DYKE, Panel Discussion on TB.
- DR. SOGNAES, Lecture, "Histology and Physiology of Enamel."
- 8-9 DR. DE WILDE, Lecture on Surgery, with Film.

MAY 11, TUESDAY

- 9-10 DRS. PAPPENHEIMER and DRIPPS, Visit to State TB Clinic.
- DR. WHITE, Lecture, "Myocardial Failure."
- DR. PRATT, Visit to two TB Clinics and one VD Clinic.
- DR. VAN DYKE, Conference with Dr. Klissiunis.
- 9-11 DR. SOGNAES, Visit to Policlinic.
- 9-12 DR. DE WILDE, Visit to Dispensaries with Dr. Pervos.
- 10-11 DRS. PAPPENHEIMER, PRATT and DRIPPS, Visit to VD Clinic.
- DRS. WHITE, JONES and ELVIDGE, Ward Rounds, Municipal Hospital.
- DR. HOWES, Lecture, "Radical Gas-

trectomy and Removal of Lower Esophagus."

11-12 DRs. DRIPPS and PAPPENHEIMER, Visit to TB Case Finding Clinic.
DRs. WHITE and ELVIDGE, Ward Rounds, Municipal Hospital.
DR. PRATT, Lecture on Hematology.
DR. VAN DYKE, Conference with Dean Kotsaftis.

11-1 DR. JONES, Surgical and Medical Ward Rounds, Military Hospital.

12-1 DR. PAPPENHEIMER, Lecture, "Active Immunization against Virus Diseases: Influenza and Mumps."
DR. DE WILDE, Inspection of University Library.

3-4 DR. DRIPPS, Lecture, "Anesthesia in Obstetrics and Gynecology."

4-6 DRs. PAPPENHEIMER, JONES, DRIPPS, ELVIDGE and VAN DYKE, Visit to Laboratories of Physiology, Pharmacology and Anatomy.

7-8 DR. VAN DYKE, Lecture, "Antimalarials."
DR. JONES, Lecture, "Comparative Value of Liver Function Tests."

MAY 12, WEDNESDAY

9-10 DR. JONES, Lecture, "Treatment of Degenerative Liver Disease with Evidence Obtained from Liver Biopsies."
DR. PRATT, Conference with Dr. Pagiatake on Treatment of TB.

9-11 DR. PAPPENHEIMER, Discussion with Medical Students.

10-11 DR. HOWES, Surgical Films: 1. Pancreatectomy; 2. Pneumonectomy; 3. Transthoracic Gastrectomy.
DR. WHITE, Visit to Military Hospital.

10-12 DR. ELVIDGE, Ward Rounds, Neurology, Municipal Hospital.

11-12 DR. VAN DYKE, Conference with Dr. Klissiunis.
DR. WHITE, Visit to Kentrikon Hospital.

12-1 DR. VAN DYKE, Lecture, "The Pharmacology of Drugs Used in the Treatment of Epilepsy."

2-3 DR. PRATT, Visit to Hematology Laboratory.

3-4 DRs. DRIPPS and ELVIDGE, Visit to Asylum of Children.

4-5 DR. PRATT, Conference with Dr. Kouraglou.

7-8 DR. WHITE, Lecture, "Subacute Bacterial Endocarditis."

DR. JONES, Lecture, "The Therapy of Diminished Fat Absorption by Means of Surface Acting Agents."

MAY 12 — MAY 14

DR. SOGNAES, Trip to Cavalla, Thasos, Panagia, for Dental Survey and Examination of Children's Teeth and Water Samples.

MAY 13, THURSDAY

9-10 DR. DE WILDE, Lecture, "Bronchoscopy and Bronchograms in Children."

9-11 DR. ELVIDGE, Ward Rounds, Kentrikon Hospital.
DR. VAN DYKE, Surgical and Medical Ward Rounds, Military Hospital.

10-11 DR. PRATT, Lecture, "Recent Concepts of Composition of the Body Fluids in Relation to Dehydration."

