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ASSOCIATED

REPORT

of the

College of Medicine and Dentistry

to the

General Faculty

West China Union University

May 8th, 1935

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May 8th, 1935

To the Members
of the General Faculty of Union University:

Dear Confreres:

I much appreciate the honour of submitting the report of the medical faculty to this body and request your tolerant consideration of it. It is however difficult for me to appreciate the particular efficiency of a series of faculty reports, committees, speeches, etc., on specific common subjects unless all of them are fundamentally based on similarly derived accurate factual data. To illustrate my meaning if a list of questions and/or suggestions had been made out and circulated to the different faculties previous to their reporting to this body then the particular faculty would have answered them after careful consideration according to the particular viewpoint of that group; then we would have had correlating data from which conclusions and a *modus operandi* could be mutually arrived at with all the wisdom we do or do not possess. This report of the medical faculty is not short because of the inclusion of data which, while it might be known to all, is not always in your minds, such facts constitute the structure upon which our conclusions must be made. As I conceive the matter all the faculty reports should include all the facts that are necessary. It would take a long time to enumerate all that is necessary and because of certain inhibitions this report will be superficial,

The most common endemic disease in this faculty is crisitis. Crises usually occur when a person is below *par* and is consequently depressed. Just now the political conditions are far from excellent and we are more or less under extraneous as well as particular financial strain. That is a time when decisions are apt to be wrong. It is difficult to keep ones footing in a stampede; or think, plan and act in a panic

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for we lose our sense of correct proportion and balance. We should plan during or under so-called normal conditions. We have had 25 years of existance and yet have never efficiently worked out a mode of procedure for budget allotment. We should have unquestionably, all truthful necessary facts in their correct proportion all laid on the table. Complete data from all faculties without mental or other reservations are essential. Something drastic has to be done immediately and it is apparent that we are not fully prepared, As to the position of the medical faculty in relation to the other faculties at this time and in regard to budget, there comes to mind a story more or less appropriate—A self-opinionated but efficient headclerk on the death of one member of the partnership of the firm in which he was employed went to the living partner and said "I am sorry because of your partner's death, would you like me to take his place?" the answer was immediate and emphatic—"very much, if you can get the undertaker to arrange it".

This university stands for the development of higher education in a religious atmosphere for the peoples of West China.

This report deals with medical education as carried out in this university. Now medical education is, after all, not medicine, but education *per se*. The pedagogical problems of the medical faculty are the same as those of the other faculties of the university.

The proper appreciation and correlation of the work of all the other faculties in the university with the particular problems and aims of the medical faculty should lead to mutual understanding, cooperation and efficiency of the whole university. There must be a tolerant consideration of all factors in all of the faculties.

Fundamental needs are great in all faculties.

Particular needs do differ in different faculties.

If we analyse correctly all the factual data some faculty and/or some department in a faculty may be deleted or even increased.

This report is not a stressing of the strongest appeals and/or or needs for the medical faculty but it earnestly will

endeavour to convey both the special and general setting of the medical faculty in relatiou to the university and community. The parts should not be considered without the whole nor the whole without the parts. There will be an endeavour to give a viewpoint analagous to a Chinese painting—in viewing which the perspective is from above not from the side or on a level plane. We are trying to *look around* our endeavours on all sides. This report is neither a strictly academic nor a coldly analytical description.

The faculty of medicine conducts a technical vocational school.

Our faculty of medicine does not meet the requirements of a grade A college, judged from western standards, yet it is performing a needed physical and intellectual effort to a definite aim and is carrying it out in a fairly efficient manner. Medical missions is one of the most unique adventures of the human spirit. Our work is a dignified, important and pertinent labour adapted as far as possible to the situation in which we are placed i.e. our environment. We realise our faculty is imperfect, fallible and commonplace.

The faculty of medicine is absolutely dependant upon other faculties for the basis essential for a technical education. We cannot exist efficiently without the faculties of science, arts and religion, because in those faculties the student must develope first the scientific spirit or outlook, and second, the religious and humane attitudes necessary for a medical practitioner. A physician cannot rise rightly to his opportunities and obligations in applied medicine without a correct scientific and ethical foundation.

This medical history faculty began its duties in the fall of 1914 and was organised on November 2nd, 1919, by the following named physicians: Kilborn, Canright, Service and Morse. Messrs Stubbs and Bayne were also present at the meeting. Shortly afterwards Dr. Irwin came and was present at the faculty meeting on December 22,1914. We began without building, equipment or library, today we are what we are.

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AIMS, POLICIES AND FUNCTIONS OF THE MEDICAL FACULTY.

These are—1st, Train general or basic practitioners of medicine.

2nd, Relationships with the community which includes:

(a) *Care of sick*—in the hospitals and outpatient departments and offices, together with visits in the homes of those who are ill. To this may be added rural service.

(b) *Prevention of disease* by work in the public health department.

3rd, Research in scientific, social, anthropological and clinical problems.

The importance of these obligations may be equalled but is not exceeded by that of any other college. Medical science serves the public in a very intimate manner. The information and service is given through our teachers, graduates and hospitals.

To attain to these things we require a certain type of individual, the characteristics or traits of whom will be briefly placed under the heading

THE QUALITIES OF A PHYSICIAN

"The body of a man is the plastic material in which an artist works and no art is worthy of such a medium unless it has in it something of a sacrament" Moynihan.

Our main object is to teach general practitioners of medicine. It is not our aim to develop trained intelligence of a high order in a relative few students but to create in all our student a sound social, ethical and intellectual sense while proficiently teaching a technical education. Our courses are adapted for the mediocre student.

Physicians constantly witness all of the tragedies and some of the joys of life. Physicians are interested in both physical facts and deep emotions and are concerned in sharing with others the precise significance of living wisely. Their duties are essentially reconstructive and recreative.

The imagination and vision of a doctor must be impersonal, he must be trained so that at a moment's notice every mental trait will centre around some tragic circumstance. The physician makes a supreme effort to preserve individualism.

The medical faculty has a very real and deep sence of responsibility for the individual student and patient. We are not indifferent to social problems as a whole, but we do not consider it is within our sphere to enter into controversies and arguments of theoretical socialogical and political import. Our sphere is medical education not political adjustment. Certainly medicine touches every individual in every social and political situation and our graduates are qualified to do that from the medical viewpoint amongst their own countrymen.

FACTORS GOVERNING OUR PROBLEMS

Our present stage of growth might be said to have passed the pioneer stage, but there is now a reconstructive stage to be considered which has as many implications and problems as were present when the university began. Have we been a success? To use medical parlance, at least some of our operations have been technically perfect—and—the coffin was a work of art. Should there be a Union University at all? If so, what should we teach.

This discussion relates to the immediate future—and is broadly speaking, based upon local environment (political and social); conditions or circumstances of out supporting bodies at home; our *present* staff, equipment, budget, hospitals, and student body.

Some of the factors which should be considered in our university, college and faculty discussions, as they appear to me are—1, a careful, accurate analysis of our environment is

essential; 2, the economic depression at home with the dearth of local support and the resulting curtailment of our budget is acute, 3 the criticisms of the Laymen's Report so seemingly drastic were only too well authenticated in some instances and the writer is inclined to consider that all of their conclusions must be considered and many, if not all, carried out by us if we are not already doing so; 4, Our registration with the government and acceptance of some federal government support with its definite implications of control ever us may be the fore runner of state education; 5. The political instability of all China and particularly of Szechwan cannot be ignored; 6, We have an intense desire to advance and improve this school; 7, We believe that medical education is of supreme import to mission propoganda, and that it is a great factor in social regeneration; 8, Our relation with the Chinese Christian churches must be considered; 9, Our rate of transition to partial or complete Chinese financial and academic control requires infinite wisdom and tolerance. 10, The question of falling into line with Chinese non-christian efforts needs consideration. 11, The great relative increase of the student body without concomittant increase in staff, budget, equipment, etc., has created stiff problems; 12, There is a very pressing need for more Chinese teachers with the accompanying question of their salaries.

The economic conditions of our environment, with their political, social and religious aspects vitally effect university work. We cannot proceed efficiently without full knowledge of and reasonable accommodation to these factors. Over emphasis or correct emphasis on the principal mission method i.e. on preaching, teaching and or healing is a vital matter.

I will not necessarily deal with all these matters at the present time nor in the order written above.

COMMUNITY 17-24

The medical faculty and its connected hospitals, etc., are extremely closely related to the community.

The proper relations of this faculty to the community predicates an accurate knowledge and appreciation of our environment. *The basic motif of medical education is the social service of medicine.* "Human races build and adapt social existance upon economic life", said Huxley. The social order and human health are absolute correlates. Modern science is creating a new social order, another world and a special civilisation. In the West it has actually upset the equilibrium of the organs of our bodies and created new diseases! What will happen in W. China with the full introduction of science?

Hunger, taxes and death are inevitable. In Szechwan all three are pressing and imminent. Bare existance is extracted chiefly by human hands and almost entirely from the soil. Wages are pitilessly low, capital is scarce, security is at a minimum. Industries of modern civilisation are being slowly introduced in Szechwan. Poverty is the rule and not the exception. Housing is inadequate and unhygienic. Housing does not protect from the inclemencies of the weather. There is no safe water supply here, comparative safety is in hot tea. Sewage disposal is extremely inadequate and spreads infection. Lighting (artificial) is very poor and especially so outside a very few of the largest cities. Educational facilities are limited to the very small minority. Food is scarce and restricted in varieties to the vast majority. There is no health supervision. Disease is rampant. Epidemics are uncontrolled. The life span is short. Infant mortality is high. The political situation is unpredictable, uncertain and frequently dangerous. Literally there have been hundreds of wars in this province alone since 1910. Taxes are collected sometimes three score years in advance. The Chinese are confused and full of fear. This paralyzing fear is perhaps the greatest factor in their mental and social lives. They fear for health, wealth, food and family. Fear is the commonest disease amongst the laiety in this province.

The medico-economic problem seriously affects the educational policies and practices of our schools. We must bear in mind the adequacy and appropriateness of medical care to family income. A bill from one hospital for one of my servants was $16.00 or 2 months wages. For another, the medicine recommended consisting of cheap medicines and the price asked was 50 cents, while its cost to the hospital may have been 5 cents or even less.

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GOVERNMENT CONTROL - STATE MEDICINE

The founders of this university and a large member of its teachers are foreigners. The foreign teachers are all paid by mission bodies. Up to last year 80% of the university budget came from foreign sources. The support of the hospitals and some of their Chinese staff (but not the foreign staff) comes from funds chiefly collected from the Chinese. This last year the National government made a grant to Dentistry, Pharmacy and Arts.

I have understood that the aim of this university is to become either an entirely Chinese institution or at least predominately so.

We are registered under the federal government. In doing so we accepted, consciously or unconsciously, a modified Chinese control.

We have accepted government grants which, I believe, augurs more rapid and unmodified control of our institution.

Devolution is controlling us and not we directing it. I do uot know which is right. This university may be regarded now as a Chinese university assisted by funds from abroad and largely (in medicine) staffed by foreigners.

National aspirations in Russia, Italy and Germany aim to control the individual by the state. Whither is China trending?

In China elementary and secondary schools are now controlled by the government and in higher education the trend seems to be to either cut out entirely or control private institutions by the state.

Just at present the Chinese are not finally forcing out foreigners, who are a very small minority in China's schools. The apparent trend in China is towards *state education* with an exceedingly strong trend towards science. We assuredly cannot, and have no business to stem the tide. We can do only the best we can, as rightly as possible, for as long as we are allowed. If our aspirations do not fit in with those of the Chinese we foreigners probably will have to go, for we are

aliens and not Chinese. We cannot be fully loyal to our aims and religious beliefs if entirely guided by non-christians. Our province should be to inculcate religious and ethical beliefs with our technical education.

The scientist and humanitarian may insist that the art of medicine in itself is a great and effective socialising process. It is. I think however we will be more humane if a proper proportion of the mixture of ethics, religion and science be made. In our school considerable emphasis is placed on character, however over emphasis on science is the easier road and we trend to follow that path.

China as a whole probably must have state education especially in medicine and Science. Civic centres, rural health projects and the developement of a suitable system of previncial medicine are in the air. Undoubtedly all efforts to secure preventive medicine should be stressed very strongly.

It is to hoped that the influence of the National Health Administration may affect Szechwan, more effectively than at present. The mission medical personnel would cooperate wholeheartedly with them in every way and link up their hospitals and work with them.

It there eventuates state medicine, the mission doctors are a good example of altruistic service without special stress on honorarium given them.

It gives us solid satisfaction to assist people to see their own possibilities and develope them, especially if they wish us to do so.

DEPARTMENTS OF THE FACULTY OF MEDICINE AND CURRICULUM.

The principal departments of the faculty of medicine in the preclinical division are Anatomy, Biochemistry, Physiology, Pharmacology, and Pathology—to these are added the necessary English and a smattering of some clinical subjects.

The clinical departments are concerned with Internal Medicine, Surgery, Obstetrics, Gynaecology, Public Health, Pathology and some specialties.

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The correlation of the preclinical departments is not good owing chiefly to a lack of teachers in physiology; to correlate anatomy and that subject and the bridge between the preclinical and clinical departments needs better adjustment, and is the crux of the medical teaching.

In some faculties there are choices of courses, electives etc. In the medical faculty the courses are fixed, there are no electives. All the departments we have are necessary for our course in fact we need more departments. To pare off any department destroys continuity and weakens our whole course to such a degree that it cannot be done. In our case it is all or none! In other faculties there may or may not be opportunities to cut courses, departments, electives, etc., for the good of the whole university.

In our opinion it is essential to have a medical course of seven years (including the two years in science). We do not train specialists except in one hospital and at no advanced cost to the university. We teach fundamentals only in all departments.

The students in medicine are required to study a fixed curriculum for 4 years and then are required to put in an interne year before graduation. In medicine the whole course is compulsory for all students. We aim for quality in our product and not for the quantity of our graduates.

Curricular Meedings.

Beginning in spring of 1932 our faculty has been making a careful study of our curriculum with the main aim of raising our academic standards present staff and equipment. During the last two college years monthly meeting have been held for the sole purpose of evaluating our teaching methods and curricular content. Carefully considered academic and practical papers have been delivered by heads of all departments, and by other teachers who were here. There have been in all 19 particular and 9 general papers delivered. There were discussed teachers and teaching methods, equipment and apparatus, student body and numbers, aims, policies, purposes, organisation, budget, administration, and departmental methods.

The curriculum of this faculty must be based mainly on the type of physician we wish to produce. This type must

be the one we can develope best at the present time, with our present staff equipment, budget, students and hospital facilities—for the needs of the local community we are serving.

Our medical product is for local needs—we cannot supply all the needs for West China let alone other parts of this great country nor should we attempt so to do. The breadth or narrowness of the call does not detract from the quality of the product. Local provincial or national practitioners must be of the same quality.

There are 4 types of practitioners to be discussed viz:

1. The general practitioner, or, basic type.
2. The institutional practitioner.
3. The teacher for the medical school.
4. The specialist.

There is another type of physician that might be added to this list, viz., 5. The physician trained for state medicine—in other words a governmental employee. I shall not, attempt at the present time to debate the *pro* and *con* of the type we have decided to teach but state simply that there is a tremendous need for all five types in West China.

The medical faculty delimits itself to the development of the general practitioner or basic type of practitioner.

I doubt if the medical needs of China can be met effectively by private practice and by private initiative. One is very foolish to attempt the prediction of events in China. There are wealthy private interests that may take on the wholesome but great burden of medical education. There will always be a big place for the private practitioner, or, he may assume some form of state medicine.

STUDENT BODY.

According to the present method of registration there are 194 students in the College of Medicine and Dentistry. This number includes students in Science. (the so-called premedical and dental groups which numbers 74.) There are therefore 120 students in the college of Medicine and Dentistry, of whom 79 or 65.8% are in medicine proper, and 41 or

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34.2% in dentistry. Of the 79 medical students 52 or 54.8% are males and 27 or 34.2% are females.

There are no special students in medicine.

Owing to lack of equipment, etc., we have limited the number of medical students entering the faculty of medicine to 16 only. This number may be further reduced to none at all because of small budget.

Speaking broadly and without comparison with any other group, the students of our faculty are a mature, well prepared, enthusiastic, attentive and satisfactory group of men and women.

TEACHERS.

The reported has been told that the College of Medicine and Dentistry has a good reputation amongst the Chinese. This reputations is the result of 21 years intensive work by the members of the faculty since its origin. That may well indicate that the Chinese have recognised that we are filling a need which they cannot fill effectively at the present time. We must always remember that our function is to correlate so that, if possible, we can fit in where the Chinese consent to the fitting.

At the present time there are 14, or 54%, full time foreign, and 12 or 46% Chinese doctors on the staff = 26 in all; there are 4 foreign and 2 Chinese part time teachers = 6 in all; or a grand total of 32 teachers of whom 56% are foreign and 46% are Chinese. The two Kilborns and Peterson leave this year. Anderson is on the way here we believe. During the next two years 1937 and 1938 eleven teachers (and this does not include the three leaving this year) will have gone on furlough and some not to return. Thus during 1937 and 1938, 70% of our foreign staff are off the field. New recruits do not seem to be coming. Our Chinese colleagues are an uncertain quantity—chiefly because we have not the budget to hire them.

The outlook is not bright. There is an extremely acute crisis right at hand.

Our teachers are mostly full time—this is an unmixed blessing.

The outstanding need for teaching is at the least an increase of 10 more Chinese teachers. Ten thousand dollars a year is the minimum for them. Chinese teachers from the east or north of China might be secured. These men will require large salaries $2-3000 a year. Our main hope is to train our own graduates for teachers because of reduced cost.

UNIVERSITY HOSPITAL

The needs for a hospital for clinical teaching and research, situated on the campus, and under the control of this College is a necessity. The present three medical hospitals are under the control of three different mission boards. They were founded to carry on healing *per se* as a part of mission propaganda. That motive is extremely laudable.

A hospital mainly devoted to teaching and research is expensive to run. Self support is now mainly attained by the above three hospitals as mission hospitals only. Unless the missions consent to and maintain a much increased budget, an additional appropriation must be made by the university for hospital teaching and research.

The College of Medicine and Dentistry approves and desires a university hospital under their direction and without it a really efficient medical and dental college cannot be run.

BUDGET

The minimum needs for the medical faculty for this year are: Salaries $5460.00 and department maintenance $6050.00 = $11,510.000. The medical faculty has a deficit balance of $8.123 or 58% of the total present annual grant. The total grant is about sufficient for running the departments let alone pay teachers salaries. Our minimum needs would range from $11—12,000 for the medical faculty alone (or $17-19,000 for the college). Salary expenditures have increased 340%

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during the last five years: and the grants to department 176% with a decrease of 18% this year.

More teachers (at least three) are needed if the pre-clinical departments are to be continued.

The main causes of the deficits are (1) the great increase of students (2) salaries of Chinese teachers.

If would seem, if no more budget can be secured from our Board at home, or from local contributions, that either the medical school should be closed, or, take in no more students for two years and again try to run after that time. Such a decision would be basically wrong but we cannot run on the present budget.

In connection with this statement in regard to the budget your attention is drawn to the need of the completion of the medical-dental building. There is some congestion of classes because of lack of room for the students. Perhaps the completion of this building is not our most pressing need, great as it is. In passing, the following information may be suggestive, a friend writing to me from Canton gives the information that the federal government granted them $500,000 to assist in the erection of the Canton hospital which is the teaching institution in connection with the Medical School of Lingnam University.

PROCEDURE RE BUDGET ALLOTMENT

Our income falls far below the total reasonably necessary for our needs. A medical school, like most essential needs, is expensive to run.

There might be slight readjustment of teachers in medicine as one or two departments are supplied with two or more, while others, have but one teacher.

Necessary and indispensible are the salaries for teachers (Chinese) and salaries are the great burden on the budget.

The essential maintenance, equipment and replacement costs of departments must not be cut except in the gravest emergency. But what are these essentials?

There is no department in medicine which is not in urgent need of more apparatus.

If after a *correlated study of all faculties of the university is made*—and the decision is to continue the medical faculty well and good, if not, it is unhealthy and bad for the whole university.

A careful analysis of all factors; considering the number of students taught, number of teachers (Chinese and foreign) whether full or part time, laboratory courses *vs.* lecture courses, library, maintenance and equipment costs etc., may or may not show that the medical faculty is fundamentally the most expensive faculty. Just a word on teachers. In Mr. Lo's report there were 53 teechers (full and part time) in the Arts faculty. In Science there are 22 full and part time teachers. In medicine there are 32 teachers, but of these, if there were no medical school here, there would be probably 3 foreign and 7 or more Chinese on the hospital staffs = 10 in the 3 hospitals; from one point of view the medical faculty *per se* has a staff of 22 teachers. As mentioned above all this is subject to maturer, considered, mutual analysis and judgement before a final decision can be made. It is a university not a faculty matter.

OUR FUTURE HOPES

A physical plant sufficient for the needs of our student body—this include the hospitals; financial needs to provide necessary equipment; a staff of expertly trained zealous teachers; a curriculum of sufficient length and content to fulfil our task in a dignified, adequate, humane and scientific manner; cooperation with the Chinese—(christian and non-christian); a leader of great comprehension who makes the medical college his deepest interest; and, full cooperation with whole university.

We are only the now and perhaps the five years from now. Our hopes are many and just, but they are not based on a strictly scientific tangible material basis in comparison with the whole university.

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I am convinced that our aims are wholesome righteous and wise. I cannot see clearly the way out of our difficulties, however, I believe the end will be reached successfully. We are instruments of a temporary nature and the Chinese will develope themselves. I trust that our influence, apparently slight, will help and not hinder.

Socrates said "Know thyself" therein lies the formula for university, faculty and individual mental health, happiness and success.

A tolerant efficient examination in close detail of apparently well integrated data and circumstances will doubtless bring out some disturbing contradictions but will also give a righteous foundation upon which we should build our abiding structure.

Respectfully submitted,

W. R. MORSE

DEAN OF THE FACULTY OF MEDICINE.

REPORT OF THE FACULTY OF DENTISTRY

Reports from the various Colleges to the General Faculty should be very helpful. We are apt to think in terms of our own work and neglect our relation to other departments. Mutual understanding and knowledge of each other's difficulties as met with in the various Colleges and departments will make possible the proper adjustments of available resources towards the greatest good.

The time has surely arrived for a review of the work of the University as a whole. A survey of the university program is necessary. Under existing circumstances should we attempt to carry on as many Colleges! Are there convincing reasons for the existence of all the departments or for teaching all the courses we do? The final determining factor is the budget.

Staff and equipment cannot be transferred to any extent from one College to another; budget may be. Available finances could be allocated to those projects which, in the opinion of the whole University, it seems best to promote, Certainly no advance is at present possible; whether we can maintain the 'status quo' or not is problematic; we hope it will not be necessary to retrograde.

Much that has been stated in the report of the Faculty of Medicine applies to the Faculty of Dentistry as well and does not need to be repeated.

HISTORY.

Dentistry as a university project began here some seventeen years ago, when a department of Dentistry was organized under the Faculty of Medicine in 1918. From the earliest beginnings there has been continuous growth and progress, in spite of many difficult problems, such as political disturbance, evacuations, strikes, shortage of staff and budget. In 1920 a separate Faculty was formed which carried on as such until 1929, when the two Faculties were united in the College of Medicine and Dentistry. Today the two Faculties are most intimately associated; they do not function to any extent as separate units; we try to mutually solve each other's problems.

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AIMS.

The general objective is to graduate competent practitioners of dentistry, who can cooperate effectively in the general health program, and by continued study advance themselves and the profession. We aim to create an ethical and intellectual sense as well as technical ability; the aim has alway been to uphold high standards.

Being the only dental school of university grade in China, we are much concerned with the laying of the foundation of dental science in this country and in giving leadership to dental education. We have a unique opportunity in this connection. At present there are no regulations governing the practice of dentistry, yet in all the towns and cities of China there are thousands of so-called dentists and 'quacks' causing more or less harm to the people.

We are attempting to educate the people to an appreciation of modern dentistry and are anxious to assist the authorities in the question of standardizing and regulating the practice of dentistry in China, so that the profession here may be saved the long period of growth which was necessary in the west. Considerable correspondence with the Bureau of Education at Nanking has already been carried on in regard to the requirements and standards for licensing dentists, and in respect to establishing rules and regulations for the practice of dentistry.

STUDENTS.

Of the 192 students in the College of Medicine and Dentistry, 74 are registered in Dentistry; 59 men, 15 girls. On the whole, the students are of a good grade academically. During the part years they have been continually securing their share of the scholarships offered.

The students in dentistry are drawn from many provinces in China, as well as from countries outside China. Requests for catalogues and correspondence regarding entrance requirements and curriculum details are constantly being received. This popularity is encouraging but with limited budget, staff and equipment refusal will have to be given to any increase in applications for admission.

LIMITATION OF STUDENTS.

Larger numbers indicate a wider recognition of our school, but we are faced with the difficulty of insufficient staff and equipment to accommodate any further increases not to mention the impossibility of maintaining high standards of efficiency with over-crowded laboratories. Size of classes must be governed by equipment, accommodation and the number of teachers available. We should accept only as many students as we can efficiently train.

Limitation of the size of classes has been under serious discussion in the College. Recommendations have been made to the Committee on Studies to the effect that a maximum of 28 students be received in the 1st year proper of Medicine and Dentistry; of these not more than 12 to be dental students. It was further recommended that the credentials (academic, character, etc.) of all students entering medicine and dentistry proper be reviewed before admission is granted and that a notice be inserted in the catalogue informing students that academic standing alone will not be sufficient for admission to the above year of the College. Furthermore, the College plans to institute some form of aptitude tests to assist in the selection of students. Tuition fees are being increased not only to secure larger income but also as a step towards preventing overcrowing of classes. It is therefore evident that the limitation of the size of classes is a very acute question with the College. Why has it become so acute? Largely because of no increase in budget.

COURSE.

The courses for students in dentistry and students in medicine have been so arranged that the early years cover practically the same work; this has been done to give the graduates in dentistry the same biological approach to the health problem as their medical confreres. On graduation the two groups are able to meet on the same common ground and discuss their problems with mutual understanding.

The dental course as outlined in the catalogue compares favorably with courses offered by grade 'A' schools abroad. As stated elsewhere, the courses to the junior years are given very completely; those course to the senior students are sometimes limited in the amount of detailed work presented, due

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to the limitations in our staff. Since, in the allotted time, it is impossible for teachers to cover all phases of modern dentistry or even for the student to acquire knowledge and skill in all its branches, it becomes imperative that the basic principles be given special emphasis, both in lecture and laboratory courses. Fundamental basic principles must be clearly and repeatedly presented. This we attempt to do; specializing comes later, after fundamentals are mastered.

The seven-year course is divided into two years pre-dental and five years dentistry proper. Of these seven years the greater part of the total number of hours of a year is taken up in the study of English, thus lengthening the course to this extent. Knowledge of English is necessary so that adequate scientific reading may be kept up. The pre-dental work is taken in the College of Science; the work of the next two years is taken in conjunction with the medical students in such subjects as anatomy, pharmacology, physiology, biochemistry, physical diagnosis, medicine, etc. From then on, although they continue to take some subjects in common, there is a great deal more stress on strictly dental subjects, the sixth year being altogether taken up with the study of subjects special to dentistry. The final year is an interne year.

GRADUATES.

There have been 22 graduates in Dentistry. At the time of graduation, practically all have given promise of becoming good practioners; a few are exceptionally fine and are a real credit to our college. Most of them are holding responsible positions in other cities throughout China. We are exceedingly sorry that we are unable to continue more of them on our staff.

Unlike graduates with certain other University degrees who have difficulty in the present state of Chinese society in securing suitable positions, graduates in dentistry find remunerative positions with comparative ease. This is true to such an extent that with our limited budget we have been unable to retain our graduates for assistance on the teaching staff or as clinicians in the clinical department. Likewise we have been unable to offer sufficient salary to bring back those who have been gone away for training and experience in other parts of China. We can not compete with the salaries they

are able to procure in municipal health centers, military or government hospital or in private practice.

STAFF.

Thanks to the cooperation by the College of Science and our relation in the College of Medicine and Dentistry the students in dentistry, in the early years of their course, enjoy the same facilities as are offered to science and medical students. The staff in these departments has been well maintained and the teaching efficient. In the senior years of the dental course, when specialization begins, we are terribly understaffed. With the limited numbers, and one foreign member generally on furlough, it is obvious that we cannot carry on as efficiently as we should. Lectures, laboratory hours, supervision in the clinic, administration, etc., place heavy burdens on the few dental members of the staff. There is no time for relaxation; no time for research; it is not conducive to growth. The requests to the cooperating missions for additions to the staff are quite legitimate.

EQUIPMENT.

Up to the present year the purchase of any equipment has largely depended upon the meagre annual grants to each department, grants ranging from $50 up to $200 or $300 Mex. These amount have covered scarcely more than the ordinary running expenses, and have not been at all adequate towards buying needed equipment. This year we were extremely gratified with the grant from the Nanking Government. It is a recognition that we are worthy of their support, and since contributions from abroad are likely to diminish, government grants and local gifts from the Chinese seem to be our only hope of expansion.

The above mentioned grant to Dentistry from the Nanking Government amounted to Mex. $11000; of this $4000 was assigned for the salary of a Chinese professor, and $7000 for equipment. It has not been possible to find a teacher with the necessary qualifications so the grant of $4000 has reverted. As to the grant for equipment, $2000 was spent in the department of pathology and the remainder is being used in the purchase of operating chairs, electric engines, lathes, autoclave, etc., for the clinical department. It is

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hoped that further grants may be available to aid in equiping other departments.

Aside from the larger pieces of equipment and apparatus, such as operating chair, vulcanizer, etc., the student of dentistry in western countries furnishes his own equipment costing from Gold $100 to $150 annually. In this college the student furnishes nothing, except a receptive mind. This method demands a large budget, with large departmental grants.

The college finds itself in a serious situation. With a considerable deficit and no increase in the yearly budget such proposals as closing certain departments or not taking in a new class this year have been suggested. Endowments and special gifts are needed for securing more staff and equipment.

BUILDING.

Dentistry is housed in inadequate quarters. There is need for a new building for the clinical department. Formerly a dental unit was mentioned as one of the first to be built in the new clinical centre; lately others have taken precedence, but the need is still as great.

BESEARCH.

Research is naturally to be desired; West China is rich in opportunity and material. No money is allocated for this purpose, nor can we find time to devote to it. The press of regular duties requires all our time and effort. This is to be pitied, not only because West China is a very fertile field for research, but also from the standpoint of the growth of the profession and the teacher himself.

CLINICAL DEPARTMENT.

The clinic has been under discussion at the college meetings recently in connection with preparing next year's estimates. Questions have been asked regarding the finances of the clinic. The question was asked, 'Why should the University or College pay the salaries of the staff of the clinic when they apart from one or two are not actually teaching dental courses?' and it was intimated that the clinic should be responsible within itself for the salary of all its staff. It has

been generally understood that the clinic was self-supporting; the University was not asked for a grant to the clinic as such. Still the salary of the staff has been supplied from the University budget, that is, from the amount allocated to the College of Medicine and Dentistry.

The equipment, such as it is, has been gradually gathered together; aside from the operating chairs, all the heavy or more stationary furniture and fixtures have been manufactured locally. Instruments and supplies have of necessity been purchased from abroad. These are exceedingly expensive and the cost of such has greatly curtailed our purchases.

The primary need for the University dental clinic is to provide facilities for giving practical training to the senior students in the various operative procedures. Medicine, in regard to the opportunity for clinical training, has had available for its students the facilities offered by the various mission hospitals in the city, which are maintained and financed by individual missions. The University has not assumed financial responsibility for maintaining those hospitals, although grants are being made through the salary budget of the College to certain members of the staff of these hospitals.

It is the responsibility of the University to maintain a dental clinic where students of dentistry may receive their practical training. It is not the responsibility of any one mission nor of the dental clinical staff, but it is a unit of the College of Medicine and Dentistry, and as such under the control and responsibility of the General Faculty. If we sanction Dentistry in this University we accept the responsibility of maintaining the clinic. On the other hand it follows that estimates of receipts and expenditures should be brought in and appropriations made on that basis.

The administration of the finances of the dental clinic has been under the head of the clinical department; all the accounts are kept in the office of the bursar of the University. During the last few years there has been what might be called a surplus, amounting to several hundred dollars annually, which has been swallowed up immediately in the purchase of more foreign supplies and hand instruments to maintain a working equipment. So we should really say there has been no surplus. Such a department needs a little working capital; it cannot tolerate a deficit.

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The income of the clinic is a very nebulus quantity; it cannot be guaranteed: it is difficult to estimate. Patients may be few or many; political conditions materially affect the income; during the last two months the number of patients has been greatly reduced and the income from fees accordingly lessened. We do a lot of comparatively free treatment, at least a good deal at or even below cost. The fees in some respects are ridiculously low; in other ways they seem high, at least from the patient's viewpoint. A large number of our patients are mission employees, university employees, teachers, teachers' families, students, friends of this one or that one, all of whom expect reduction in fees. We are continually in a dilemma; we have to demand certain fees to secure sufficient income; on the other hand, we have to have patients in order that students may secure practical training in operative procedures. High fees keep patients away - no opportunity for students to develop teachnique. Low fees—more patients perhaps, but insufficient income to meet expenses.

The use of any surplus in the payment of salaries would likely necessitate a request for a grant from the University budget for the purchase of foreign supplies, since formerly any surplus has been used in this way.

FUTURE.

The future of dentistry is very promising. The school is well established and we enjoy a considerable reputation throughout China. If substantial increases are made to the budget, as well as the addition of two or three members to the teaching staff, there is no reason why the teaching of dentistry can not be effectively carried on in this University and thereby give leadership to dental education in China.

Respectfully submitted.

H. J. MULLETT

ACTING-DEAN.

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WEST CHINA- Report- College of Medicine 1935

ASSOCIATED
BOARDS

fin copy —

1929-35

Six Years

1929-1935

Chengtu

Eye, Ear, Nose

and

Throat

Hospital

Chengtu

West China

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Chengtu, Eye, Ear, Nose and Throat Hospital.

History.

The first Medical work founded in Chengtu by the Methodist Episcopal Board of Foreign Missions was opened here by Dr. Harry L. Canright in 1894. This medical work was carried on for ten years in a small building yet standing. In 1905, the present hospital building was completed and functioned as a General Hospital for twenty years. From 1925 to 1929 this Hospital was closed due to lack of staff and Dispensary service carried on. It was decided to re-open the Hospital and it was opened as an Eye, Ear, Nose and Throat Hospital on January 2, 1929. The six years since this opening are summarized in this report.

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SIX YEARS

1929-1935

Chengtu

Eye, Ear, Nose and Throat

Hospital

CHENGTU, WEST CHINA

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THE WORK OF THE CHENGTU EYE, EAR, NOSE AND THROAT HOSPITAL BY WONG HO CHING.

成都美以美會醫院、成立有年、前由紅會送往治療軍民甚衆、社會稱之、繼以歷經川戰、經費拮据、行將停辦、彼時斐倫承乏院務、再再與、故籌商應社會之需要、改為眼耳喉鼻專科醫院、并得其友人畢德生醫生同意、允於來川襄助、以所整紅會救治醫藥之資、收作購置器械藥品之用、由放偕斐君陳請當局、如數撥予、促成是舉、延請畢德生醫生莅院主辦一切、本園結博愛之精誠、同趨社會、此存仁醫院之發端也、

畢君德生、以其學識經驗、曲盡精能、六年於茲、不獨市民患病得以霍然者多、即附近各省就醫獲效者亦不少、院務日益發達、設備日臻完善、皆畢君暨諸醫護士之力、有以致之、就醫之人、以耳目復得聰明、佩感之忱、盈乎五內、以是區額環懸、琳瑯滿目、行路稱仁、畢君之榮、醫院之榮、亦同人之榮也、際茲彙刊報銷書册、畧述陳立梗概、以誌厥美、並以俟後來者之觀感而興起焉、

成都存仁醫院醫務部主席王 放

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Dedication.

One Hundred Years Ago
Dr. Peter Parker
Opened the first Hospital in China
As an Eye Hospital.
To him
And to all who have followed
In the Service
of the
Great Physician
This Six Year's Report of
The Chengtu, Eye, Ear, Nose and Throat Hospital
Is Dedicated.

Chengtu, West China, January 1, 1935.

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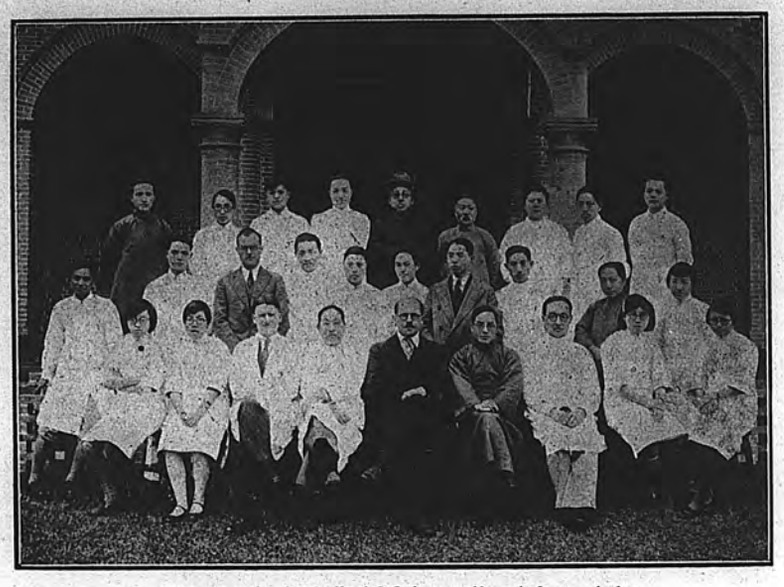
An Appreciation.

Mr. Wong Ho-ching, Chairman of the Hospital Board of the Chengtu, Eye, Ear, Nose and Throat Hospital, Represents the type of individual in Chinese Society who spends his life in doing good. Content with a modest competence, his days are completely devoted to movements having for their aim the betterment of Social conditions. his leadership, his loyalty and his devotion to the highest ideals of Humanitarian Service have made his life an inspiration to the many who are privileged to call him friend. In times of need, day or night, peace or war, he has given Unselfishly of his many talents in furthering the welfare of this Hospital. The Staff and Friends of the Hospital wish to record their Appreciation of his help through these years.



Mr. Wong Ho-ching.

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Members of Staff, 1934, reading left to right

First Row

Miss M. B. Long, N.A.C.
Miss S. C. Fu., N.A.C.
E. R. Cunningham, B.A., M.D., C.M., D.O.M.S. (London)
D. M. Chuang, M.D., Resident
R. A. Peterson, M.S., M.D. Director
D. L. Lu, M.D., D.O.M.S. London
Y. H. Ho, M.D. Assistant Resident
Miss D. W. Lo, N.A.C.
Miss W. R. Hsia, N.A.C.

Second Row

Mr. F. D. Wei, N.A.C.
Mr. D. K. Hsieh, N.A.C., Supervisor
Mr. T. E. Freeman, B.A., Business Manager
Mr. L. L. Dso, Intern
Mr. S. C. Li, N.A.C.
Mr. S. T. Kung, N.A.C.
Mr. D. L. Tang. N.A.C., Hospital Manager
Mr. B. Y. Nien, Intern
Mrs. S. K. Nien, Matron
Miss G. M. Liu, N.A.C.

Third Row

Mr. D. H. Wen, Electrician
Mr. W. M. Li, Laboratory student
Mr. C. T. Chang, Graduate Technician
Rev. J. C. Hsu, Chaplain and Registrar
Mr. T. S. Hsiao. Ass't. Registrar
Mr. T. C. Chang, N.A.C., Druggist
Mr. Y. D. Yang, N.A.C.
Mr. S. Q. Yen, N.A.C.