10-2 DR. HOWES, Operation: Transthoracic Gastro-Esophagostomy, Municipal Hospital.

DR. DE WILDE, Assisting Dr. Howes, Municipal Hospital.

DR. DRIPPS, Anesthesia for Operation by Dr. Howes, Municipal Hospital.

11-12 DRs. PAPPENHEIMER and VAN DYKE, Conference with Dr. Klissiunis.
DR. WHITE, Conference at University.

DR. ELVIDGE, Lecture at University, "Cerebral Gliomas."

7-9 DRs. PAPPENHEIMER, JONES, DRIPPS, DE WILDE, HOWES and VAN DYKE, Panel Discussion on Antibiotics.

MAY 14, FRIDAY

9-10 DRs. VAN DYKE and PAPPENHEIMER, Visit to Rabies Clinic.

DR. WHITE, Lecture, "Pulmonary Embolism and the Reversibility of Heart Disease."

9-11 DR. DRIPPS, Anesthesia for Operation by Prof. Missirloglou, Gastric Resection.

DR. ELVIDGE, Visit to Municipal Hospital.

DR. HOWES, Work in Operative Clinic, Municipal Hospital.

- 10-11 DR. VAN DYKE, Conference with Dr. Klissiunis.
DR. PAPPENHEIMER, Visit to Rabies Clinic.
DR. WHITE, Visit to Infectious Disease Hospital.
DR. DE WILDE, Lecture, "Otitis Media and Simple Mastoidectomy."
- 11-12 DRS. VAN DYKE, PAPPENHEIMER and JONES, Visit to Kentrikon University Hospital and Ward Rounds.
DR. WHITE, Visit to Red Cross Hospital.
DR. PRATT, Lecture, "The Treatment of Diarrhea."
DR. DRIPPS, Discussion of Regional Anesthesia.
DRS. ELVIDGE and HOWES, Ward Rounds, Municipal Hospital.
- 12-1 DR. PRATT, Visit to Municipal Hospital.
DR. DE WILDE, Visit to Students' Library.
DR. ELVIDGE, Lecture at University, "Sciatica and Ruptured Disc."
DR. VAN DYKE, Visit to Kentrikon Hospital.
- 1-2 DR. PRATT, Visit to Merima Children's Hospital.
- 3-6 DR. VAN DYKE, Worked in Dr. Klissiunis' Laboratory.
- 7-8 DR. WHITE, Lecture, "Hypertension and Its Effect on the Heart."
- 8-9 DR. PRATT, Lecture, "Chemotherapy in Certain Pediatric Infections."
- 11-12 DR. DRIPPS, Anesthesia for Hydatid Cyst of Liver.
DRS. JONES and PRATT, Ward Rounds, Municipal Hospital.
DRS. DE WILDE and HOWES, Ward Rounds, Central Hospital.
- 12-1 DR. PRATT, Visit to Policlinic.
DR. DRIPPS, Ward Rounds, Kentrikon Hospital.
DR. ELVIDGE, Lecture, "Arteriography and Cerebral Aneurysm."
- 1-2 DR. PRATT, Visit to Asylum for Foundlings.
- 2-4 DR. HOWES, Operation, Closure of Colostomy.
DR. DE WILDE, Assisting Dr. Howes.
DR. DRIPPS, Anesthesia with Cyclopropane for Operation by Dr. Howes.
- 3-4 DR. SOGNAES, Conference with Dr. Caminopetrous on Fluorine Problems, Athens.
- 5-6 DR. VAN DYKE, Conference with Dr. Klissiunis.
- 7-8 DR. WHITE, Lecture, "Rheumatic Fever and Rheumatic Heart Disease."

ATHENS

MAY 16, SUNDAY

- 9-3 DR. SOGNAES, Trip to Lavrion for Examination of Teeth and Water Samples.
- 4-5 DR. JONES, Interview with Dr. Panaiotou.