ROBERT A. PETERSON, M.S., M.D., Director.

Professor of Otolaryngology and Associate in Ophthalmology.

West China Union University, Chengtu, West China.

The Aims of Medical Mission Work.

The relief of disease and the solution of problems for the preservation of health are not apologetics for Christianity but are Christianity in action. The development of the work of the *Chengtu Eye, Ear, Nose and Throat Hospital* into one of the largest special clinics in Asia has been accepted by the staff as a responsibility and a challange, This responsibility can be analyzed into five obligations. These five obligations are the relief of pain and suffering, the spreading of knowledge for the prevention of disease, the training of medical students and doctors in these fields of special work, the opening of extension work into other areas, and research into diseases and health problems as manifested in West China. These five obligations constitute a challenge to the Christian dynamic of love in action as expressed in medical mission work.



DJUNG-LIN LU,
M.D., D.O.M.S.,
London

Member of Staff
1929—

Associate Professor of Opthalmology and Otolaryngology.

West China Union University.

The Development of Chinese Leadership.

The fulfillment of the obligation for the development of Chinese leadership in medical work in China is a genuine test of the adequacy of the medical mission program. As a teaching organization connected with the College of Medicine and Dentistry of the West China Union University, this hospital would lose much of its effectiveness in its undergraduate and postgraduate teaching program if it were not committed to training additional teaching personnel. Dr. Djung-lin Lu after graduation had two years special training in this hospital, followed by two years study in Liverpool in London. He has made a significant contribution to the teaching activities of the Department of Ophthalmology and Otolaryngology since his return from abroad. He has played an equally adequate part in development of the clinical and administrative parts of the hospital work.



EDISON R.
CUNNINGHAM,
B.A., M.D., C.M.
D.O.M.S. London

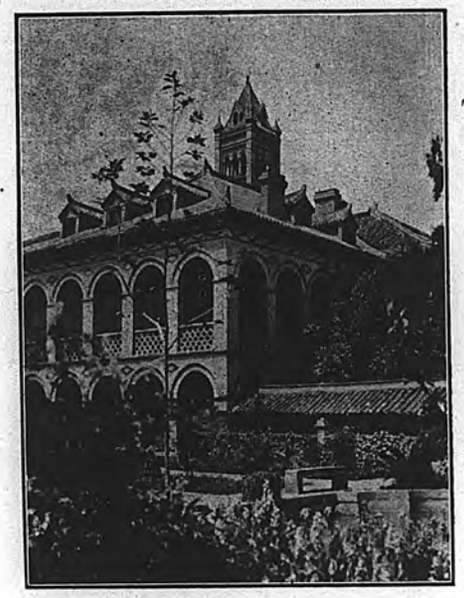
Member of Staff 1931—

Professor of Opthalmology.

West China Union University.

The Cooperative Aspect of our work.

The development of cooperative activities through international and interdenominational cooperation has been a dominant factor in the success of this hospital. Dr. Edison R. Cunningham is appointed to the staff from the United Church of Canada Mission. Dr. Djung-lin Lu is associated with the Chinese Shen Kong Huei the Chengtu work of which was founded by the Anglican mission. Dr. R. A. Peterson is appointed by the Board of Foreign Missions of the Methodist Episcopal Church, New York City. This type of international and interdenominational cooperation is also a key factor in the personnel of the Faculty of the College of Medicine and Dentistry and of the other Faculties of the West China Union University and of the Union Hospitals Board with whom this hospital is associated.



The Chengtu Eye, Ear, Nose and Throat Hospital as seen from the Hospital Garden. The tower has housed the famous hospital clock since its installation twenty-five years ago. The hospital is located in the center of the south half of Chengtu

Location.

Chengtu is the capital city of Szechuan province in West China. It is located seventeen hundred miles inland from Shanghai. The former traveling time of one month from Shanghai can be reduced to two days by air under present conditions. The city has a population of 400,000. The population of the province is estimated at sixty million people. The city is located in the center of a very fertile plain. The irrigation system supplying this plain has functioned perfectly for over two thousand years. Southwest of Chengtu The Trans-Himalayan snowcapped mountain ranges of the Thibetian Marches can frequently be seen from this clock tower.



K.C. DEN, M.D.

Resident 1929.
Superintendent of Hanchow Municipal Hospital.



D. H. CHIEN, M. D.

Assistant Resident 1929-30.
Superintendent of Tzechow Hospital.

Undergradute Instruction.

The organization of this hospital as the Chengtu Eye, Ear, Nose and Throat Hospital in 1929 naturally made it the center of instruction in ophthalmology and otolaryngology for the students of medicine of the West China Union University. In six years, fifty-one undergraduates have had their undergraduate work in these specialties here. Since the intern year has become a prerequisite for graduation in medicine, thirty-two students have had a three months training in this hospital during their intern year in the rotation service offered by the Men's Hospital the Women and Children's Hospital and the Eye, Ear, Nose and Throat Hospital. The undergraduate courses are based on conditions as observed in the large dispensary and clinical service. The intern period is devoted to intensive work with cases in the outpatient and inpatient services under adequate teaching supervision.



G. B. LO, M.D.

Resident, 1930-32.
Clinician, Faculty of Medicine, West China Union University.



D. D. YUAN, M.D.

Assistant Resident 1931-32
Resident 1932-33.
Organizer and Superintendent of Chungking Eye, Ear, Nose and Throat Hospital.

Postgraduate Instruction.

It was recognized that, hand-in-hand with the development of undergraduate instruction, postgraduate instruction was necessary to supply personnel for the Department and for other hospitals in the province. Four graduates of medicine from the West China Union University have returned for courses of two years duration. Three other graduates have completed one years special training here and five other doctors have attended short courses of from one to six months in length. These courses are all in residence with the postgraduate student an active member of all services. These men have returned to their hospitals after their special work and are pioneering in establishing the neucleus of clinics of predominantly eye, ear, nose and throat services throughout the province. Hospitals of other provinces are requesting personnel. Applications received for postgraduate opportunities for study from graduates of schools in other parts of China are more than the places available.



D. M. CHUANG, M.D.

Assistant Resident 1932-33
Resident 1933-34.
Suifu Baptist Hospital.



C. H. YU, M.D.

Assistant Resident 1932-33
Resident 1933.
Private Hospital, Wanhsien.

The Equipment of the Hospital.

The organization of this work in 1929 necessitated facing the fact that certain handicaps had to be met. A fair stock of drugs and operating instruments were on hand. The building was in good condition. Sixty beds without bedding were extant. There was practically no furniture since the building had not been used as a hospital for five years. The equipment had gradually disappeared. Beginning with several thousand dollars silver, some furniture and equipment was added. Through the years as self-support has become an assured fact, equipment has been added until the hospital is well-furnished and equipped. Through teaching grants, income from patients, and special gifts, such equipment as a slit lamp, Gullstrand ophthalmoscope, ultraviolet units, a modern epidiascope with an excellent microprojection attachment, and a Kohler electrical unit for daytime light and power were added. The hospital is wired throughout and electricity for the wards is supplied through a city plant. The wards are heated in winter.



Y. H. HO, M.D.

Assistant Resident,
1933-34.
Mienchu Hospital.

The following graduates of the West China Union University have attended short courses of one to six months in length at the Chengtu Eye, Ear, Nose and Throat Hospital 1929-35

H. P. CHEN, M.D.	Suining
Y. Y. LIU, M.D.	Yuinhsien
D. D. DSEO, M.D.	Wanhsien
Y. K. WU, M.D.	Suining
K. P. WAN, M.D.	Yachow.

Extension Work.

One of the fundamental commitments in a clinical and teaching work is the provision for growth. From the first year, it has been a part of the hospital policy to develop extension work through the outlying hospitals in centers throughout province. During the years 1934, units from this hospital visited and held 5 day clinics in eleven hospitals throughout the province. Seven of these were held by Dr. Cunningham in hospitals of the United Church of Canada Mission. Hospitals established by the Baptist, Friends and American Methodist Missions have been visited and clinics held by Dr. Peterson and Dr. Wu, with Mr. Peng and Mr. Yen as assistants in organizing the clinic. Each Saturday a unit under Dr. Wallace Crawford of the Department of Public Health does a one day trip in the Wesleyan University Ambulance to a nearby center and the hospital has supplied the eye, ear, nose and throat personnel of the unit.



MR. D. L. TANG, N.A.C.

1929-1934.
Hospital Manager.



MR. D. K. HSIEH, N.A.C.

1929—
Chairman of Patient's Welfare Department.

Hospital Administration.

The administration of an eye, ear, nose and throat hospital with clinical, teaching and extension programs of development has necessitated development of a personnel capable of coordinating the various aspects of these programs. This hospital has been especially fortunate in developing administrative personnel from the Chinese staff. The work done by graduate male nurses as nurses will ultimately be largely cared for by female nursing graduates. In this readjustment, the development of departmental administrators from the male nursing staff has provided a field of wider usefulness. Mr. D. K. Hsieh, after six years in various departmental activities, has been selected for a years special training in the National Health Administration at Nanking. On its completion, he will be eminently fitted for the organization and direction of extension work in this special field.



MR. T. S. CHANG, N.A.C.

1929—

Druggist and Hospital Buyer.



MR. C. T. CHANG,

Graduate Technician.

1931—
Chairman of Laboratory Service.

Special Departments.

An average day's work in the hospital necessitates the caring for over two hundred outpatients and fifty to sixty inpatients. To do this efficently, six separate clinical units are functioning. In order that these clinical nnits may properly function, it is necessary that various departments such as registration, business office, drugroom and laboratory be coordinated with the clinical organization. The drugroom, for instance, handles over 15,000 prescriptions a year and the laboratory cares for nearly 10,000 various examinations in the same period. The dispensary services and inpatient treatments are done in the forenoons. Special examinations and operative clinics are held in the afternoon beginning at 1:30. Teaching activities are coordinated so as to be a part of and utilize the regular clinical and administrative services.



MR. DAVID PENG, N.A.C.

1930—
Hospital Staff, X-ray and electrical equipment.

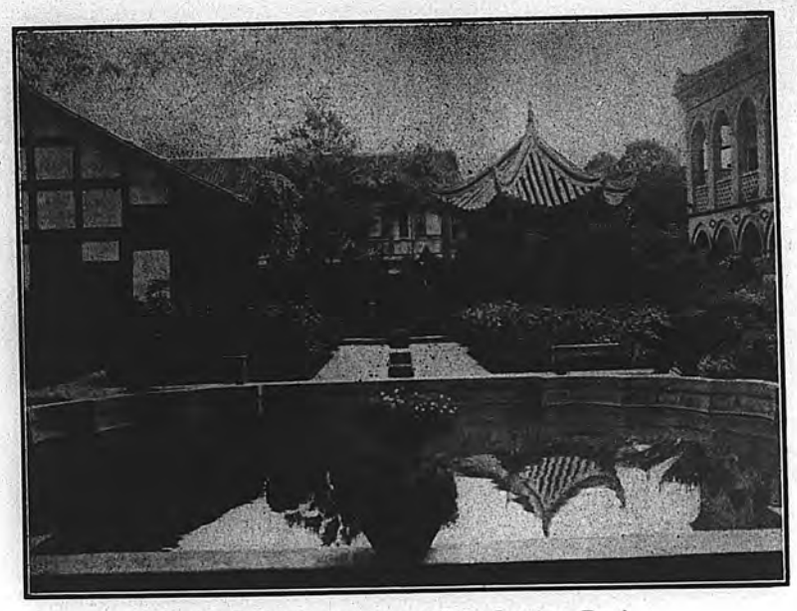


MR. S. T. KONG, N.A.C.

1930—
General Staff.

Hospital Finances.

The study of a hospital's financial program over an extended period gives some very interesting data. The total income for a period of six years has been slightly over $280,000 in Szechuan silver. 97% of this amount came from patients fees. Of the 315,353 outpatient attendances durin'g this period, seven-tenths have paid the equivalent of ten cents local currency. One fifth have been special cases at higher fees. One tenth have been indigent. To make a self-supporting hospital-work in China, certain essentials are required. Adequate facilities and staff must be provided to handle a large number of patients. Adequate facilities and staff must man the paying clinic, the regular dispensary, and the indigient clinic. The staff need a large vision in which intensive work, cooperative teamwork, opportunities for individual development and a real spirit of service are dominant factors.



The Hospital Garden and Reflecting Pool.

The Need of Beauty.

The spirit of the Orient finds a spiritual ex pression in the beauty of its gardens. Synchronous with the development of the work of this clinic came the need of surroundings where patients and staff could "feed their soul". Limited by being located on grounds in the heart of a great city, the Small Garden surrounding the Pavilion in the distance, and the Large Garden planned around the Reflecting Pool fills this need. Trees, flowerbeds, walks and resting places are combined in a setting that gives an illusion of open spaces and distances. Their gradual development came through the appreciative cooperation of friends of five continents. The influence of such surroundings in developing quietness of heart and calmness of spirit among those in need of such reinforcement make such gardens a potent resource in a hospital program.



MRS. B. Y. NIEN,
Matron

1930—
Director Housekeeping Services.



MISS D. W. LO,
N.A.C.

1930—
Head of Women's Nursing Staff.

The Care of the Patients.

Overpopulation, lack of opportunity and inadequate knowledge are responsible for the fact that a large proportion of the population of the Szechuan plain are existing in the twilight zone of nutritional instability in spite of living on one of the richest plains of the world. The physical capital of the individual patient is quickly depleted by illness. Food deficency states follow in the toll of acute conditions and are potent in maintaining the paradoxical condition of "chronic poor health". The response of eye, ear, nose and throat conditions to the effect of an adequate diet is frequently a very potent factor in determining the success or failure of the line of treatment followed. The field of food values in the Far East must be thoroughly surveyed for a rational understanding of the fundamental processes involved in the maintenence of health and the production of states of disease.



MISS G. M. LIU,
N.A.C.

1931—
Nursing Staff.



MISS W. R. SHA,
N.A.C.

1931—
Nursing Staff.

The Nurses.

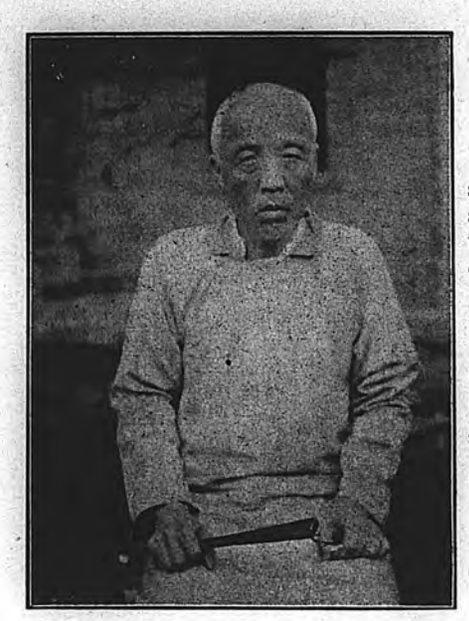
Limitations of space prevent the individual presentation of all the past and present members of our staff. It has been necessary to limit personal mention to those who have been with us for a period of four years on the nursing staff. They are worthily representative of the followers of Florence Nightingale. Quietly, carefully, efficently; responding alike to the sharp call of sudden emergency and to the routine of the usual case, the Chinese Nurse worthily upholds a great tradition. Although there is less than a century of professional background, the resources of centuries of patience, of devotion in the face of need, and of consecration to an ideal of service makes the Nurse in China, as elsewhere, a worthy colleague in the battle against ill-health.



This father carried his daughter for fourteen days in his overland trek from Kweichow. The daughter had fallen into a firepit as an infant, losing the right eye and injuring the left through scars of the lids and a burn of the eyeball. Three months treatment and several plastic operations were necessary to restore the vision to three-fourths of normal.

The Outpatient Service.

The outpatient service of a hospital in China offers one of the best modes of expression for medical work. This is particularly true of eye, ear, nose and throat where a large percentage of patients are ambulatory. The attendance has increased by one third through six years while the staff members have tripled in number. This has given an opportunity to steadily increase the quality of our service, to maintain an adequate income and at the same time reduce the number of patients for which each doctor is responsible to a reasonable figure. With increased personnel available, the clinics of the future will allow of both extensive and intensive development of outpatient work. To allow for such development, an institution of this type should have an adequate endowment for the support of staff. This is one of our most important problems to be solved. The patients come and cannot be turned away.



Mr. Hsü Tien-chi, an old Chinese scholar and teacher, had lost useful vision because of senile cataracts. A very successful result followed their removal. He has been again been teaching the Classics for some years. Every New Year season, he pays a ceremonial visit.

The Inpatient Service.

The intensive study of inpatient cases and their care is the final criterion of the professional service offered by a hospital. It has been the policy to keep the inpatient services at a level that will allow efficient work from both teaching and clinical aspects on the part of the senior staff. During the six years, 5,612 inpatients have been cared for in the hospital. The average patients stay has been 16 days. A stay in a hospital usually means an entire readjustment of the idea that the average patient has of adequate attention to some aspects of public health. That this has been a happy readjustment accounts in part for the tremendous growth in the following of modern medicine in China.



Four convalescing mastoid cases, two of which had subdural brain abscesses

The Children.

Children are universally beloved in China. The parents and families will make any sacrifice possible for their welfare. Poignant memories rise of a father bringing his son from Kansu, the province to the North, traveling day and night that a brain complication associated with mastoid disease might have relief. A follower of the Crescent, yet he turned to followers of the Cross for help. Another picture arises of a Chinese mother bringing her child across country by day in a sedan chair, sitting up at night, not knowing what moment the tracheal foreign body might stop the child's breathing forever. Each day in the clinic the most perfect tribute ever paid the medical profession is heard many times over when a mother reassures her frightened child with the words, "puh pah deh, ih sen ngai ni." 不怕得醫生愛你 (Do not be afraid, the doctor loves you.)



Hourglass cyst of submaxillary gland.

The Field for Research.

The thrill of creative thinking is a potential factor in the development of medical science. Livingstone noted the effect of inadequate diet in causing night-blindness among his bearers as he was pressing through the African forest. Other remote places in the world have been most productive in medical research. West China is teeming with problems that demand an answer. The factors that influence the permeability of mucous membranes in the causation of disease; the influence of the lack of certain food factors or of deficient mineral content of foods in unbalancing bodily processes; the effect of modern rapid transportation in introducing diseases formerly nonprevalent; the geographical dissemination of disease as trades followed the old trade route across Central Asia since ancient times; these, problems and many more offer a field for the creative thinker who would give of his best that others might have more abundant life.

SUMMARY

Name - -	Chengtu Eye, Ear, Nose and Throat Hospital.
Location - -	Chengtu, West China.
Founder - -	Methodist Episcopal Board of Foreign Missions.
Teaching Affiliations	Faculty of Medicine, West China Union University.
Teaching Departments	Ophthalmology and Otolaryngology.
Teaching Field -	Undergraduate, postgraduate and Extension.
Bed Capacity -	Seventy Patients.
Yearly Inpatient Average - -	936
Yearly Outpatient Average - -	52,559
Yearly Major Operation Average -	325
Yearly Minor Operation Average -	669
Yearly Dispensary Operation Average	1302
Average Annual Income	$46,789.00 local silver currency.
Percentage Self Support -	97%
Senior Staff - -	3
Junior Staff - -	3
Internes - - -	3
Graduate Nurses - -	15
Technicians, etc. - -	4
Additional Directing Staff	4
Orderlies, and servants -	32
Annual Drug-room Prescriptions -	15,104
Annual Laboratory Examinations -	8,340
Needs -	Outpatient Building and Teaching Unit.
	Funds for Special Equipment
	Endowment for Extension Work
	Endowment for Additional Chinese Staff.
Director -	Robert A. Peterson, M. D.
Address 1935-36	150 Fifth Avenue, New York City.

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WEST CHINA

1/7/36

Presented to Ex. Com: 1/7/36

STATEMENT REGARDING PRESENT SITUATION IN DENTISTRY IN THE WEST CHINA UNION UNIVERSITY

INDEXED

Dental education of university grade in China is at present confined to the College of Medicine and Dentistry of the West China Union University in Chengtu. Several attempts in the past to conduct schools of dentistry in other parts of the country have all failed, apparently from lack of support in the case of mission institutions and from internal dissension or refusal of the part time staffs to give sufficient of their time for instruction on the part of the commercial institutions. The government has not yet started work of university grade in dentistry, but in September 1935, in Nanking, it opened a dental technical school giving a three year course.

A dental faculty was instituted in the West China Union University in 1919, when the former department of dentistry was reorganized and a full university course established. In 1929 the faculties of Medicine and Dentistry were united to form the College of Medicine and Dentistry, which is at present one of the three colleges of which the university is composed. The course of instruction is seven years in length, including two years of predental instruction and one year of internship. In every way the course is on a par with that given in medicine, and the students in all preclinical departments work alongside the medical students in the same class rooms and laboratories, and under the same instructors. The university is registered with the National Government of China, and also holds a charter from the Board of Regents of the University of the State of New York, both of which institutions recognize the degree of D.D.S. conferred upon the graduates.

The graduates of the West China Union University in dentistry, although relatively few in number, are nearly all holding responsible posi-

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tions in educational and government institutions in various parts of China, including the Peiping Union Medical College and the Central Hospital established by the Government in Nanking. Others are in private practice in such important centers as Chungking, Hankow and Tsinan, etc. The present student body comes from Szechwan, Yunnan and Kweichow in West China, and also from Manchuria, Hopeh and Shantung in the North, and Fukien and Canton in the South. Overseas Chinese are also represented among the student body, as well as Korea, Russia, and the non-Chinese races of the West China Border. The school, although in the far West, is now serving the whole of China. The rapid increase in transportation facilities in recent years now makes access to Chengtu relatively easy. Furthermore the constant danger from Japanese aggression in the North is making all China turn more and more towards her own West as a new cultural center. Hence, it is almost certain that the stream of Southern students who formerly sought an education in the great universities of the North will be more and more diverted towards the newer regions of the West.

The staff in dentistry of the West China Union University, from the inception of dental work, has been supplied almost entirely by one mission, that of the United Church of Canada. The university is a union institution, and each of the participating units is supposed to be equally responsible for the missionary staff. But in dentistry the distribution has been far from equal. With the exception of one man supplied to the teaching staff by the Baptist Mission for about five years, all the non-Chinese and some of the Chinese members of the dental staff have been supplied by the United Church of Canada. Most of the time the United Church has been represented on the staff by four Canadian dentists. In 1923 one of these, Dr. Thompson, died. Arrangements were made for his re-

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placement with a new man, and an excellent candidate for the position in the person of Dr. Gordon Campbell has been found. But before his appointment was completed decreased income compelled the Board of Foreign Missions of the United Church to assume a cut of $100,000 in its expenditure for 1936. Under these circumstances it does not feel able to replace Dr. Thompson at present.

It has come to our attention that Mr. John D. Rockefeller, Jr. desires to have his attention directed to those union enterprises in which the Baptist Board is engaged, as he wishes to confine his gifts to such projects. The West China Union University is undoubtedly one of the most outstanding of such enterprises, and it is one in which the Baptists originally assumed equal responsibility with other boards. However, in recent years this principle of equal responsibility has not been maintained. Although the Baptists have not fallen as far behind as have some other boards, nevertheless they do not take nearly as large a share in staffing the institution as does the Canadian Mission. For years the field in West China has requested the Baptist Board of Missions to replace their former representative on the dental staff in Chengtu, but without result. Now, with an increasing number of students and a decreasing budget on the part of the United Church, dental education faces an extremely critical situation. If the staff is not strengthened immediately we fear that this most successful undertaking may have to be abandoned.

Therefore, we the undersigned, desire to call the attention of the Executive of the Board of Governors to the critical situation in dentistry in West China, and to suggest that representation be made to the Baptist Board, and through it to Mr. Rockefeller that the former Baptist representative on the dental faculty be replaced. We understand that a suitable Baptist candidate for the position is available, and that he

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has already applied to the Baptist Mission Board for appointment. We believe that no greater union work can be found for Mr. Rockefeller to invest in than that represented by the West China Union University. Should Mr. Rockefeller see his way clear to support one or more professors on the dental staff it will do much towards saving this excellent piece of professional educational work from an early demise, and so make a very valuable contribution towards the maintenance of high standards in dentistry in China.

/s/ ASHLEY W. LINDSAY

/s/ LESLIE G. KILBORN

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West China Union University

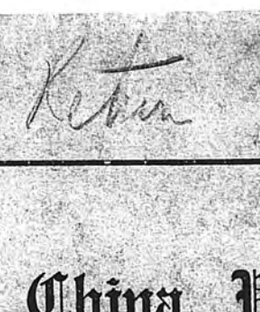
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of the

College of Medicine and Dentistry

and

BULLETIN OF GENERAL INFORMATION



CHENGTU, SZECHWAN

1936 - 1937

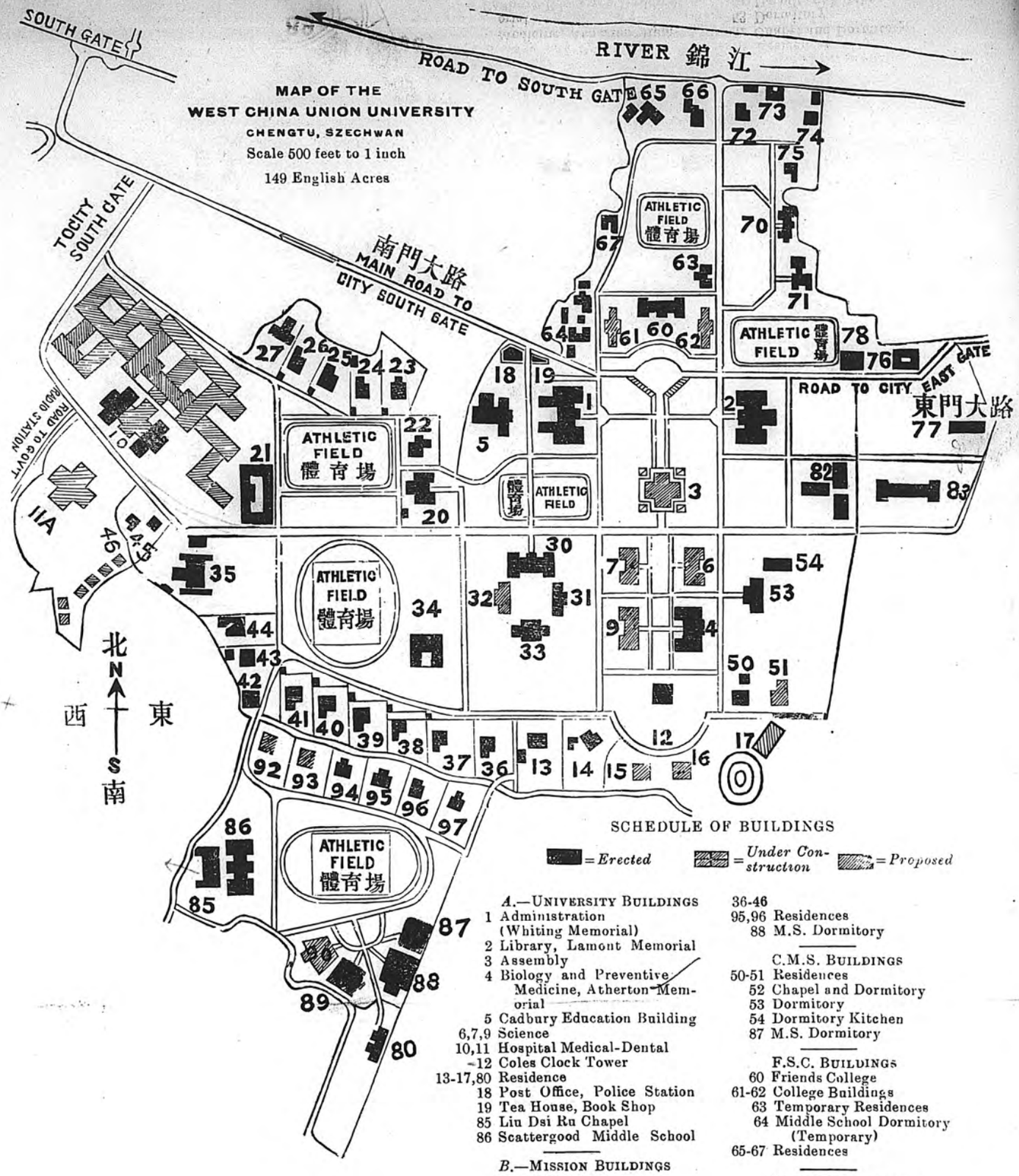
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MAP OF THE WEST CHINA UNION UNIVERSITY

CHENGTU, SZECHWAN

Scale 500 feet to 1 inch

149 English Acres



SCHEDULE OF BUILDINGS

■ = *Erected* ▨ = *Under Construction* ▨ = *Proposed*

A.—UNIVERSITY BUILDINGS

1 Administration (Whiting Memorial)
2 Library, Lamont Memorial
3 Assembly
4 Biology and Preventive Medicine, Atherton Memorial
5 Cadbury Education Building
6,7,9 Science
10,11 Hospital Medical-Dental
12 Coles Clock Tower
13-17,80 Residence
18 Post Office, Police Station
19 Tea House, Book Shop
85 Liu Dsi Ru Chapel
86 Scattergood Middle School

B.—MISSION BUILDINGS

A.B.F.M.S. BUILDINGS

20 Vandeman College
21 Middle School Dormitory
22-27,93 Residences
90 M.S. Dormitory

U.C.C.M. BUILDING

30 Hart College
31-32 University Dormitories
33 Gymnasium
34 Teachers' Residences (Temporary)
35 Canadian School (For Missionaries' Children)
36-46
95,96 Residences
88 M.S. Dormitory

C.M.S. BUILDINGS

50-51 Residences
52 Chapel and Dormitory
53 Dormitory
54 Dormitory Kitchen
87 M.S. Dormitory

F.S.C. BUILDINGS

60 Friends College
61-62 College Buildings
63 Temporary Residences
64 Middle School Dormitory (Temporary)
65-67 Residences

M.E.M. BUILDINGS

70 Joyce Building
71 Ackerman Building
72-75,94 Residences
76 Chinese Residence
77 M.E.M. College
78 Goucher Memorial Junior M.S.
89 M.S. Dormitory

A.F.B.M. BUILDING

97 Residence

WOMAN'S COLLEGE BUILDINGS

82 Women's College
83 Dormitories

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Annual Announcement, 1936-1937

COLLEGE OF MEDICINE AND DENTISTRY

WEST CHINA UNION UNIVERSITY

FOUNDED 1910

Accorded Registration by the Szechwan Provincial Government Bureau of Education, 1927; and Registration with the Chinese National Government, Nanking, in 1933.

Published by
THE WEST CHINA UNION UNIVERSITY
CHENGTU, WEST CHINA
JULY, 1936

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HISTORICAL STATEMENT

The West China Union University was established in 1910 by the united action of the American Baptist Foreign Mission Society; the Friends' Foreign Mission Association, now the Friend's Service Council, Great Britain and Ireland; the General Board of Foreign Missions of the Methodist Church of Canada, now the Board of Foreign Missions of the United Church Canada; and the Board of Foreign Missions of the Methodist Episcopal Church, U.S.A. The Church Missionary Society of England was admitted to participation in the University in 1918. The Women's Foreign Missionary Society Boards of the American Baptist Church, the Methodist Episcopal Church, U.S.A., and the United Church of Canada were admitted to participation in 1925.

The aim of the founders, as stated in the constitution, is, "The extension of the Kingdom of God in West China by means of higher education under Christian auspices."

The University is situated in the south suburb of Chengtu, the capital of the province of Szechuan. The strategic importance of the location is readily recognized, as it is not only in the center of the most populous and most extensive province of the Republic, but is also well placed to extend its influence to all West China, Tibet, and the many border tribes.

Part of the present site had been purchased by the co-operating Missions by the year 1908, but classes were not opened until March 1910. Because of Revolutionary disturbances, the University was forced to close in the Autumn of 1911. It was re-opened in 1913 with three Faculties—the Faculty of Arts, the Faculty of Science, and the Faculty of Medicine.

During the succeeding decade there was a steady and normal growth in the number of students and in the diversity of subjects taught. By 1922 the Faculty of Education, the Faculty of Religion, and the Faculty of Dentistry had been added.

Women students were admitted to the University in the autumn of 1924, and in 1925 three representatives of the Women's Boards were admitted to membership in the Board of Governors.

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The university made application for Government registration in 1927 and was accorded provisional recognition by the Provincial Bureau of Education in November of the same year. Full registration was granted by the National Government in the Autumn of 1933 and the University now operate as part of the national system of Education.

ORGANIZATION.

The University is carried on under the control of the Board of Governors, the Board of Directors, and the General Faculty.

The Board of Governors, the members of which are resident in England, the United States, and Canada, consists of three representatives elected by each of the uniting bodies and two-thirds that number of co-opted members, elected by the Board.

The Board of Directors is composed of fifteen members, resident in China. The majority of the members of the Board of Directors must be Chinese. The Board of Directors has power to elect the President who is an ex-officio member of the Board, without vote.

The Board of Governors acts as a Board of Founders and has entered into an agreement with the Board of Directors whereby the payment of an annual sum is assured to the Board of Directors to be used for the work and promotion of the University.

The General Faculty of the University consists of the chief administrative officers; representatives of the professors and associate professors and assistant professors; and coopted members.

BUILDINGS AND GROUNDS.

According to the original article of union each mission founding a college was to purchase property and erect buildings for the housing of its staff and students, and contribute a college building for teaching purposes. The Board of Governors purchased property for the teaching building and general campus and was to erect the university administrative and teaching buildings and residences for those members of the staff who are provided by the Board of Governors. This policy has thus far resulted in the erection of twenty-nine foreign

residences and seven Chinese-style residences, nineteen permanent college and dormitory buildings and the Clock Tower, also three groups of Chinese-style dormitories and other buildings. Accommodation is thus provided for eight hundred and fifty students and teachers. Athletic fields and a number of tennis courts are also provided for on the property.

(1) UNIVERSITY BUILDINGS:—

The Whiting Memorial Administration Building.

This Building was completed in 1919, as a memorial to Robert Morris Whiting by the generosity of Mr. and Mrs. Joseph B. Morrell, Northport, Long Island, New York, U.S.A. The building is of grey brick with grey tile roof, finished in accordance with the best traditions of Chinese architecture adapted to modern school conditions. It is two stories high, 175 ft. long by 93 ft. wide. The administrative offices, the assembly hall, and class rooms for arts and photography are located in this building.

The Atherton Building for Biology and Preventive Medicine

This Building completed in April 1924, is the gift of the Atherton family of Honolulu, H.I., in memory of Dr. Alexander Atherton. It is 192 ft. long and 94 ft. at extreme width, with two full stories and basement. The Departments of Biochemistry, Chemistry, and Biology and the University Dispensary are housed in this building.

The Lamont Library and the Museum Building

This building, completed in 1926, is of the same general type of architecture as the Administration Building and stands opposite to it. Its erection was made possible through the generosity of Mr. and Mrs. B. C. Lamont of Aberdeen, South Dakota, U.S.A. The Library is a memorial to their son.

The Scattergood Memorial Middle School Building

This building, providing teaching accommodation for three hundred middle school students, was given by Mrs. Thomas Scattergood, of Philadelphia, U.S.A., as a memorial to her husband and an expression of international good-will. The building is of the same material as the University Buildings. It is two stories high, 190 ft. long by 48 ft. wide.

The Middle School Chapel

The chapel, was erected in 1927, with funds contributed by Mr Liu Dsi Ru, of Chungking, West China. It is of the same general type of architecture as the Middle School building. It is 82ft. long by 60 ft. wide and provides seating accommodation for four hundred students on the main floor.

The Cadbury School of Education Building.

Through the beneficence of Mr. George Cabury, Bourneville, England, the University has erected the main section and one wing of its Education Building. When completed the building will be 180 feet long, two stories high It is of the same type of architecture and form of construction as the other buildings.

The Coles Memorial Clock Tower is the gift of J. Ackerman Coles, LL.D., New York. The tower is built of brick nearly fifty feet, with a superstructure of wood to a total height of slightly over one hundred feet. The four faces of the clock, which are seven feet in diameter, are seventy-one feet from the ground, above which is placed the bell. The bell and clock are also the gifts of Dr. Coles. It was erected in 1925-6.

The Medical-Dental College Building when completed will be the largest building on the campus. At present the two end wings only have been built. Each is 152 feet long and 40 feet wide, and consists of two stories and basement. The east wing houses the departments of Anatomy and Physiology, and Pharmacology; also the department of Pharmacy. The west wing houses the departments of Pathology and Bacteriology, Hygiene and Public Health and Dental Laboratory Technology, Dental Surgical Technology, and the Dental Infirmary.

The Dewey and Goucher Schools, schools established by Dr. John F. Goucher, became the practice schools of the Faculty of Education and the Normal School in 1919.

The Goucher Practice School, a three year junior middle school with 125 selected students, has, since the destruction of the original building by fire, been operated in the rooms of the Cadbury Educational Building. From the Autumn of 1936 its work will be conducted in a fine new brick building of two stories, 170' X 50', erected by a gift of $20,000. local currency from Mrs. Elizabeth Goucher Chapman in memory of her father, the founder of the school.

(2) Co operating Mission Hospitals:—

The *United Church of Canada Mission Hospital for Men* is located in the N. E. section of the city at some distance from the University. A dormitory for senior medical students is maintained in connection with this hospital, and students of the third, fourth and interne years reside here. This hospital has 150 beds, and is well equipped with operating rooms, clinical laboratory, x-ray department, pharmacy, etc. A general out-patient department is also carried on here. The School of Nursing has two foreign nurses in charge, and about 30 nurses in training. All of the doctors on the staff of this hospital are teachers in the Medical Faculty of the University. The instruction in Medicine, Surgery, Clinical Laboratory and Parasitology is given here. Pending its removal to the new Medical-Dental College Building, the Department of Pathology and Bacteriology is also temporarily located in this building.

The *United Church of Canada Mission Dental Hospital*, one of the constituent bodies of the Chengtu Hospitals Board, is located in the city at Sze Shen Tze. The hospital is well equipped and carries on a polyclinic. The head of each department is a professor in the university. Our students may receive clinical instruction in any clinic which presents suitable teaching material.

The *United Church of Canada Hospital for Women and Children* is in close proximity to the Hospital for Men. It has a capacity of 80 beds, and is well equipped for its special work. All x-ray and laboratory work is done in the Men's Hospital. A good outpatient department is maintained. The training school for nurses has two foreign nurses in charge. Most of the doctors on the staff of the Men's Hospital are also on the staff of this Hospital in a consultative capacity. Pediatrics, Obstetrics and Gynecology are taught in this hospital.

The *Chengtu Eye, Ear, Nose and Throat Hospital* of the M. E. Mission about half way between the University campus and the other hospital, is a 60 bed hospital devoted entirely to these specialties. It was founded and is maintained by the Methodist Episcopal Church. It has served as an eye, ear, nose and throat hospital since January 1, 1929. It has very large outpatient clinics, the total outpatient attendance for 1934 being over 60,000. It has a well balanced inpatient service of approximately 1000 inpatients per year. The undergraduate and graduate teaching and clinical activities of

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the departments of Ophthalmology and Otolaryngology are carried on here. The heads of departments on the staff of this hospital are members of the teaching staff of the Medical Faculty.

The Post office Building is a one story brick structure on the University property fronting on the main street, that provides for post office, police headquarters and bank.

(3) College Buildings, Dormitories and residences:—

The Joyce Memorial Dormitory and the Ackerman Memorial Dormitory were erected in 1914 by the Methodist Episcopal Church. The former was made possible by the gift of the Joyce family of Minneapolis, U.S.A., and the latter by gifts from J. Ackerman Coles, L.L.D., New York. *The Joyce Memorul* is a two-story buiding, 120 ft long by 55 ft. wide; the Ackerman Memorial is a three-story building, 120 ft. long by 30 ft. wide. These and all the other permanent college buildings are of the same material and conform to the prevailing Oriental-Western type of architecture of the University.