MAY 17, MONDAY

- MAY 15, SATURDAY
- 9-10 DR. PRATT, Lecture, "Investigation of Pediatric Diseases by the Metabolic Balance Technique."
- 9-11 DR. DRIPPS, Anesthesia for Operation by Prof. Sigalas, Gastro-Jejunostomy.
DR. DE WILDE, Visit to Central Hospital and Ward Rounds.
DR. HOWES, Work in Operative Clinic, Central Hospital.
- 10-11 DR. PAPPENHEIMER, Conference with Dean Kotsaftis and Dr. Klissiunis.
DR. PRATT, Lecture, "Current Practices in the Care of Premature and New Born Infants."
- 10-12 DR. ELVIDGE, Witnessed Operation by Prof. Sigalas, Central Hospital.
- 9-10 DR. JONES, Lecture, "The Mechanism and Clinical Aspects of Variations in Pain Thresholds."
- 10-11 DR. HOWES, Lecture, "Amputation," Laikon Hospital.
DR. VAN DYKE, Conference with Dr. Pangalou.
- 11-12 DR. VAN DYKE, Conference with Dr. Katakusinos on Epilepsy.
- 12-1 DR. PAPPENHEIMER, Visit to Chemistry Department.
- 12-3 DR. SOGNAES, Trip to Lavrion for Examination of Teeth and Water Samples.
- 2-4 DR. PRATT, Visit to Day Nursery.
- 3-5 DRS. DE WILDE and SOGNAES, Inspection of Athens' Dental School.
- 4-5 DR. JONES, Conference with Dr. Lourandos on C.P.C.

- 6-7 DR. PRATT, Conference with Dr. Saraglou.
 7-8 DR. JONES, Lecture, "The Therapy of Diminished Fat Absorption by Means of Surface Acting Agents."

MAY 18, TUESDAY

- 9-10 DR. HOWES, Work in Operative Clinic, Red Cross Hospital.
 DR. PAPPENHEIMER, Conference with Dr. Michaelides, on Microbiology.
 9-2 DR. PRATT, Visit to the P.I.K.P.A. Antenatal Clinic.
 10-11 DR. VAN DYKE, Conference with Dr. Pangalos.
 DR. JONES, Lectures, "Comparative Value of Liver Function Tests" and "Treatment of Degenerative Liver Disease with Evidence Obtained from Liver Biopsies," Laikon Hospital.
 DR. SOGNAES, Visit to Anthropology Department.
 10-12 DR. PAPPENHEIMER, Conference with Dr. Logathetes on Chemistry and Biochemistry.
 DR. WHITE, Demonstration of New Electrocardiograph and Lecture on Electrocardiography, Laikon Hospital.
 DR. DRIPPS, Conference with Dr. Vine on Training of Greek Doctors in Anesthesia.
 11-12 DR. VAN DYKE, Conference with Dr. Michaelides on Epilepsy.
 DR. HOWES, Conference with Dr. Makos.
 12-1 DR. VAN DYKE, Lecture, "Plasma Protein."
 2-4 DR. DRIPPS, Ward Rounds, and Conference at Sotiria-TBC Hospital, Inspection of Equipment, Advice on Anesthesia.
 3-4 DR. JONES, Conference with Dr. Panantonion.
 6-7 DR. WHITE, JONES and PRATT, Panel Discussion on Nutrition.
 DR. VAN DYKE, Conference with Dr. Katakusinos.

SECOND PHASE — ITALY ROME

MAY 21, FRIDAY

- 9-11 DR. DRIPPS, Conference with Dr. Tosatti.

- 9-12 DR. WHITE, Visit to Cardiac Clinic of Policlinic.

DRS. JONES, DE WILDE, ELVIDGE and HOWES, Visit to Policlinic.

- 9-1 DR. PRATT, Ward Rounds, Pediatric Clinic of Policlinic.

- 10-11 DR. PAPPENHEIMER, Lecture, "Recent Studies on the Chemistry and Pharmacology of Bacterial Toxins."

- 10-12 DR. SOGNAES, Visit to Eastman Dental Dispensary.

- 11-12 DR. VAN DYKE, Lecture, "Recent Progress in the Chemotherapy of Malaria."

- 11-1 DR. PAPPENHEIMER, Visit to the Institutes of Hygiene, Microbiology and Biochemistry.

- 1-3 DR. DE WILDE, Ward Rounds, Eastman Institute.

- 3-4 DR. DE WILDE, Conference with Dr. Gaspari, Eastman Institute.

- 3-5 DR. VAN DYKE, Visit to Istituto Sanita.

- 5-6 DR. DRIPPS, Lecture, "Curare" at International Congress of Surgeons Meeting.

MAY 22, SATURDAY

- 9-10 DR. DE WILDE, Operation, Otolaryngological Clinic.

- 9-11 DR. PRATT, Conference with Dr. Frontali.

DR. VAN DYKE, Visit to Department of Pharmacology of University.

- 9-12 DR. DRIPPS, Ward Rounds and Observation of Operations at Surgical Clinic of University.

DR. ELVIDGE, Visit to Policlinic, Witnessed Operation by Dr. Chiasserini.

DR. HOWES, Attended Operative Clinic Given by Prof. Paolucci.

DR. WHITE, Conference on Electrocardiography and Heart Disease at Policlinic.

DR. JONES, Ward Rounds with Dr. Alessandrini, Spirito Santo Hospital.

- 10-12 DR. DE WILDE, Ward Rounds, Eastman Clinic.

- 11-12 DR. VAN DYKE, Lecture, "New Drugs Affecting the Autonomic Nervous System."

NAPLES

- 2-4 DR. PAPPENHEIMER, Visit to Therapeutic Institute.

- 6-7 DR. WHITE, Visit to Marine Institute.
 7-8 DR. PAPPENHEIMER, Lecture, "Immunization of Adults with Diphtheria Toxoid."
 DRs. WHITE, DE WILDE and VAN DYKE, Visit to Marine Institute.

MAY 23, SUNDAY

- 9-1 DR. PAPPENHEIMER, Visit to Therapeutic Institute.
 10-11 DRs. SOGNAES, WHITE, JONES, DRIPPS and ELVIDGE, Visit to Policlinic.
 11-12 DRs. WHITE, JONES and ELVIDGE, Visit to TB Sanatorium.
 DR. DRIPPS, Visit to Policlinic, Ward Rounds.
 DRs. DE WILDE and HOWES, Visit to University Hospital.
 12-1 DR. WHITE, Visit to Camaldoni TB Hospital.
 DR. DRIPPS, Inspection of Piemonte TB Hospital.

ROME

MAY 25, TUESDAY

- 9-10 DR. HOWES, Lecture, "Preservation of Anal Sphincter in Operation for Carcinoma of the Rectum."
 DR. DE WILDE, Visit to Eastman Clinic.
 DR. WHITE, Lecture, "The Early Recognition and Effective Treatment of Congestive Heart Failure," at Policlinic.
 DR. SOGNAES, Lecture at Eastman Institute, "Enamel."
 9-11 DR. PRATT, Lecture, "Recent Concepts of Composition of the Body Fluids in Relation to Dehydration."
 10-11 DR. DE WILDE, Lecture, "Bleeding Control in Hemorrhage."
 DR. DRIPPS, Lecture, "Anesthesia for Thoracic Surgery."
 DR. JONES, Lecture, "Treatment of Degenerative Liver Disease with Evidence Obtained from Liver Biopsies."
 10-12 DR. ELVIDGE, Conference with Dr. Chiasserini.
 11-12 DR. HOWES, Conference with Dr. Valdoni.
 11-1 DRs. WHITE, PAPPENHEIMER, JONES, PRATT and DRIPPS, Visit to Polio Hospital.

- 12-1 DRs. ELVIDGE and HOWES, Visit to Polio Hospital.
 DR. DE WILDE, Ward Rounds, Maxillo-Facial Cases.
 12-2 DR. SOGNAES, Conference with Dr. De Fazio.