The Bishop Bashford Memorial was made possible by donors of the Detroit Area of the Methodist Episcopal Church. It was ready for occupancy in the Autumn of 1933. It is of grey brick construction two stories high and provides accommodation for 100 students.

The Vandeman Memorial Hall and the Baptist Middle School Dormitory were erected in 1919-1920 by the Baptist Mission. Vandeman Hall was erected by a gift from the Vandeman family of Indianapolis, Indiana, U.S.A., and is used as a combined teaching building and dormitory. It provides teaching quarters for the Department of English and dormitory accommodation for 50 students. The Vandeman Memorial is three stories high with basement, 122 ft. long and 53 ft. wide. *The Baptist Dormitory* is a quadrangle. one and a half-stories high: two sections are 200 ft. long by 18 ft. wide, and two sections are 120 ft. long by 18 ft. wide. It accommodates 80 students.

The Hart College, named in honor of Dr. Virgil C. Hart pioneer missionary of the Canadian Methodist Mission in West China, and Jairus Hart, Esq., of Halifax, the donor, was completed in 1920 by the Canadian Methodist Mission (United Church of Canada), and has been set apart largely

for university work; the theological, physics and mathematics departments occupy this building. It is a two story structure, with basement, 160 ft. long by 60 ft. wide.

Tee United Church of Canada College Dormitory and Dining Hall, Gymnasium. The former was erected in 1914; it is 2 stories, 108 ft. long by 40 ft. wide. The Dining Hall-Gymnasium was completed in 1922; it is two stories high, 190 ft. long and 40 ft. wide. These dormitories provide living accommodation for about one hundred students.

The United Church of Canada Middle School Dormitory, located on the Middle School site, completed in 1924, is a two-story brick building, quadrangle style, accommodating one hundred students.

The Friend's College Building.

The building, a gift from the Arthington Estate, London, was completed in 1925. It is two full stories with basement, of brick and tile construction, built in conformity to the prevailing type of university architecture. It is intended for teaching and hostel purposes. The Department of Chinese occupies the lower floor of this building. The second and third stories are occupied by students.

The Church Missionary Society College and Middle School Dormitories.

The College dormitory stands opposite to the United Church of Canada Dormitory and matches it in style of architecture and size. The Middle School Dormitory is located on the Middle School campus. Both dormitories are of grey brick construction and accommodate about 100 students.

The Woman's College erected three semi-permanent buildings during the years 1924-27. They provide residential quarters for 50 students and teachers. The first permanent building was completed in the Autumn of 1932. It is of brick construction built in harmony with the Library architecture and stands near to it. It will accommodate 70 students and teachers.

BOARD OF GOVERNORS.

OFFICERS.

Honorary Chairman:

Sir Joseph Wesley Flavelle, Bart., LL.D., 2,610 Canadian Bank of Com. Bldg., 25, King Street West, Toronto, Canada.

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Secretaries:

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Harry T. Silcock, M.A., China Institute, 91, Gower Street, London, England.

Treasurer:

Rev John R. Edwards, D.D., 150, Fifth Avenue, New York City.

Assistant Treasurer:

B. A. Garside, M.A., 150, Fifth Avenue, New York City.

MEMBERS.

American Baptist Foreign Missionary Society:

Dr. J. W. Decker, Rev. Emery Wm. Hunt., D.D., LL.D. Prof. H. B. Robins, Ph D.

Church Missionary Society:

Rev. Prof. F. Anderson, M.A., D.D., Mr. J. Gurney Barclay, Rev. A. G. Lee, B.A.

Friends Service Council:

Mr. Carl Heath, Mr. H. T. Silcock, M.A., Mr. Herbert G. Wood, M.A.

General Board of Missions, United Church of Canada:

Rev. James Endicott, D. D., Hon. Newton Wesley Rowell, K. C., Dr. E. W. Wallace.

The Board of Foreign Missions of the Methodist Episcopal Church, U.S.A.:

Mr. H. A. Chaffee.

The Woman's Missionary Society of the United Church of Canada:

Mrs. James Hales.

The Woman's Foreign Missionary Society of the Methodist Episcopal Church:

Mrs. Frank E. Baker.

The Woman's Missionary Society of the American Baptist Church:

Miss Frances K. Burr, Mrs. Curtis Lee Laws.

Chancellor of the University:

Joseph Beech, B.A., D.D.

CO-OPTED MEMBERS.

Rev. J. H. Arnup, D.D.
Mr. Frank T. Cartwright
Mr. K. N. Chang
Dr. J. R. Edwards, D.D.
Sir Joseph Flavelle, Bart., LL.B.
Dr. J. H. Franklin
Dr. G. B. Huntingdon
Hon. Vincent Massey.
Dr. Alton L. Miller
Sir Michael E. Sadler, K.C.S.I., C.B., Litt.D., LL.D.

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BOARD OF DIRECTORS.

1. OFFICERS:

Chairman	Mr. Chang Kia-ngau
Vice-Chairman	Mr. S. C. Yang
Chinese Secretary	Mr. C. H. Yang
English Secretary	Rev. C. B. Rape
Hon. Treasurer	Mr. C. C. Chang
Auditor	Dr. Luke Hsiao

2. OTHER MEMBERS:

Rev. G. S. Bell	Mrs. Ola Dudley
Mr. Ho Beh-heng	Dr. Luke Hsiao
Mr. D. K. Liu	Mr. Lu Dso-fu
Mrs. Salquist	Bishop C. T. Song.
Mr. H. C. Wu	

ADMINISTRATIVE OFFICERS.

OFFICERS OF THE UNIVERSITY

President	Lincoln Chang
Chancellor	Joseph Beech
Vice-Chancellor	H. D. Robertson
Bursar	W. B. Albertson
Dean of Studies	Fang Shu-hsuan
Registar	Hua Hsien-da
Librarian (Chinese)	Ch'eng Chih-hsuan
Librarian (English)	Mrs. Chapman
Museum Curator	D. C. Graham
Dean of Discipline and Sec. to the President	T'ang Po Ch'eng
English Sec. to the President	Miss Robertson

Superintendent of Buildings	W. Small
Director of the College of Medicine and Dentistry	W. R. Morse
Dean of Medicine	L. G. Kilborn
Dean of Dentistry	H. J. Mullett
Dean of the College of Arts	Lo Chung-shu
Dean of the College of Science	D. S. Dye
Dean of Women	B. L. Foster

Cabinet:

The President, Vice-Chancellor, Fang Shu-hsien, Chang Ming-chun, H. G. Anderson, T'ang Po-ch'eng and A. W. Lindsay.

General Faculty:

College of Arts:	
Dean	Lo Chung-shu
Heads of Departments	J. E. Moncrieff, Liu Chih-chieh, H. D. Robertson
Representatives of Profs. and Assoc. Profs.	Shen Ssu-chuang, Tu Feng-fu.
College of Science: Dean	D. S. Dye
Heads of Departments	Chang Ming-chun, R. C. Spooner, Chang Hsiao-li
Reps. of Profs. and Assoc. Profs.	Miss Downer, W. G. Sewell.
College of Medicine and Dentistry:	
Director	W. R. Morse
Deans	L. G. Kilborn, H. J. Mullett
Reps. of Profs. and Assoc. Profs.	Tu Shun-te, Lu Chung-ling, A. W. Lindsay, R. G. Agnew, H. B. Collier R. A. Peterson

Standing Committees:

University Extension: Li Ming-liang, Liu Chih-chieh, L. G. Kilborn, Wang Chun-hsien, Shen Ssu-chuang.

Studies and Ranking: Dean of Studies, Registrar, Deans of Colleges.

Missionary Training School: J. E Moncrieff, S. Lewis, R.O. Jolliffe.

University Health: R. G. Agnew, A. W. Lindsay, J.M. Kilborn, H. G. Anderson, Pai Ying Ts'ai, S. L. Chang, T. F. P'eng, S. C. Yang and one member elected from the Dormitory Principals.

Library: The Librarians (Mrs. Chapman, Ch'eng Chih-hsuan), Mrs. Lindsay, Tu Feng-fu, S. D. Liu, F. A. Smalley.

Publicity and Publishing: Mrs. Spooner, M. C. Lin, F. A. Smalley, B. C. T'ang, Miss Robertson.

Property: S. C. Yang, W. Small, S.H. Fang, A.W. Lindsay.

University Functions: The Cabinet and Co-opted members.

Photograyhic Studio: H. B. Collier, W.B. Albertson, D. S. Dye, H.T. Chin.

Harvard-Yenching Funds: S. H. Fang, D. C. Graham, C. H. Ch'eng, D. S. Dye, S. C. Yang, L. G. Kilborn, S. D. Liu, D.S. Lo,

Hodgkin Memorial Fund: Dr. L. Chang, S. H. Fang, S. C. Yang, D. S. Lo, H. D. Robertson, W. G. Sewell.

University Museums: D. C. Graham and the Curators.

Committee on Student Discipline: Dean of Discipline, Principals of Dormitories, Drill Instructors.

Employment Bureau: B. C. T'ang, S. D. Hua, S. D. Liu, R. C. Spooner.

Nominating: To be appointed by the Cabinet.

Reception: Mrs. Fang, Mrs. T'ang, Mrs. Mullett, Mrs. Spooner.

Decorations: Miss Streeter, Miss Downer.

FACULTY OF THE UNIVERSITY

Agnew, Robert Gordon, B.A., M.Sc., (Dent.), D.D.S., F.I.C.D., Professor, Pathology and Bacteriology.

Agnew, Mary Caldwell, M.A., Toronto. Lecturer, Biochemistry.

Albertson, Wilford Beaton, B.A., Toronto; B.D., Bursar; Lecturer, Oral Technical Drawing, and English.

*An Chih-li, D.D.S., West China; Instructor, Dentistry

Anderson, Harold G., B.S., M.R.C.P., M.D., London. Associate Professor, Internal Medicine.

Anderson, Eleanor Waverly, Dip. Music, Melbourne University. Assistant Professor, Voice and Piano.

Beech, Joseph, B.A., Wesleyan; D.D.; Chancellor.

Best, Albert Edward, B.A., M.D., Toronto. Professor, Internal Medicine.

Brown, Homer Grant, M.A., Professor, Psychology and Religious Education.

Chapman, B. Burgoyne, M.A. Education.

Chapman, Elizabeth Goucher B.A., Goucher.

Chang Ai-te (Dsang, Margaret), B.A., West China Instructor, Piano and Organ.

Chang Ch'iung-hsien, D.D.S., West China Clinician, Dentistry

Chang Hsiao-li, B.A., West China Union; M.A., Toronto. Associate Professor, Mathematics.

Chang Ling-kao, (Dsang, Lincoln) B.A., West China M.A., Northwestern D.D., Ph. D., Drew. President; Lecturer, Rural Sociology.

Chang Ming-chün, B.A., West China; M.Sc., Yenching. Associate Professor, Biology.

Chang Shu-lin, D.D.S., West China; Clinician, Dentistry

Chao Shao-han, Lecturer, Chinese Language.

Ch'en Chia-i, M.A., Yenching. Instructor, Chinese Language and Literature.

Cheng Hsiao-hsiang, B.A., Lecturer, Sociology

Cheng Te-k'un, (Cheng Teh-kuen), M.A., Yenching. Associate Professor, Chinese History and Literature.

Ch'eng Chih-hsuan, Professor, Chinese. Head, Department of Chinese.

Chi Kan-cheng, (Gi Gan-Chen), Ph.G., West China. Lecturer, Pharmacology.

Chiang Wen-kang, B.A., Lecturer, Sociology.

Ch'iao Kuo-ch'ang, (Chiao Kuei-chang), B.A., Instructor, Methods of Teaching Chinese.

Chou Hsu-te, M.D., West China. Assistant Instructor, Pathology.

Chou Yun-wen, (Dseo Yuin-wen), B.A., West China. Instructor, Physics.

Chu Shao-pin, Professor, Chinese History and Literature.

Chung Chih-chü, Szechuan, Graduate, Japanese Normal School. Professor, Chinese Classics.

Collier, H. Bruce, M.A., Ph.D., Toronto. Associate Professor, Biochemistry.

Collier, Mary, Lecturer, Extra Curricular Activities.

*Crawford, Wallace, M.D., C.M., D.P.H., Professor, Hygiene and Public Health.

Cunningham, Edison Rainey, B.A., M.D., C.M., Manitoba; D.O.M.S., London. Professor, Ophthalmology.

Cunningham, Gladys, B.A., McGill; M.D., Manitoba; L.M. C.C., Canada. Associate Professor, Obstetrics and Gynecology.

*Dickinson, Frank, B.A., Mt. Alison; M.Sc., Cornell. Professor, Rural Sociology.

Downer, Sara Boddie, B.A., Mt. Holyoke; M.A., California. Associate Professor, Physics.

Dye, Daniel Sheets, M.A., Cornell; Professor, Physics.

Dye, Jane Balderston, M.A., Columbia. Associate Professor, Mathematics.

Fang Shu-hsuan, (Fong Su-hsuan), B.A., West China. Professor, Education.

Feng Ta-jang, (Fung Da-ran), B.S., Associate Professor, Pharmacology.

Fosnot, Pearl, B.A., Nebraka; M.A., Boston. Assistant Professor, Ethics.

Foster, B. Louise, B.A., Queens. Assistant Professor, English.

Graham, David C., Ph.D., Chicago; D.Sc., Whitman College. Associate Professor, Archaeology, and Curator, the Museum of Archaeology.

Hansing, Ovidia, M.A., Ph.D., Northwestern. Assistant Professor, Philosophy.

*Ho Wen-chun, B.A., West China M.A., Yenching. Associate Professor, Biology.

Hsia Yao-shan, D.D.S., West China. Clinician, Dentistry.

Hsiao Wen-jo, B.A., West China M.A., Toronto. Visiting Professor Philosophy of Religion.

Hsieh Hsi-hsu, M.D., West China. Instructor, Roentgenology and Surgery.

Hsieh, Helen Yo, M.D., West China. Instructor, Obstetrics and Gynecology.

Huang Ch'eng-ting, Special Instructor.

Huang Fang-kang, P.h., Harvard. Lecturer, Philosophy.

Huang Mien, B.A., West China B.Sc., Nanking. Assistant Professor, Biology.

Huang T'ien-ch'i (Whang Tien-chi), D.D.S., West China D.D.S., Toronto. Professor, Odontal Surgery.

Kilborn, Leslie Gifford. M.A., M.D., P.h.D., Toronto. Professor, Physiology and Pharmacology.

Kilborn, Janet McClure, M.D., Toronto. Assistant Professor, Technical English.

Kao Yü-ling, B.S., West China M.S., Yenching. Assistant Professor, Chemistry.

Kung Hsiang-nung, Szechuan; Lecturer, Chinese.

Lan T'ien-ho, B.S., Yenching. Instructor, Biochemistry.

Lenox, John E., B.S., Bucknell, M.D., Pennsylvania. Assistant Professor, Internal Medicine.

Lewis, Spencer, M.A., D.D., Professor Emeritus, New Testament.

Li Hsing-lung, B.S., West China. Assistant Instructor, Pharmacology.

Li Ming-liang, B.A., West China B.Sc., Nanking. Assistant Professor, Rural Sociology.

Li P'ei-fu, Lecturer, Chinese.

Li Ping-Ying, Lecturer, Chinese Grammar.

Lin Shan-yu, Szechuan. Lecturer Chinese Literature.

Liljestrand, Sven Herman, Ph.B., M.D., Syracuse. Professor, Obstetrics.

Lindsay, Alice Winifred, Assistant Professor, English.

Lindsay, Ashley Woodward. D.D.S., B.Sc., (Dent.), Toronto; L.D.S., Royal College of Dental Surgeons; F.A.C.D , Professor, Oral Surgery.

Liu Chih-chieh, B A., West China; M.A., Chicago. Associate Professor, Educational Psychology.

Liu Li-hsien, B.A., West China. Assistant Professor, History.

Lo Chung-shu, (Lo Djung-su), B.A., West China; M.A., Yenching. Associate Professor, Philosophy.

*Lo, Lucy, B.A., West China. Instructor, Piano and Organ.

Lo Yu-tung, B.A., Lecturer, Economics.

Lousley, Helen, M.D., Manitoba, Instructor, Pediatrics.

Lü Chung-ling, M.D., West China; D.O M.S, London. Associate Professor, Ophthalmology and Otolaryngology.

Lung Shou-jung, Lecturer, Social Sciences.

Manly, Marian E., B.A., Ohio Wesleyan; M.D., Rush. Assistant Professor, Obstetrics.

Meuser, Edwin Nelson, Phm. B , Toronto; Pharm. D., Pennsylvania. Professor, Phamacology.

*Millar, Jean, Ewald, M.D., Western Ontario, Lecturer, Pediatrics.

Morse, Anna C., Lecturer, Drawing.

Morse, William Reginald, B.A., Acadia; M.D., C.M., McGill; L.L.D., Acadia; F.A.C.S. Professor, Anatomy and Associate in Surgery.

Moncrieff, Virginia, Lecturer, Piano and Theory.

Moncrieff, Jesse Edwin, B.Sc., M.A., Professor, English.

Mullett, Harrison, D.D.S., B.Sc. (Dent.), Toronto; L.D.S., Royal College of Dental Surgeons, F.A.C.D., Professor, Prosthodontology.

Mullett, Pearl, Lecturer, English.

Pai Ying-ts'ai, (Bei Yin Chai), M.D., West China. Assistant Instructor, Anatomy.

P'ang Shih-chou, Lecturer, Chinese Philosophy.

P'eng Jung-hua, B.S., West China. Assistant Instructor, Biology.

P'eng Ta-Shih, B.S., West China. Assistant Instructor, Biology.

P'eng Tzu-fu, B.S., West China. Instructor, Physiology.

P'eng Yun-sheng, Lecturer, Chinese

Peterson, Robert, M.S., M.D., Iowa. Professor, Otolaryngology and Ophthalmology.

Peterson, Victoria, Lecturer, English.

*Phelps, Margaret, B.A., Lecturer, Piano and Voice.

*Phelps. Dryden Lindsay, B.D., Ph.D., Yale. Professor, English Literature.

P'u Ch'un-hua, B.A., West China. Assistant Instructor, English.

Robertson, Harold Deeks, B.A., Toronto. Professor, History.

Sewell, William Gawan M.Sc., Leeds, Professor, Chemistry.

Sewell, Hilda, B.Sc., Leeds, Lecturer, Biology.

Shen Ssu-chuang, M.A., B.D., Northwestern, Associate Professor, Sociology.

Sharevitch, Eugengia, D.D.S., West China. Assistant Instructor, Oral Pathology.

Shih Ju-ts'ung, Lecturer, Chemistry.

Simkin, Robert Louis, M.A., Columbia; B.D. Professor, Old Testament.

Smalley, Frank A., M.A., B. Litt., Oxford. Associate Professor, Political Science, New Testament.

Smalley, Nellie, B.A., Oxford. Lecturer, Violin.

*Sparling, George W., M.A., Toronto; D.D., Wesley. Professor, Systematic Theology and Philosophy.

Spooner, Roy C., M.A., Toronto. Assistant Professor, Chemistry.

Spooner, Kathleen, B.A., Toronto. Lecturer, English.

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Streeter, Mary Elizabeth, B.A., Syracuse. Assistant Professor, English.

Sung Ch'eng-chih, B.A., West China. Visiting Professor, English Literature.

T'ang Tsu-yao, Special Instructor.

T'ao Liang-sheng, Lecturer, Chinese Language.

Thexton, Annie, M.A., Manitoba. Lecturer, English.

Tu Feng-fu, B.A., West China M.A., Yenching, Associate Professor, Chinese Literature.

Tu Shun-te, M.D., West China Associate Professor, Parasitology.

*Walmsley, Lewis. B.A., B.Paed.. Toronto. Assistant Professor, Psychology.

Wang Chun-hsien, B.S., West China B.D., Yenching. Lecturer, Sociology,

Wang T'i-jen, B.S., West China; Instructor, Physics.