MAY 26, WEDNESDAY

- 9-10 DR. WHITE, Conference with Prof. Pazzini.
 DR. JONES, Lecture, "The Mechanism and Clinical Aspects of Variations in Pain Thresholds," at Policlinic.
 DR. DE WILDE, Visit to Eastman Institute.
 DR. ELVIDGE, Lecture, "Gliomas and Aneurysm," Policlinic.
 9-12 DR. HOWES, Visit to the Istituto Regina Elena.
 DR. PRATT, Panel Discussion on TB with Drs. Frontali and Sosti.
 10-11 DR. WHITE, Lecture at Policlinic, "The Reversibility of Heart Disease."
 DR. JONES, Ward Rounds at Forlani Institute.
 DR. VAN DYKE, Visit to Policlinic.
 10-12 DR. DE WILDE, Lecture, "Mucoseal Technique in Full Mouth Impressions."
 11-1 DRs. WHITE, PAPPENHEIMER, ELVIDGE and VAN DYKE, Visit to Forlani TB Sanatorium.
 12-1 DR. DE WILDE, Discussion at Eastman Institute.
 6-8 DR. WHITE, Lecture, "Rheumatic Fever and Rheumatic Heart Disease."

MAY 27, THURSDAY

- 10-12 DRs. WHITE, JONES, DRIPPS, ELVIDGE, DE WILDE, PAPPENHEIMER, PRATT and VAN DYKE, Visit to Medical and Surgical History Museum, Department of History of Medicine.
 3-5 DR. WHITE, Demonstration of Electrocardiograph at Policlinic.
 5-6 DR. DE WILDE, Visit to Medical Clinic of University.
 7-8 DR. SOGNAES, Conference with Dr. Taricco.

MAY 28, FRIDAY

- 8-8.30 DRs. WHITE and JONES, Conference with Prof. Frugoni.

- 11-12 DR. DE WILDE, Visit to Medical Clinic of University.
DR. SOGNAES, Visit to Eastman Institute, Dental Section.

MILAN — TURIN — FLORENCE

MAY 29, SATURDAY

- 9-12 DRS. DRIPPS, ELVIDGE and HOWES, Attended National Congress of Surgery, Turin.
DRS. DE WILDE and SOGNAES, Attended International Congress of the Association of Medical Dentists, Milan.
- 11-12 DR. VAN DYKE, Visit to Institute of Pharmacology, Florence.
- 4-5 DR. JONES, Visit to Institute of Pharmacology, Florence.
DR. HOWES, Conference with Prof. Rene Fontaine, Turin.
- 4-6 DR. DE WILDE, Conference with Prof. Arlotta, Milan.
- 5-7 DRS. JONES and VAN DYKE, Visit to Institute of Pharmacology, Florence.
- 6-7 DR. WHITE, Lecture, "Cardiovascular Surgery," Turin.
- 7-8 DR. WHITE, Film on Pericardial Resection, Turin.

MAY 30, SUNDAY

- 9-10 DR. SOGNAES, Lecture, "Experimental Caries and Fluorine," Dental Congress, Milan.
DR. PAPPENHEIMER, Visit to the Institute of Pharmacology, Florence.
- 9-11 DR. DE WILDE, Attended Meeting of Stomatological Society of Italy, Milan.
- 9-12 DR. PRATT, Ward Rounds, Pediatric Clinic, Milan.
- 10-11 DR. PAPPENHEIMER, Conference with Prof. Mazzani, Florence.
- 11-12 DR. DE WILDE, Lecture, "New Protein Sponges for Bleeding Control," Milan.
DRS. JONES and VAN DYKE, Visit to University Institute of Hygiene with Dr. Davoli, Florence.
- 11-1 DR. PAPPENHEIMER, Visit to Institute of Hygiene and Microbiology, Florence.
- 12-1 DR. DE WILDE, Demonstration on "Mucosal," Milan.

- 6-7 DR. VAN DYKE, Conference with Drs. Morri and Giotti, Florence.

MAY 31, MONDAY

- 9-12 DRS. DRIPPS, DE WILDE, ELVIDGE and HOWES, Visit to Cancer Institute, Ward Rounds, Observation of Operations, Inspection of Laboratories, Milan.
- 10-11 DR. VAN DYKE, Conference with Prof. Dr. Aiazzi-Mancini, Florence.
DR. WHITE, Lecture, "Recent Advances in the Diagnosis and the Treatment of Heart Disease," at Policlinic, Milan.
- 10-12 DR. PRATT, Conference with Prof. Pauli, Milan.
- 10-1 DR. PAPPENHEIMER, Visit to Serum Therapy Institute with Prof. Pauli, Milan.
- 2-4 DRS. WHITE, PRATT, DRIPPS, DE WILDE, ELVIDGE, HOWES, Visit to Serum Therapy Institute, Milan.
- 4-5 DR. VAN DYKE, Visit to Institute of Pharmacology, Florence.
DR. HOWES, Conference at Institute Giuliana Ronzoni, Milan.
- 5-6 DR. VAN DYKE, Lecture, "Antimalarial Drugs," Florence.
DR. HOWES, Lecture, "Cancer Therapy," at Cancer Institute, Milan.
- 6-7 DR. HOWES, Film on Pancreaticotomy, Milan.

JUNE 1, TUESDAY

- 9-12 DR. PAPPENHEIMER, Visit to Serum Therapy Institute, Milan.
DR. JONES, Visit to Policlinic, Florence.
- 10-11 DR. VAN DYKE, Visit to Institute of Pharmacology, Florence.
- 11-12 DR. VAN DYKE, Lecture, "New Drugs Affecting the Autonomic Nervous System," Florence.
- 12-1 DR. VAN DYKE, Visit to Laboratory of Military Medical School, Florence.
- 3-5 DR. PAPPENHEIMER, Visit to Physiology and Biochemistry Institute, Milan.
- 5-7 DR. PAPPENHEIMER, Lecture, "Recent Studies on the Chemistry and Pharmacology of Bacterial Toxins," Milan.

BOLOGNA

JUNE 2, WEDNESDAY

- 9-10 DRs. DRIPPS, DE WILDE and ELVIDGE, Ward Rounds, Policlinic and Surgical Clinic of University.
- 10-11 DRs. WHITE, DRIPPS, DE WILDE, ELVIDGE, HOWES and VAN DYKE, Ward Rounds, Medical Clinic of University.
- 11-12 DR. WHITE, Ward Rounds, Medical Clinic of University.
DR. HOWES, Lecture, "Present Status of the Use of Antibiotics in Surgery."
- 12-1 DR. WHITE, Lecture, "The Early Recognition and Effective Treatment of Congestive Heart Failure."
- 12-2 DR. ELVIDGE, Visit to Istituto del Ravia.
- 4-5 DR. HOWES, Conference with Dr. Pesci on Cancer Tests.
- 4-6 DRs. ELVIDGE and VAN DYKE, Visit to Institutes of Pharmacology, Physiology and Biochemistry.
DR. DRIPPS, Lecture, "Curare."
DR. PRATT, Lecture, "Recent Concepts of Composition of the Body Fluids in Relation to Dehydration."
DR. DE WILDE, Visit to Dental School.
- 6-7 DR. DE WILDE, Lecture, "New Protein Sponges for Bleeding Control."
DR. VAN DYKE, Lecture, "Recent Progress in the Chemotherapy of Malaria."

JUNE 3, THURSDAY

- 9-12 DR. WHITE, Ward Rounds, Policlinic.
DR. JONES, Ward Rounds, Medical Clinic.
DR. PRATT, Ward Rounds, Pediatric Clinic.
DR. DE WILDE, Ward Rounds, Oto-Rhino-Laryngological Department of University.
DR. ELVIDGE, Ward Rounds Neuro-Surgical Clinic.
- 10-12 DR. DRIPPS, Conference with Prof. Moruzzi.
- 12-1 DR. PAPPENHEIMER, Lecture, "Recent Studies in Nutrition of Pathogenic Bacteria."