Ward, Annie, B.A., Toronto, Lecturer, Piano.

Wilford, Claudia, Toronto Conservatory of Music. Lecturer, Piano and Organ.

Wilford, Edward Corry, M.D., Toronto; L.R.C.P. & S. Edinburgh; F.A.C.S. Professor, Surgery.

*Williams, Thomas Henry, M.D., C.M., Manitoba; M.C.-P.S., Manitoba; L.M.C.C., Canada; D.T.M.&H. London. Professor, Pathology and Bacteriology.

*Willmott, Katharine, M.A., Lecturer, English.

Wu Hsien-yu, B.A., Lecturer, History and Sociology.

Wu Kuo-chang, B.S., West China M.Sc., Yenching. Assistant Professor, Physics and Mathematics.

Yang Chih-kao, M.D., West China, Instructor, Surgery.

Yang Chia-liang, M.D., West China, Clinician, Surgery.

Yang Yu-yun, Lecturer, Sociology.

Yen Yin, M.C., Instructor, Anatomy.

Yuan, Germaine, Lecturer, French.

Yu Han, M.A., Yenching. Instructor, Biology.

*On leave

STAFF.

Chang Tzu-ch'i, Assistant, Bursar's office.
Chang Yu-ming, Assistant, Registrar's office.
Chin Hsi-T'ien, Head, Photographic Studio
Chin Hsi-sheng, Assistant, Photographic Studio
Chang Ching-po, Assistant, office of Sup't, of Buildings.
K'uang Kuang-yu, Assistant Librarian
Lin Ming-chun, Assistant Curator
Ma Chung-i, Secretary
Teng Kuang-lu, Assistant Librarian
Wu Te-chien, Clerk
Wang Fu-t'ang, Clerk
Yo Ch'ing-ch'en, Assistant Librarian

TRAVEL

During the last few years there has been a very rapid improvement in communications, both within the Province and with other parts of China. Good roads connect the large centers of Szechuan. Other roads are under construction which, when finished, will join this province more closely to other parts of the country.

A very efficient air service, both for passengers and for mail, has been operating for two years.

Persons travelling from Shanghai to Chengtu are advised to book passage on through river steamers from Shanghai to Chungking. In summer and autumn this trip can be made in about ten days; in winter a few more days should be added, but the trip should not take more than two weeks. From Chungking to Chengtu there is a motor bus service which runs regularly, making the distance in two days. The approximate cost of the fare between Chungking and Chengtu is $20.-$25.

UNIVERSITY COLLEGES AND SCHOOLS

The work of the University is carried on under the following Colleges.

I. University Colleges

1. College of Arts—four years
2. College of Science—four years
3. College of Medicine and Dentistry—five years
4. College of Religion—three years

Two years prerequisite college courses are offered under the College of Science to enable students to qualify for entrance to the Medical-Dental Courses.

See College Announcements and Requirements for Admission for detailed information.

The catalogues are printed in the English and Chinese languages in alternate years.

II. University or Affiliated Schools

1. Senior Middle School	Three years
2. Goucher Junior Middle Practice School	Three years
3. Dewey Practice School, Primary	Six years
4. Summer Normal School	One month
5. Summer Bible School	One month
6. Summer School, University Classes	One month

REQUIREMENTS FOR ADMISSION

Candidates seeking admission to the University should call upon, or write to, the Registrar at the Administration Building of the University and secure registration for the Entrance Examination. Candidates who qualify for entrance are required to pay the tuition fee for the term, secure permission to reside in a college dormitory, and have their Schedule of studies approved by their College Principal, the Dean of the College they elect and the Registrar before entering classes. Each applicant must present 4 photographs with his application for admittance. For fuller information in regard to entrance, the student should apply to the Registrar.

1. Character.

All applicants for admission to the college or schools of the University must furnish proof of good moral character. They must promise to obey the rules and regulations of the University, to perform faithfully all scholastic and other duties to which they may be assigned or elected, and to strive at all times to uphold the honor and good name of the University.

2. Scholastic Standards.

The scholastic standards of entrance to the University are determined by the standards of graduation from Middle Schools as fixed by the regulations of the Board of Education of the Chinese Government, and by the college entrance requirements as stated under No. 4. Entrance requirements for the College of Medicine and Dentistry are stated in their catalogue.

3. Union Middle School.

The Union Middle School which for many years has been carried on adjacent to the university but independent of it, and conducted by the several Missions, is now the University Senior Middle School. There will continue to be separate dormitories and the two student bodies will exist as separate groups. Students registering in the Middle School will continue

to do so at the school and will be assigned to their separate dormitories there

4. Entrance Requirements for the Colleges of Arts and Science, and Prerequisite Courses in Medicine and Dentistry.

A. For admission to any course leading to a University degree the candidate shall have completed six years of Junior and Senior Middle School work, and shall also give evidence that he is qualified to do the required work in the course he elects.

(1) Students wishing to enter the College of Arts are required to take entrance examinations in the following subjects;

Chinese Language and Literature; History of Chinese Literature; English; Chinese and Foreign History; Chinese and Foreign Geography; Algebra and Geometry; Physics; Chemistry; Biology; Intelligence Test; Oral Examination.

(2) Students wishing to enter the College of Science are required to take entrance examinations in the following subjects:

Chinese Language and Literature; History of Chinese Literature; English; Algebra and Geometry; Trigonometry and Analytical Geometry; Physics; Chemistry; Biology; Intelligence Test; Oral Examination.

(3) Students wishing to enter the College of Medicine and Dentistry are required to take entrance examinations for the College of Science.

B. An applicant for admission to special subjects or to a course not leading to a degree must pass the regular entrance examination to test his fitness to pursue the subjects or course he desires to elect, and present evidence that he has satisfactorily completed the work prerequisite for such subjects or course. The subjects should not exceed 21 hours and should be selected in consultation with the candidate's College Principal.

The regular rate of tuition is charged for 10 to 21 hours. If less than 10 hours are taken the rate is $3.00 an hour.

Students taking courses subsequent to graduation must obtain the approval of the college in which they wish to study and shall be required to register with the Registrar of the University and their fees shall be the same as for undergraduate students.

Note. A student under this classification who later desires to regularize his course for a degree, may, at the discretion of the Committee on Studies, be given credit for work done.

TUITION

The tuition fees for the all University Colleges are as follows:

	1936 Autumn Term;		1937 Spring Term.	
	Tuition	Dormitory,	Tuition	Dormitory
Arts	$26.	$5.	$22.	$5.
Science	$31.	$5.	$27.	$5.
Medicine & Dentistry	$31.	$5.	$27.	$5.

The above fees will be charged during the regular days of registration.

Tuition fees which are not paid on the two registration days will be increased at the rate of $1. per week until payment is made.

Students registering in the men's medical dormitory in the city will be required to pay an annual fee of five dollars in addition to the regular tuition fee.

All students taking any course or courses in Chemistry shall pay a fee of two dollars to the Chemistry Department.

Examinations and Deposit.

A laboratory deposit fee of $5.00 per Year is required in Science, Medicine and Dentistry and from Arts students taking Science courses. This is returnable after deductions have been made for any breakages by the student.

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All laboratory fees are payable with the tuition fees at the time of registration.

Board and Lodging.

Board and lodging are provided in the college dormitories. The student is required to furnish his own bedding. The present rate for board is about $4.00—$5.00 per month payable each term at the time when tuition fees are paid.

Laundry.

Arrangements are made in each of the dormitories for washing, barbering, mending, etc., at the expense of the students.

Books.

Text books may be purchased from the principal book stores of the city. Books may also be purchased from the University Book Store or ordered from the publishers. The cost of books varies in the different faculties. The expense is borne by the student.

Suits and Other Expenses.

An athletic fee of fifty cents will be charged each student each term for athletic supplies and general athletic expenses. A fee of approximately $4.80 is required of all new students for a University uniform. These fees must be paid at the time of registration.

Candidates for graduation are required to provide gown, cap, and hood for the graduation ceremony.

For rates of tuition for summer or special courses apply to the Registrar of the University.

SUMMARY OF YEARLY EXPENSES.

Tuition and other fees	$80—$110
Board and Domitory exp.	45— 50
Books	20— 50
Washing	10— 15
Incidentals	20— 50
TOTAL - - -	$175—$275

GRADUATION DEGREES

(1) At the completion of the prescribed courses the following degrees are conferred by the University upon successful candidates. (See the Colleges Courses of Study).

Bachelor of Arts	(B.A.)
Bachelor of Science	(B.S.)
Doctor of Medicine	(M.D.)
Doctor of Dental Surgery	(D.D.S.)

The Bachelor of Arts Degree—The degree of Bachelor of Arts is conferred upon those students who have met the requirements for graduation in the College of Arts and Science.

The Bachelor of Science Degree—The degree of Bachelor of Science is conferred upon those students who have met the requirements for graduation in the College of Science. The degree of Bachelor of Science, (B.S.) (Pharmacy), will be given upon the satisfactory completion of the prescribed course in Pharmacy and an accepted thesis.

The Degree of Doctor of Medicine—This degree is conferred by authority of the University upon recommendation of the College of Medicine and Dentistry upon such students as have completed the medical course, and have met other requirements requisite for graduation.

The Degree of Doctor of Dental Surgery—This degree is conferred by authority of the University upon the recommendation of the College of Medicine and Dentistry upon such students as have completed the dental courses, and have met other requirements requisite for graduation.

All Degrees are conferred by the University upon authority of the Board of Regents of the University of the State of New York.

(2) College gowns, caps and hoods are required for the graduation ceremony. Candidates for graduation are expected to provide these in conformity with the usage of the College in which they have studied.

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THE LIBRARY

The University Lamont Library is situated within the central plot opposite the Whiting Administration Building. It is an attractive and commodious structure, the gift of Mr. and Mrs. B. C. Lamont of Aberdeen, South Dakota, U.S.A., in memory of their son.

The Library is open on all week days during the college year from 8 a.m. to 4.30 p.m., on holidays from 9. a.m. to 4. p.m. and during the mid-winter holiday and July from 9 a.m. to noon. The building is closed during the month of August.

Since the installation of electric lights, the Reading and Stack-rooms are also open for two hours during the evening, these hours varying with the seasons.

A radiator heating plant has recently been put in and it is expected will render the offices, stackroom, seminar and reading rooms more comfortable during the winter months.

The Student Reading Room, occupying the entire centre front of the building, is accessible to the graduates, the University students, and during the daytime to such Middle School students as on entering display their school insignia. In this room are placed the dictionaries and an excellent assortment of Chinese current periodicals of both scientific and general interest.

The Faculty Reading Room, situated along the south end of the building and containing foreign language periodicals published in China and abroad, is open to all Faculty members, to graduates and to those students who desire to do assignment or research work in such periodicals. In this reading room are also available the many exchange scientific periodicals which come to the West China Border Research Society from scientific research bodies in China and abroad. Here, too, the International Relations Club has its headquarters and non-members have the privilege of reading the various important publications on international questions which come to the club. The University Book Club, the membership principally among faculty members, houses in this room its collection of

the best annually published works of biography, travelogue, popular science, child training, and historical and problem fiction; after a year or two of circulation within the club, the books become the property of the University Library.

The Stackroom contains general and departmental books in both Chinese and foreign languages, the total number approximating Chinese 69454 other languages 15259 the latter including about 2000 volumes of bound teachnical periodicals principally in science, medicine and dentistry. A considerable number of pamphlets, reports and a few books, publications of the Smithsonian Institute, the Rockefeller and Carnegie Foundations and various Agricultural Experiment Stations, come annually to the Library. For the present the magazine files occupy the north balcony of the stackroom. In the south balcony is placed the valuable private Chinese library of Mr. Lo Heo Fuh and his family; this collection consists of 25,596 volumes and has been loaned to the University for an indefinite period. Current periodicals, placed for loaning in the two large reading rooms, number in the Chinese language 84, published in China but printed principally in English 22, from abroad, largely in English, 288. These are among the best periodicals of general and scientific interest which can be secured.

Two general seminar rooms are provided for day or night classwork for those instructors and their classes wishing to make use of current periodicals and reference books during the teaching period, for students desiring a quiet place for uninterrupted study, and in the evening for student committees and stereopticon lectures to small groups. Besides, there is a large seminar room set apart for the exclusive use of the Chinese Department and an English Clubroom, each containing a small library and facilities for individual study. There is also a seminar room for the Division of Social Sciences.

Each year the Library is the recipient of many gifts and loans from members of the staff, outside friends, colleges and publishers in China and abroad, including periodical subscriptions, books, pamphlets, catalogues, reports and occasionally pictures. Annually as many standard works are added to the general and departmental libraries as the limited funds of the library and faculties allow.

The Harvard-Yenching Endowment Fund, of which the University has become one of the beneficiaries. has greatly facilitated the addition of valuable standard books both in Chinese and foreign languages, principally in the former, which will be of great value to the department of research in Chinese Studies, literary and scientific, giving to it a most heartening impetus. Without this aid the extremely limited library budget would have severely restricted an unrivalled opportunity which comes because of the unique location of the University and because of the keeness of the entire staff to push forward such work.

MUSEUMS

Three museums are in process of development; one of cultural, historical, and art materials; one a natural history museum, and one a medical-dental museum. These will not only be of much educational value to students, but will enable the University to be of greater service to the people of West China. In each of these museums an excellent beginning has been made, and useful and valuable objects are being acquired either as gifts or by purchase.

The natural history collection is in the Atherton biology and preventive medicine building. The West China Union University Archaeological Museum of historical, cultural and art objects occupies the museum section of the Lamont Library and Museum Building. This museum is sustained by grants by the Harvard-Yenching Institute from the Hall Estate funds designated for the West China Union University. David C. Graham, Ph.D., D.Sc., has recently been appointed as director of this museum. During the past two decades Professor Daniel S. Dye, Rev. Thomas Torrance. F.R.G.S., Rev. J. Huston Edgar, F.R.G.S . F.R.A.I., and others have collected about six thousand objects. Recent additions, and the purchase of many Tibetan objects, have increased the collection to over 13,000 objects, including pottery, jades bronzes, embroideries, coins, stone implements, etc. Of these 10,400 are Chinese, 1500 are Tibetan, about 200 are

from tribal groups in West China, and the rest from foreign countries.

A large collection of paleolithic stone implements has been received, being a gift from J. Huston Edgar. D. C. Graham has found more than eighty soft stone scrapers and punches and knives which fill a whole case and are of great interest. A large gift has come from General Ch'en consisting of two hundred and fifty bricks and iron temple objects including urns and bells.

These have all been catalogued and many of them are on exhibition. It is hoped that this museum will, in future years, have the most complete exhibit of the cultural objects of this general area to be found anywhere in the world, and that it will be a center of study for students in China and abroad, and especially valuable to the people of West China.

The medical and dental collections are in the medical and dental college.

PHOTOGRAPHIC STUDIO

The Photographic Studio was originally outfitted through a grant from the Eastman Kodak Company of Rochester, New York.

In the past the Studio has provided courses in the Art and Technique of Photography, but at present its facilities in staff and equipment are limited.

The Studio serves the faculty in the preparation of lantern slides and all other teaching material requiring photographic co-operation. There is also provided a processing department which develops, enlarges, tints and finishers, etc., for a large group of kodak enthusiasts.

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HEALTH REGULATIONS

A special dispensary clinic is open in the Atherton Memorial Building for students of the University and the nearby community. Arrangements also exist with the mission hospitals within the city by which students of the University may be seen without delay in case of sickness. In case of severe illness the University physician will visit the patient in his room, or the patient may be removed to one of the hospitals. Treatment is at the expense of the student.

Physical Culture.

Recognising the fact that an educated mind can be little practical use unless supported by bodily vigour, physical culture is included in the University curriculum. Facilities are given for a medical examination of all students and each student is required to obtain a medical certificate of health previous to registration. Unless this examination is made at the time fixed, the student will be required to pay the regular medical fees.

1. A minimum of 3 hours of systematic physical exercise per week, to count as one and a half credits each term, will be required of all students during their first and second years of precollegiate and college work unless excused by the examining physician.

The students' individual needs and preference will be recognized as far as possible. The course will involve free-hand calisthenics, wand drill, apparatus work and a variety of track and field games. In addition to the above requirements there will be an opportunity for students to take part in voluntary sports.

2. The control of athletics and physical culture is centralized in an Athletic Committee appointed by the Student Association. Health affairs are in charge of the Health Committee.

3. All students in their first years of residence will be required to provide suitable althletic suits costing approximately $2.00. This amount must be paid at the beginning of the College year at the same time as other fees.

The standing of students in the subject of physical culture is determined by attendance at classes and the interest and general attention shown.

RECITATIONS, EXAMINATIONS, DISCIPLINE, RULES.

Attendance at Lectures.

Attendance at the regular lectures, recitations and examinations of the University is compulsory. Any student under necessity of absenting himself, must first obtain a written permit from his College Principal, and see that the form is properly filed with the Registrar. Absences from any class during one term are limited to the number of hours required in that subject each week. Two marks will be deducted for each absence in excess of limit.

Students appearing late for lectures may have marks deducted.

Essays, preparation of notebooks, monthly tests, grades, etc., are the option of, and under the control of the instructors.

Examinations

1. Term and final examinations are required by the colleges.

2. Where the coures course two terms' work, the student must make a grade of at least 60% for each term. The two terms' grades shall not be averaged. Each term's grade is determined by the class work as well as the examination mark.

3. Any student failing to obtain a satisfactory grade during the term may be excluded from the examination.

4. Students wilfully absenting themselves from class tests or term examinations shall not be allowed to try the final examination.

5. Every student must take the regular examination unless he presents a medical certificate of illness signed by a university physician, or unless he is exempted because of the death of a parent or other important reason.

6. In case of unavoidable absence from term or final examinations, supplementary examinations may be given at the discretion of the college. Application for such examinations should be made through the college Principal and Registrar.

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7. A student of any year who fails to get 40% in one-third of his credits in the final examinations of the year must repeat the year.

8. A student failing in any subject in a term or final examination may be given a supplemental examination before the opening of the next term. The fee for such an examination is fifty cents.

9. Supplemental examinations for students failing in the autumn term will be held within two weeks' time of the opening of the Spring term. Supplemental examinations for students failing in the spring term will be held two weeks before the opening of the autumn term.

10. No supplemental examination will be given after the close of the term following the term when the course was taken.

11. If a student fails in more than half of his credits in any year he shall not be given a supplemental examination unless he has a university physician's certificate of illness. In such a case, special consideration will be given the student.

12. No student in the university shall be permitted to repeat any year in college more than once.

13. No credits shall be given for a half year's work in a course which covers a year unless there are reasons which are satisfactory to the Committee on Studies.

14. Any student found cheating at any examination will forfeit his marks in that subject, and will receive two marks of discredit, besides.

15. The standing of students in term and final examinations is published by the Registrar. Pass cards are also issued for the information of students and parents.

16. A student who discontinues his studies for more than one year, on re-entering must meet requirements for entrance to the year in which he wishes to register.

17. All candidates for graduation degrees are required to present a Thesis. The subject of the Thesis should be approved by the head of the Department and the Dean of the College at the close of the Junior Year. The Thesis should be presented to the Dean of the College not later than the middle of May of the year in which the candidate hopes to graduate.

Discipline.

Any student refusing to obey the rules of the University may be permanently expelled or suspended for a period of time as may be determined by the University authorities.

In case a student is expelled or suspended no fees will be refunded.

The use of wine or cigarettes on the University grounds is forbidden.

The carrying of firearms or the shooting of birds is prohibited on the university grounds.

Visitors.

Visitors to the dormitories are received, in general, only after 4 p.m.

Persons desiring to visit the Classes of the University are requested to notify the President in advance.

Religious Services.

In addition to the courses in religious knowledge offered, daily morning chapel and Sunday evening services are held in University Colleges or Schools for all students.

The churches of the city cordially invite the students of the University to attend their services. They also offer opportunities for those qualified to assist in Christian work.

STUDENT ASSOCIATIONS

The Student Self-Governing Association.