- 4-5 DR. WHITE, Visit to Policlinic.
DR. VAN DYKE, Conference with Dr. Bovet, Rome.
- 5-6 DR. WHITE, Lecture, "Pulmonary Embolism and Heart Disease."
DRs. PAPPENHEIMER and JONES, Visit to Orthopedic Institute.
DR. PRATT, Lecture and Panel Discussion on TB.
DR. DE WILDE, Lecture, "Bronchoscopy and Bronchograms."
- 6-7 DRs. WHITE, PAPPENHEIMER, JONES, PRATT, DRIPPS and ELVIDGE, Visit to Orthopedic Institute.
DR. HOWES, Films on Radical Pancreatotomy and Removal of Lung.
- 7-8 DRs. PAPPENHEIMER, DRIPPS and ELVIDGE, Visit to Orthopedic Institute.

FLORENCE — ROME — BOLOGNA

JUNE 4, FRIDAY

- 9-10 DR. WHITE, Conference with Prof. Gasperini, Bologna.
DR. JONES, Lecture, "Treatment of Degenerative Liver Disease with Evidence Obtained from Liver Biopsies," at Medical Clinic of University, Florence.
DR. HOWES, Lecture, "Preservation of Anal Sphincter in Operation for Carcinoma of the Rectum."
- 9-11 DR. DRIPPS, Ward Rounds with Prof. Comoli, University Hospital, Florence.
DR. DE WILDE, Visit to Clinica Odontriatica, Florence.
DR. VAN DYKE, Visit to Istituto Superiore di Sanita, Rome.
- 9-12 DR. ELVIDGE, Visit to University Surgical Clinic, Florence.
- 9-1 DR. PAPPENHEIMER, Conference with Drs. Favilli and Davoli, Florence.
- 11-12 DR. JONES, Conference with Dr. Grippi, Florence.
DR. DRIPPS, Lecture, "Anesthesia for Thoracic Surgery," Florence.
DR. DE WILDE, Lecture, "Mucoseal Technic in Full Mouth Impressions," Clinica Odontriatica, Florence.
DR. VAN DYKE, Visit to Institute of Pharmacology, Rome.
- 12-1 DR. JONES, Conference with Dr. Fenwick, Florence.

DR. DRIPPS, Conference with Dr. Bolletti, Florence.

DR. DE WILDE, Lecture, "New Protein Sponges for Bleeding Control," Clinica Odontriatica, Florence.

DR. VAN DYKE, Conference with Prof. Di Mattei, Institute of Pharmacology, Rome.

1-2 DR. DE WILDE, Discussion of Lectures, Clinica Odontriatica, Florence.

2-3 DR. VAN DYKE, Conference with Prof. Bastianelli, Rome.

3-5 DR. PAPPENHEIMER, Visit to Department of Hygiene and Microbiology, Florence.

4-5 DR. PRATT, Lecture, "Recent Concepts of Composition of the Body Fluids in Relation to Dehydration," Florence.

6-7 DR. WHITE, Lecture, "Rheumatic Fever and Rheumatic Heart Disease," Florence.

6-8 DR. DE WILDE, Conference with Drs. Zuccatelli and d'Inzeo, Florence.

11.30 DR. WHITE, Conference with Dr. Puddu, Florence.

JUNE 5, SATURDAY

9-11 DR. WHITE, Lecture, "Hypertension and Pericardial Surgery," with Film, Florence.

9-12 DR. JONES, Ward Rounds with Prof. Grippi, Florence.

DR. PRATT, Ward Rounds, Pediatric Clinic, Florence.

10-11 DR. PAPPENHEIMER, Lecture, "Recent Studies on the Chemistry and Pharmacology of Bacterial Toxins," Florence.

11-12 DR. WHITE, Visit to Medical Clinic, Florence.