Following the regulations outlined by the Government, the students have organized themselves into a self-governing society which takes oversight of all affairs outside of curricular activities and which concern the student body.

Athletic Association.

Every student is a member of the Athletic Association and is required to pay a fee of fifty cents each term. The

officers are elected once a year. Football, baseball, handball, tennis and other games are played. A fee of fifty cents a term is required, payable to the Bursar.

Educational Club.

The students enrolled in the College of Education, together with other students who are especially interested in Education, are eligible for membership in the Educational Club. Meetings are held periodically with members of the Faculty of Education for the discussion and study of educational problems especially in their relation to the educational work of Szechwan.

†Science Club.

This is an association of the students enrolled in the Faculty of Science and such other students as are particularly interested in scientific subjects. It meets at stated times with members of the College of Science for the discussion of scientific subjects and the application of science to the life of the Szechwanese. Social meetings are also held.

†Arts Club.

The Arts Club is composed of students studying in the College of Arts, who wish to meet to discuss subjects specially connected with their interests, or subjects of current interest. It is hoped that through the Arts Club the social life of the College will be served.

†Medical Students' Association.

This in an association of the students registered in the Faculty of Medicine. Its purpose is twofold. The association meets for the discussion of topics of interest to students in Medicine, and also for social activities. In this way it helps to keep students of different years and dormitories in touch with each other while promoting interest in their chosen profession.

†Dental Students' Society.

The students of the Faculty of Dentistry have organized a Dental Society.

†A fee of fifty cents a term is required.

Membership is open to all dental students and the dental teachers may become honorary members. Besides regular monthly meetings at which the teachers give special lectures, social gatherings are held at the beginning and end of each term. Special meetings are held as occasions demand.

Pharmacy Students' Association.

This is an association of the students registered in the Department of Pharmacy.

Meetings of the association are planned to be held at regular periods, some of which are of a social nature, while others take the form of special lectures and discussions on topics intended to promote interest in the profession of Pharmacy.

English Club.

All students who are taking a major or a minor course in English are eligible for membership in the English Club. Other students who have a special interest in English are also welcomed. All the business and social activities of the Club are carried on in the English language. The Club sponsors plays given in English at intervals during the academic year.

Chinese Club.

Students in the Department of Chinese and members of the Faculty of Chinese have organized a Chinese Club. This Club meets to hear and discuss papers and lectures on subjects related to Chinese studies. The Club also affords opportunity for social intercourse.

Social Science Club.

All students and members of the Faculty who are interested in the Social Sciences may be members of this club. It meets several times each term to receive reports and hold discussions on topics concerning the social life of the people of Szechwan.

The Philosophy Club.

Students of the department of philosophy and members of the faculty interested have organized a philosophy club. This club meets to hear papers and lectures on some subject of philosophy and for social intercourse.

The Phi Tau Phi Society.

A Chapter of the Phi Tau Phi Society was organized in the West China Union University in the year 1923 and is now recognized as one of the chapters of the National Organization.

International Relations Club.

This Club was organized in 1932 in connection with the Carnegie Endowment for International Peace. The membership is composed of both students and faculty who are eager to study international questions objectively. At the monthly meetings one member is requested to give a review of current events, and another member is asked to give a review of a book on international problems.

Books, pamphlets, and periodicals are received regularly from the Headquarters of the organization in New York. These materials are placed on a shelf in the Faculty Reading Room in the Library and are available as reference books.

Occasionally, distinguished persons are invited to lecture to the University Community on some subject intimately connected with world peace.

Christian Student Movement.

Students who are especially interested in Christian service are organized in Religious Clubs and Associations. They meet for the discussion of religious subjects and forms of Christian service and mutual helpfulness.

Association of Graduates.

The graduates of the University are organized as the Association of Graduates of the West China Union University. Their headquarters are at the Administration Building of the University.

SCHOLARSHIPS.

Scholarships and Prizes.

1. *Rosemond Scholarships.* These scholarships are the gift of Fred L. Rosemond, Cambridge, Ohio, U.S.A , who gave Gold $600.00 the interest of which is to be used in providing tuition for worthy students. This money is to be applied to the winner of the Annual and Entrance scholarships in as far as the proceeds of the fund will provide such scholarships.

2. *Wallace Scholarship:* Through the kindness of Miss Wallace, Toronto, the University is enabled to offer a special scholarship amounting to G. $25.00 to a candidate who stands highest (at least 75%) in the regular examinations for entrance to the University. This scholarship is applicable to students for the first year's work in the college course of the Division of Education at the discretion of the Faculty.

3. *Clifford M. Stubbs Memorial Scholarship in Pre-Medical and Pre-Dental Sciences.*

This scholarship amounting to $50.00 will be awarded annually to the student who completes the pre-medical or pre-dental courses with the highest standing for the entire course. His standing shall be reckoned on the basis of the weighted average of the subjects prescribed in the university catalogue. The scholarship shall not be awarded to any student who has obtained a weighted average of less than 75%.

In exceptional cases, if no person has obtained an academic standing sufficient to qualify him for the scholarship, it may be awarded to a student with a lower academic standing, provided that he has failed in no subject, and provided that he exemplifies to an unusual degree those qualities of character so well revealed in the life of Dr. Stubbs. The deans of Science, Medicine and Dentistry shall in such cases make unanimous recommendation that the scholarship be awarded.

Note.—In weighting the average, chemistry, biology, physics and english shall be reckoned as of approximately equal value, and shall total at least 90% of the course.

4. *Clifford M. Stubbs Scholarships in the College of Science.* The Scholarships will consist of

1. Tuition, or such per cent of tuition, as the income will allow of the students (or more in case of tie) in Science of the third and fourth years.
2. One Scholarship is for a student of the Chemistry Department, and one is for another student in the Science Faculty who may be registered in any department.
3. The average grade for the year (2nd or 3rd) must be at least 80% and no science grade may drop below 80%, and the scholarship must be won each year.
4. The scholarships are to be awarded upon recommendation of the Science Faculty to the Committee of Studies upon the basis of Scholarship, Character and Health.
5. The scholarships may be withheld for a year when the faculty deems that the standard of work is below the standard set.

5. *Special Scholarships and Prizes for the Department of Pharmacy.*

1. General Proficiency Prize:—This prize of $10.00 toward tuition in the second year will be awarded to the student who has received the highest standing among those who have received an average of 80% or over in the subjects in the first year.
2. General Proficiency Scholarship:—This scholarship of $65.00 toward tuition in the third year will be awarded to the student who has received the highest standing among those who have received an average of 80% or over in the subjects in the second year.
3. General Proficiency Scholarship:—This scholarship of $65.00 toward tuition in the fourth year will be awarded to the student who has received the highest standing among those who have received an average of 80% or over in the subjects in the third year.
4. Materia Medica Prize:—This prize of $10.00 toward tuition or books for the following year, will be awarded to the student who has received the highest standing among those who have received 80% or over in Materia Medica (Ph. 7-8).
5. Pharmacy Prize:—This prize of $100.00 toward tuition or books for the following year, will be awarded to the student who has received the highest standing among those who have received 80% or over in Pharmaceutical Processes and Galenical Pharmacy (Ph. 11-12 and Ph. 15-16).

Chinese Drug Research Prize:—This prize of $40.00 will be awarded, at the discretion of the Faculty, to the student who has received a satisfactorily high standing in the course "Chinese Drug Research" (Ph. 27-28), and who shows special adaptation and inclination to continue studies in this phase of Pharmacy.

6. *Pollard Scholarship.* This scholarship was founded in memory of Samual Pollard, missionary to the Tribes People, for the education of students from that territory, the capital for this scholarship is $1000.00 which is invested, giving 6% interest making available an annual sum of $60.00.

7. *The Luke Hsiao Scholarship.* By this scholarship, which is granted by Dr. Luke Hsiao, a graduate of our university of the class of 1923, tuition is supplied to a student pursuing the Medical Course. This scholarship is available to a student of high moral character, ranking high in his classroom work and who is not in a position to pay his own fees. It is expected that the money used will be repaid by the student after graduation and thus become available for another scholarship in the future.

8. *The Koh Scholarships.* These scholarships are granted by Mr. Koh Shu Kao, a friend of the university. They consist of free tuition for ten students studying in any college and in any year. They are allotted annually upon a basis of character and standing and to students who are not in a position to pay fees. It is expected that the money thus used will be returned after graduation and thus become available for more scholarships in the future.

9. *Thompson Memorial Scholarship.*

This scholarship is made available through the kindness of Mrs. Thompson in memory of Dr. John E. Thompson, who was a professor in the College of Medicine and Dentistry till his death in 1932.

Two annual scholarships of approximately $35.each shall be awarded to students in dentistry at the end of the third year proper (fifth year of the seven year course), on recommendation of the dental members of the College. In award-

ing the scholarships, general proficiency and character shall be the basis of award.

10. The Mrs. Yun Meng-chao Scholarship: This scholarship provides tuition for the fourth year in the College of Medicine. For detailed information, please apply to the Registrar of the University.

11. The Harvard-Yenching Fund grants three scholarships annually to students in the second or third year in the Department of Chinese. These Scholarships entitle the holders to free tuition for one year. A committee, the chairman of which is the Head of the Chinese Department, passes on the applications for these scholarships. The following conditions have been imposed:

(1) An applicant must furnish ample proof that he is in need of such financial assistance.

(2) An applicant must have maintained an average grade of at least 75% in all subjects taken in the Department of Chinese.

(3) All note-books and reports on supervised study must have been submitted according to schedule.

(4) All essays written by the applicant must have been submitted according to schedule.

(5) All outside work assigned by the instructors must have been satisfactorily completed.

(6) The applicant must not have had any unexcused absences.

(7) The applicant must be a person of good character, and of a sound constitution. He must have no habits of drinking or smoking.

12. Essay Competition: The Hodgkin Memorial Fund provides certain prizes for successful candidates in an essay competition on world peace movements and international co-operation. This is an annual competition with three prizes of $30., $20., and $10. Further information may be obtained from Dean Lo or Mr. Sewell. Announcements will also appear on the Bulletin Board.

13. Oratorical Contest: The Hokgkin Memorial Fund sponsors an annual oratorical contest on subjects relating to world peace and international co-operation. Prizes of $10., $7., and $5. are offered.

COLLEGE OF MEDICINE AND DENTISTRY

Council:

Morse, W. R.	-	-	Director of the College
Kilborn, L. G.	-	-	Dean of Medicine
Mullett, H. J.	-	-	Dean of Dentistry
Anderson, H. G.	-	-	Secretary of the College
Collier, H. B.	-	-	Treasurer of the College
Agnew, R. G.			
Liljestrand, S. H.			
Lindsay, A. W.			

Faculty:

Agnew, Robert Gordon, B.A., M.Sc. (Dent.), D.D.S., Toronto; L.D.S., Royal College of Dental Surgeons, F.I.C.D.
Professor of Pathology and Bacteriology.

Agnew, Mary Caldwell, M.A., Toronto.
Lecturer in Biochemistry.

Albertson, Wilford Beaton, B.A. Toronto; B.D., Union Theological Seminary. Bursar. Lecturer in Oral Technical Drawing.

Anderson, Harold G., M.B., B.S., M.R.C.P., London.
Associate Professor of Internal Medicine.

*An (Ngan) Chih-li, D.D.S. West China Union.
Instructor in Dentistry.

Best, Albert Edward, B.A., M.D., Toronto.
Professor of Internal Medicine.

Chang Ming-chün, B.S. West China Union.
Associate Professor of Biology.

Chang Ch'iung-hsien, D.D.S. West China Union.
Clinician in Dentistry.

Chang Shu-lin, D.D.S., West China Union.
Clinician in Dentistry.

Chow Hsü-te, M.D. West China Union.
Assistant Instructor in Pathology.

Collier, H. Bruce, M.A., Ph.D. Toronto.
Associate Professor of Biochemistry.

*Crawford, Wallace, M.D., C.M., D.P.H., Western.
Professor of Hygiene and Public Health.

Cunningham, Edison Rainey, B.A., M.D., C.M., Manitoba; D.O.M.S. London.,
Professor of Ophthalmology.

Cunningham. Gladys Story, B.A., McGill; M.D., Manitoba. L.M.C.C., Canada.
Associate Professor of Obstetrics and Gynecology.

Chin (Djin) Hsi-t'ien, B.A. West China Union.
Lecturer in Clinical Photography.

Feng Ta-jan, B.S. West China Union.
Associate Professor of Pharmacology.

Hsia Yao-shan, D.D.S. West China Union.
Clinician in Dentistry.

Hsieh, Helen Yoh, M.D. West China Union.
Instructor in Obstetrics & Gynecology.

Hsieh Hsi-shu, M.D. West China Union.
Instructor in Roentgenology & Surgery.

Hwang (Whang) T'ien-ch'i, D.D.S. West China, D.D.S. Toronto. Professor of Odontal Surgery.

Kilborn, Janet McClure, M.D., Toronto.
Assistant Professor of Technical English.

Kilborn, Leslie Gifford, M.A., M.D., Ph.D., Toronto.
Professor of Physiology and Pharmacology.

*Kilborn, Retta Gifford, M.D., C.M., Trinity (Toronto).
Emeritus Professor of Pediatrics.

Lan T'ien-ho, B.S. Yenching.
Instructor in Biochemistry.

Lenox, John E., B.S., Bucknell; M.D., Pennsylvania,
Assistant Professor of Internal Medicine.

Liljestrand, Ethel H., B.A., Syracuse. Registrar in Clinical Gynecology.
Liljestrand, Sven Herman, Ph.B., M.D., Syracuse.
Professor of Obstetrics and Gynecology.

Lindsay, Ashley Woodward, D.D.S., B.Sc. (Dent.), Toronto; L.D.S., Royal College of Dental Surgeons, F.A.C.D.
Professor of Oral Surgery.

Lindsay, Alice W. Assistant Professor of English.

Lousley, Helen M., M.D., Manitoba. Instructor in Internal Medicine.

Lü Chung-lin, M.D., West China Union; D.O.M.S., London.
Associate Professor of Ophthalmology and Otolaryngology.

Manly, Marion E., B.A., Ohio Wesleyan; M.D. Rush.
Assistant Professor in Obstetrics and Gynecology.

Meuser, Edwin Nelson, Phm.B., Toronto; Pharm. D., Pennsylvania.
Professor of Pharmacy.

*Millar, Jean Ewald, M.D., Western Ontario; Lecturer in Pediatrics.

Morse, William Reginald, B.A., Acadia; M.D., C.M., McGill; L.L.D., Acadia, F.A.C.S.
Professor of Anatomy, and Associate in Surgery.

Morse, Anna C.
Lecturer in Anatomical Drawing.

Mullett, Harrison J., D.D.S., B.Sc. (Dent.) Toronto; L.D.S., Royal College of Dental Surgeons F.A.C.D.
Professor of Prosthodontology.

Mullett, Pearl McDonald
Lecturer in Technical English.

Pai (Beh) Ying-ts'ai, M.D. West China Union.
Assistant Instructor in Anatomy.

P'en Tsŭ-fu, B.S. West China Union.
Instructor in Physiology.

Peterson, Robert A., M.S. M.D., Iowa.
Professor of Otalaryngology and Associate in Ophthalmology.

Sharevitch, E., D.D.S. West China Union.
Assistant Instructor in Oral Pathology.

Tu (Du) Shun-te, M.D. West China Union.
Associate Professor of Parasitology.

Williams, Thomas Henry, M.D., C.M., Manitoba; M.C.P.S., Manitoba; L.M. C C., Canada; D.T.M. & H. London.
Professor of Pathology and Bacteriology.

Wilford, Edward Corry. M.D., Toronto., L.R.C.P. and S., Edinburgh. F.A.C.S.
Professor of Surgery.

Yang Chih-kao, M.D. West China Union.
Instructor in Surgery.

Yang Chia-liang, M.D. West China Union.
Clinician in Surgery.

Yen Yin, M.D. West China Union.
Instructor in Anatomy.

*On leave of absence, 1936-1937.

History and Organization.

The Faculty of Medicine was established in 1914 as an integral part of the West China Union University. The course was reorganized in 1918, when a minimum of two years premedical instruction of collegiate grade was required for admission. A Department of Dentistry was officially organized under the Faculty of Medicine in the year 1918. This action regularized the standing of students who had registered in the medical course with a view to specializing in dentistry. In December, 1919, the Department of Dentistry was reorganized and created a separate faculty of the university.

In 1929, the Faculties of Medicine and Dentistry were united as the College of Medicine and Dentistry of the West China Union University, and the Board of Governors sanctioned this action in 1930. This union has greatly increased the efficiency of both faculties.

Degrees and Diplomas.

The Medical and Dental courses are six years in length, including one year of premedical science and the final interne year. The prerequisite for entrance into the College is one additional year in Science, this being the common First Year Science course.

However, in this catalogue, the years referred to are those of Medicine-Dentistry proper, totalling five years. Thus the First year is the first year of preclinical instruction (the *second* year of the six-year course). The Fifth Year is the interne year (the *sixth* year of the six-year course).

Upon the satisfactory completion of all requirements the degree of M.D. or D.D.S. is conferred by the University.

A Diploma in Ophthalmology and Otolaryngology is granted by the University to graduates in Medicine of this or other recognized universities who have completed the special two year course in those subject. Details of this course may be found listed under the departments concerned.

A Certificate in Hospital Techology is granted by the College of Medicine and Dentistry to students who success-

fully complete the three year course required. Details of this course and entrance requirements may be obtained by applying to the Dean of Medicine or the Head of the Department of Pathology and Bacteriology, Div. I, under whose direction the course is given.

Language of Instruction.

The language of instruction in the lower years is Chinese. English, both general and technical, is taught, and the aim is that upon graduation the student shall be able to continue his studies from English text-books and journals. Lectures in the senior years may be given in English.

Special Rules and Regulations.

1. The tuition fees, general rules, regulations, etc., of the University apply to students in Medicine and Dentistry.

2. The faculty reserves the right to change any course of study at any time without notice. Students already in the institution, as well as new students, are required to conform to the changes.

3. Each student is required to have the necessary books for each course within two weeks of the opening of the term, or attendance will not be permitted without special permission. Required text books are kept in stock by the sales department of the University Library. As cash sales only are permitted it is essential that a student begin the term with the necessary amount of money on hand.

4. Scholarship students, unless specially exempted, who have taken in advance a course listed in a given year must take a similar course of approximately the same length.

Examinations.

Candidates for the courses in Medicine and Dentistry must pass the following examinations in the Prerequisite Sciences —1st year. *Chemistry; Biology; Physics; English;* Chinese;

Mathematics, Ethics. Failure in two or more of the subjects printed in italics disqualifies the student for entrance.

The following are the subjects of examination in the Prerequisite Sciences II year—*Chemistry; Physics; Biology; English;* Chinese; Technical English; Ethics; Psychology; †Technical Drawing. Failure in two or more of the subjects printed in italics disqualifies the student for promotion.

The following are the subjects of examination in the *First year* Medicine and Dentistry:—Anatomy; Histology and Embryology; Biochemistry; English; Technical English. Failure in Anatomy disqualifies for promotion. Failure in more than one other subject disqualifies for promotion.

The following are the subjects of examination in the *Second Year* of Medicine and Dentistry:—Physiology, Materia Medica and Pharmacy; Pharmacology; Bacteriology; General Pathology; Physical Diagnosis; Clinical Pathology and Biochemistry; English; Technical English; Neurology; *Parasitology; *Dentistry; †Odontal Anatomy: †Oral Microbiology. Failure in more than *two* subjects disqualifies for promotion.

The following are the subjects of examination in the *Third* year of Medicine and Dentistry:—Medicine including *Dermatology; Surgery; including *Orthopedics, *Venereal Diseases and *Roentgenology *Applied Pathology *Obstetrics and Gynecology; English and Technical English; *Dentistry: *Clinical Neurology; †Oral Histology and Embryology; †Oral Pathology; †Prosthodontal Technology including †Applied Physics, †Oral Technology and †Metallurgy; †Odontology. Failure in more than two subjects disqualifies for promotion.