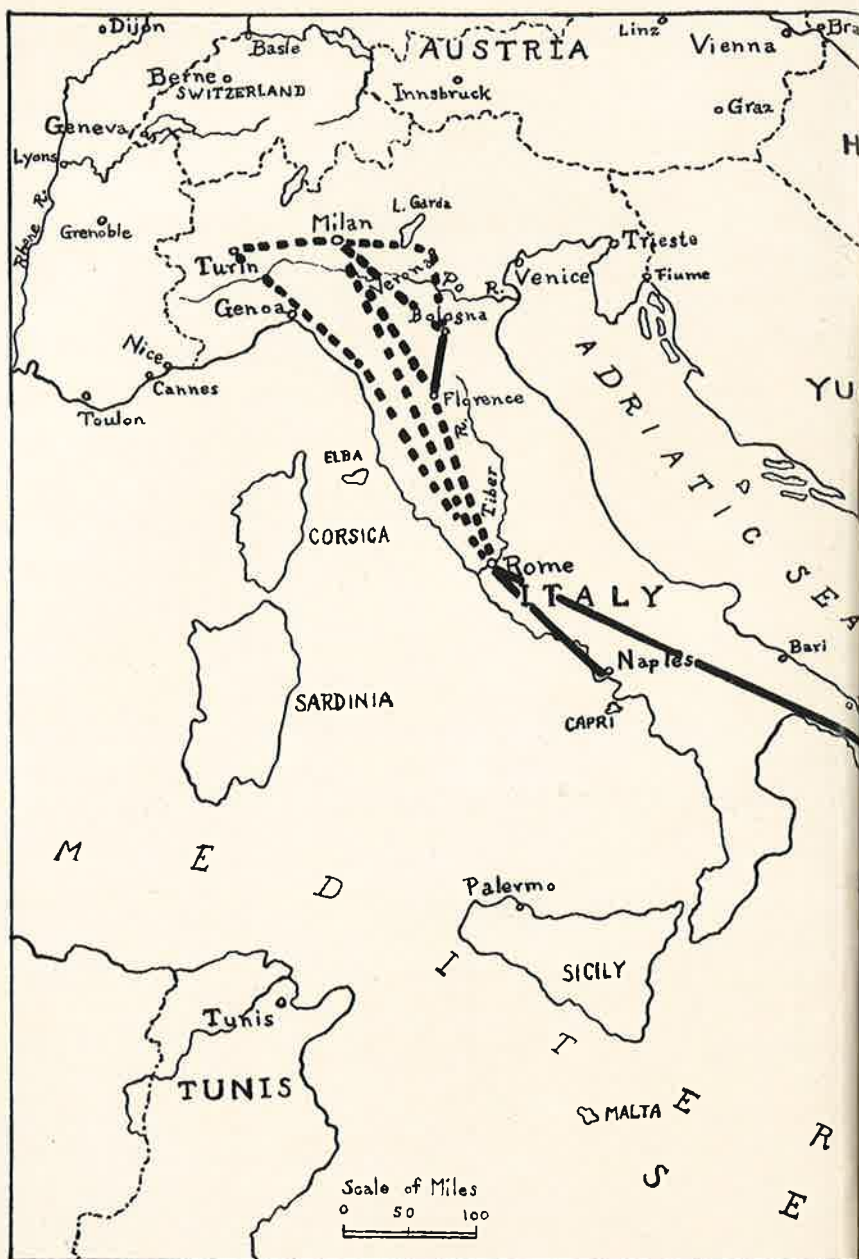
4-6 DR. JONES, Lecture, "The Mechanism and Clinical Aspects of Variations in Pain Thresholds," Florence.

5-6 DR. PAPPENHEIMER, Lecture, "Active Immunization against Virus Disease: Influenza and Mumps," Florence.





The Rev. FRED I. CAIRNS conveys the greetings of the American Unitarians to the Panhellenic Medical Association in Athens.





————— Route taken by the whole Mission

- - - - - Route taken by part of the Mission

THE MISSION