The following are the subjects of examination in the *Fourth* year of Medicine:—Medicine including Psychiatry; Surgery; Obstetrics & Gynecology; Pediatrics; Hygiene and Public Health; Ophthalmology; Otolaryngology; Therapeutics including Dietetics; Dentistry; Medical Jurisprudence; Ethics and History; English. Failure in more than two subjects disqualifies for promotion.

The following are the subjects of examination in the *Fourth* year of Dentistry:—Comparative and Applied Oral Anatomy; Oral Biochemistry and Dietetics; Oral Physiology;

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Odontology including Materia Medica: Oral Hygiene and Preventive Dentistry; Oral Laboratory Technology including Instrumentology and Applied Photography; Oral Medicine and Surgery including Oral and Exodontal Technology, Anesthesia and Electro-therapy; Parodontology including Parodontal Technology; Orthodontology including Orthodontal Technology; Prosthodontology including Prothodontal Technology; Odontology including Odontal Surgical Technology; Oral Diagnosis; Oral Pediatrics; Dental Jurisprudence, Ethics, History and Practice. Failure in more than two subjects disqualifies for promotion.

At the end of the *Fifth*, or interne, year in Medicine, comprehensive written and oral examinations are held in the general subjects of Medicine; Surgery; Obstetrics and Gynecology. Each examination shall include the subject matter of related subjects.

At the end of the *Fifth*, or interne, year in Dentistry comprehensive written and oral examinations are held in Prosthodontology, Oral and Exodontal Surgery, Odontology, Parodontology.

Subjects marked* in the above paragraphs are taken by medical students only. Subjects marked† are taken by dental students only.

A student who is disqualified for promotion by failure in more than the maximum number of subjects in which failure is allowed in any one year is not permitted to present himself for supplemental examination.

A student who has failed in not more than the maximum number of subjects in which failure is allowed in any one year, as indicated by the above schedule, may be admitted to the supplemental examination, held before the opening of the Fall term. Upon passing all examinations he may register in the year following.

Supplemental examinations are held only once each term, before the opening of the term.

Regular examinations are held at the end of each term, but additional examinations and tests may be given in any subject at any time, at the discretion of the teachers. The results of such tests shall count in determining the final standing of the student.

When a course of instruction extends over more than one term, examinations shall include all work covered to time of examination and the final examination shall include the entire course in the subject.

A student who is disqualified for promotion, either by failure in more than the maximum number of subjects in which failure is allowed or by failure in one or more supplemental examinations, if he wishes to continue the study of Medicine or Dentistry in this university must repeat the work of the entire year including those subjects in which he originally passed.

However, in the case of a student having to repeat a year, other courses may be substituted for those which have been satisfactorily completed, at the discretion of the Dean and the heads of the departments concerned.

In the case of students transferring from other Medical Schools, this College can grant degrees only to such students as have successfully completed at least the two final years of its own course.

No student may repeat any year in the College more than once.

Aptitude Tests may be held at the end of the First Year (second year of premedical sciences), and the results may be used in deciding the students' entrance into the First Year of Medicine-Dentistry proper (Second Year of the six-year course).

The number of students entering this year is at present limited to 28, of whom 16 may be registered in the Faculty of Medicine and 12 in Dentistry.

A student who fails in any subject will be notified by the Registrar. For this purpose all students should inform the Registrar of correct *summer* postal address.

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MEDICINE AND DENTISTRY.

Summary of Prerequisite Courses

The greater part of the work in the prerequisite sciences is given by the staffs of the Colleges of Arts and Science. The details of the courses may be found in the Catalogue of the Colleges of Arts and Science.

PREREQUISITE COURSE. I YEAR Science.

	Term or half-year credits.
Chinese	3
English	8
Ethics	4
Biological Principles (Biol. 1-2)	8
Inorganic Chemistry (Chem. 1-2)	8
Physics (Phys. 1-2)	8
Mathematics, (Math. 1-2)	6
Physical Training	
	45

1 YEAR MEDICINE-DENTISTRY, PREMEDICAL SCIENCES

	Credits
Chinese	4
Religion or Ethics	2
Psychology (Phil. 1)	4
English	6
Botany (Biol. 6)	4
Zoology (Biol. 19 or 20)	4
Organic Chemistry (Chem. 3-4)	6
Physics (Phys. 3-4)	8
Technical English	2
*Technical Drawing	2
Total	42

*Required of dental students only

NOTE—Academic standing alone will not be sufficient for admission to the courses in Medicine or Dentistry.

MEDICINE.

Summary of Required Courses in Medicine.

ANATOMY.

Anatomy	I.	—	Osteology
"	II.	—	Gross Anatomy
"	III.	—	Histology
"	IV.	—	Embryology
"	V.	—	Oral Anatomy for Medical Students.

BIOCHEMISTRY.

Biochemistry	I.	—	Biochemistry
" "	III.	—	Applied Oral Biochemistry for Medical Students.

PHYSIOLOGY AND PHARMACOLOGY.

Physiology	I.	—	Human Physiology
" "	II.	—	Journal Club
" "	IV.	—	Neurology
" "	V.	—	Oral Physiology for Medical Students
Pharmacolegy	VIII.	—	Materia Medica and Pharmacy
" "	IX.	—	Pharmacodynamics.

PATHOLOGY.

Pathology	I.	—	Bacteriology and Immunology
" "	II.	—	Parasitology
" "	III.	—	Clinical Pathology and Biochemistry
" "	IV.	—	General Pathology
" "	V.	—	Applied Pathology
" "	VI.	—	Clinical Pathological Conference
" "	IX.	—	Special Oral Pathology and Bacteriology for Medical Students

INTERNAL MEDICINE.

Medicine	I.	—	Physical Diagnosis
" "	II.	—	Differential Diagnosis
" "	III.	—	Neurology and Psychiatry
" "	IV.	—	Internal Medicine
" "	V.	—	Dematology
" "	VI.	—	O.P.D. and Interne Work

PEDIATRICS

Pediatrics	I.	—	Medical Pediatrics

HYGIENE AND PUBLIC HEALTH.

Hygiene and Public Health	I.	— Public Health Hygiene
Hygiene and Public Health	II.	Preventive Dentistry for Medical Students

SURGERY

Surgery	I.	—	Surgery
"	II.	—	Surgery
"	III.	—	Orthopedics and Bone Surgery
"	IV.	—	Venereal Diseases
"	V.	—	Roentgenology
"	VI.	—	Operative Surgical Technique
"	VII.	—	Interne Work

OBSTETRICS AND GYNECOLOGY

Obstetics and Gynecology	I.	— Theory and Practice of Obstetrics and Gynecology
Obstetrics and Gynecology	II.	— Practical Work in Obstetrics and Gynecology

OPHTHALMOLOGY AND OTOLARYNGOLOGY.

Ophthalmology	I.	—	Ophthalmology
Ophthalmology	II.	—	Clinical Opththalmology
Otolaryngology	I.	—	Otolaryngology
Otolaryngology	II.	—	Clinical Otolaryngology

DENTAL SUBJECTS.

I. Including Oral Gross and Histological
Anatomy — Anatomy V.
Oral Physiology — Physiology V.
II. Including Oral Pathology & Microbiology — Pathology VII.
Oral Biochemistry — Biochemistry III.
III. Including
Preventive Dentistry — Hygiene and Public Health II.
Oral Surgical Technology IX.
Oral Medicine and Surgery VII.

THERAPEUTICS.

Therapeutics	I.	— Dietetics
Therapeutics	II.	— Principles of Therapy
Therapeutics	III.	— Physiotherapy

TECHNICAL ENGLISH.

I For Medical Students

JURISPRUDENCE, ETHICS, HISTORY.

I. — Medical Jurisprudence
III. — Medical Ethics
V. — History of Medicine

FINAL YEAR THESIS.

INTERNE YEAR.

A year of twelve months rotating interneship among the clinical departments. The work of the interne in this year of practical instruction will be supervised by the head of the department in which he is working.

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DENTISTRY.

Summary of Required Courses in Dentistry.

ANATOMY.

Anatomy	I.	Osteology
" "	II.	Gross Anatomy
" "	III.	Histology
" "	IV.	Embryology
" "	VI.	Odontal Anatomy
" "	VII.	Applied Oral Anatomy
" "	VIII.	Comparative Oral Anatomy
" "	IX.	Oral Histology & Embryology

BIOCHEMISTRY.

Biochemistry	I.	Biochemistry
" "	II.	Applied Oral Biochemistry

PHYSIOLOGY & PHARMACOLOGY.

Physiology	I.	Human Physiology
" "	II.	Journal Club
" "	III.	Neurology
" "	V.	Oral Physiology
Pharmacology	VII.	Materia Medica and Pharmacy
" "	VIII.	Pharmacodynamics
" "	IX.	Applied Oral Materia Medica

PATHOLOGY AND BACTERIOLOGY.

Pathology	I.	Bacteriology and Immunology
" "	III.	Clinical Pathology and Biochemistry
" "	IV.	General Pathology
" "	VI.	Cl. Path. Conference (5th Yr.)
" "	VII.	Oral Pathology
" "	VIII.	Oral Microbiology

INTERNAL MEDICINE.

Medicine	I.	Physical Diagnosis
" "	II.	Differential Diagnosis
" "	IV.	Internal Medicine

SURGERY.

Surgery I	Surgery

ORAL SURGICAL TECHNOLOGY.

Surgical Technology	I.	Anaesthesia Technology
" " "	II.	Oral Surgery Technology
" " "	III.	Odontal Surgery Technology
" " "	IV.	Parodontal Surgery Technology.
" " "	V.	Prosthodontal Surgery Technology
" " "	VI.	Orthodontal Surgery Technology
" " "	VII.	Oral Electro-Diagnosis and Therapeutics
" " "	VIII.	Animal Operative Surgery

ORAL LABORATORY TECHNOLOGY.

Laboratory Technology	I.	Applied Physics & Technology
" " " "	II.	Metallurgy
" " " "	III.	Oral Instrumentology
" " " "	IV	Oral Technical Drawing
" " " "	V.	Applied Oral Photography

ORAL MEDICINE & SURGERY.

Medicine & Surgery	I.	Odontology
" " "	II.	Oral Surgery & Medicine
" " "	III.	Parodontology
" " "	IV.	Orthodontology
" " "	V.	Oral Diagnosis
" " "	VI.	Prosthodontology, *a* and *b*.

HYGIENE & PUBLIC HEALTH.

Hygiene & Public Health	I.	Public Health & Hygiene
Hygiene & Public Health	III.	Preventive Dentistry

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OTOLARYNGOLOGY.

Otolaryngology I.

CLINICAL DENTISTRY.

Clinical Dentistry I. Oral Operative Clinics
" " " II. Interne Year

THERAPEUTICS.

Therapeutics I Dietetics

TECHNICAL ENGLISH.

II. For Dental Students

JURISPRUDENCE, ETHICS, HISTORY, PRACTICE.

II. Dental Jurisprudence
IV. Dental Ethics
VI. History of Dentistry
VII. Dental Practice and Economics

FINAL YEAR THESIS.

INTERNE YEAR.

A year of twelve months rotating interneship among the clinical departments. The work of the interne in this year of practical instruction will be supervised by the several heads of the departments concerned.

DEPARTMENT OF ANATOMY

Morse, W. R., *Head of the Department.*
Yen, Y.,
Beh, Y. T.,
Chang, M. C.,
Morse, A. C.,
Agnew. R. G.,
Lindsay, A. W.,

Students entering upon the work of this department are required to furnish at their own expense:—

(*a*) Oil-cloth aprons and sleeves.

(*b*) Dissecting instruments, approximate cost $10.00.

(*c*) Sets of bones may be rented $2.00 per set per year. The following courses of instruction are offered;

Anatomy I.

OSTEOLOGY. W.R. Morse, Y. Yen, Y. T. Beh, A. C. Morse

This course includes a thorough drilling on the bones of the human body; some comparative anatomy of the bones of domestic animals; the bony landmarks of the human body; drawings of human bones and considerable anthropological data and physical measurements. This course is mainly applied osteology and the bones of the part dissected are studied whilst the student is dissecting the part. A complets "half" set of bones is suspended over each dissecting table for continual reference during dissection.

Anatomy II.

GROSS ANATOMY. W.R. Morse, Y. Yen, Y.T. Beh

Gross Anatomy is taught during the first year, but it is also closely correlated with the later years of the course through demonstrations and lectures in Applied Anatomy.

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Histology and Embryology are also taught in the first year.

The object of the anatomy course is not to train anatomists but to teach and inspire undergraduates to become basic practitioners.

In gross anatomy groups of four to six students are given one body which they completely dissect, as far as possible in continuity. Similar parts are dissected simultaneously on all bodies in the dissecting room and a careful comparative study of all tissues, organs, anomalies, etc., is compulsory. Tables of comparisons of the bodies are prepared and illustrated by the students.

Instructors are in the dissecting room at all times but the student is given every opportunity to develop individuality.

Students are assigned special anatomical problems and are required to give written and pictorial evidences of their findings. These problems are along the line of research and the aim is to encourage independent thinking. These problems compel the student to examine and compare findings in all the bodies, and to refer to reference books under guidance.

Students are required to make frequent drawings of their own dissections with special emphasis on all abnormalities that are found. They are also required to make drawings of cross sections of male and female bodies. Complete sets of these cross sections are available.

No stated course of lectures is given. Printed notes are given on a correlated study of all the tissues from the brain to the finger. Frequent informal talks with practical demonstrations of applied significance of the student's own dissection are given. Gross pathological conditions found in the subjects are made the basis of short explanatory discussions. Surgical procedures are demonstrated on necessary occasions. Blackboard notes are frequently written, on special regions, structures, methods, etc. Special anatomy note-books containing the blackboard work and the student's own drawings are required.

This course definitely attempts to correlate the anatomy department with all the other preclinical subjects, and in particular with physiology, as well as with all the clinical

departments. Little theory but much practice is our goal. A brief course on the physiology of the organ is given while dissection is going on.

English terms are freely used and lecture talks are given both in the Chinese and English languages.

Examinations, oral and written, are held as considered necessary Final marks depend largely on the proficiency, skill, and conduct of the student in the dissecting room.

Text and Reference Books:—The following are in constant use in the dissecting room:

In Chinese—Cunningham's Practical Anatomy, Gray's Anatomy and Rawling's Landmarks and Surface Markings.

In English—Gray, Piersol, Morris, Cunningham, Toldt, Sabotta-McMurrich, Ranson, Quain, Herrick, Frazier, Keiller, Bianchi, Radash, Santee, Arey, Edinburgh Stereoscopic Anatomy. Piersol's and Frohse Charts, and over one hundred charts drawn locally, Spalteholtz, and Morse's Anatomy Notes.

In French—Poirier, Charpy and Nicholas.

Applied and Clinical Anatomy-Campbell, Davis, Treves, Skirving, Callander, Massie, Eycleshymer and Jones, Deaver, Bowen and Mackenzie, Keith, Lehrbuch der Anthropologie, etc.

Anatomy III.

HISTOLOGY. M. C. Chang, & Y. T. Beh

First year; six hours per week in Fall Term and three hours per week in Spring Term. A course of lectures with practical work, including the preparation and examination of slides. Text: "Histology", Lewis-Shield; Reference: "Normal Histology", Piersol.

Anatomy IV.

EMBRYOLOGY M. C. Chang & Y. T. Beh

Second year; three hours per week, in Spring Term. Special reference is made to the embryos of amphioxus, frog,

chick, pig and man. In the practical work, careful studies are made of transverse and sagittal section of the embryos of the frog, chick and pig. Reference: "Laboratory Text Book of Embryology," Minot; "Atlas D'Embryologie," Duval, "Text Book of Embryology," Bailey and Miller. "Human Embryology," Kiebel & Mall.

Anatomy V.

ORAL ANATOMY—MEDICAL STUDENTS. Ashley W. Lindsay

A brief course emphasizing such phases of oral anatomy as will familiarise the medical student with the dental field will be given. See Dental Subjects I.

Anatomy VI.

ODONTAL ANATOMY. Ashley W. Lindsay

The course consists of both didactic and laboratory instruction. The student will be given opportunity by modelling and carving to perfect his ability to secure form, proportion and relationships of the teeth.

Anatomy VII.

APPLIED ORAL ANATOMY. Ashley W. Lindsay

The course will begin with a review of the anatomy of the base of the Cranium, the Face and the Neck. Landmarks and structures will be studied to prepare the students to take up the study of Surgical Techniques, Diagnostic Interpretations, and Regional Anaesthesia.

Anatomy VIII.

COMPARATIVE ORAL ANATOMY. Ashley W. Lindsay

The subject will be treated from the evolutionary, anthropological, and endocrinal standpoints.

Anatomy IX.

ORAL HISTOLOGY AND EMBRYOLOGY R. G. Agnew

Didactic instruction covers the embryology of the various oral structures, the growth of the jaws, and the minute study of the histological characteristics of the teeth, their investing tissues and adjacent structures. This is illustrated in the laboratory with non-decalcified and decalcified microscopic material. In addition the student is taught to perform the simpler procedures in the preparation of oral tissues for microscopical examination.

Reference Works: Orban, Gottlieb, Noyes, Beust, Bödecker, Mummery, Churchill.

Anatomy X.

ORAL HISTOLOGICAL RESEARCH

Research in the field of Oral Histo-Anatomy is carried on, and members of the staff or students with suitable qualifications are invited to undertake the investigation of specific problems, under the supervision of the Professor in charge.

Anatomy XI.

ORAL HISTOLOGY & EMBRYOLOGY FOR MEDICAL STUDENTS

A short course briefly summarizing such facts concerning the microscopic structure and the development of the teeth as are indispensable to the Medical student.

See Dental Subjects I.

For introductory course in Physiology to students of anatomy, see Physiology I.

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DEPARTMENT OF BIOCHEMISTRY.

Collier, H.B., *Head of the Department*
Agnew, M.C.,
Lan, T.H.,

Biochemistry I.

ELEMENTARY BIOCHEMISTRY. H. B. Collier

Lectures, 2 hours per week during the Fall Term, 3 per week in the Spring Term. Laboratory, 5 hours per week throughout the year. First Year.

A course in elementary Biochemistry, including the chief properties of biochemical materials, and the fundamental principles underlying biochemical reactions. Special emphasis is laid on the physico-chemical properties of protoplasm.

The laboratory course includes experiments to illustrate the chemical properties of biochemical materials, and selected quantitative methods.

Texts: Cameron: "Textbook of Biochemistry."
Bodansky & Fay, "Laboratory Manual of Physiological Chemistry."

Reference: Bodansky, "Introduction to Physiological Chemistry."
Mathews, "Physiological Chemistry."
Hawk & Bergeim, "Practical Physiological Chemistry."
Cole, "Practical Physiological Chemistry."

Biochemistry II.

ADVANCED BIOCHEMISTRY. H. B. Collier

Two lectures and five hours laboratory per week throughout the year. This course may be given to advanced students in Science, and other special students.

About one half of the lecture course is devoted to nutrition. The remainder of the course includes special aspects of biochemisty, such as hydrogen-ion concentration, enzymes, biological action of light.

The laboratory course lays special emphasis on quantitative and physico-chemical methods, as applicable to biochemical research.

Texts: Lusk: "Science of Nutrition."
Sherman: "Chemistry of Food and Nutrition."
McCollum & Simmonds: "The Newer Knowledge of Nutrition."
Pryde: "Recent Advances in Biochemistry."
Clark: "The Determination of Hydrogen Ions."

Biochemistry III.

APPLIED ORAL BIOCHEMISTRY FOR MEDICAL STUDENTS. M. C. Agnew

The course will emphasize dental requirements of pre- and post-natal nutrition, and the chemical phases of such diseases as dental caries, scurvy, noma, Vincent's infection, and periodontal pathosis.

See Dental Subjects II.

Biochemistry IV.

APPLIED ORAL BIOCHEMISTRY. M. C. Agnew

This course takes up the newer knowledge of nutrition in its special dental relations. Also enlarges on the chemical phases of health and disease as related to the oral cavity and the teeth.

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DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY.

Kilborn, L. G., *Head of the Department.*
Fung, D. R,
Meuser, E., N.
Pen, D. F.,
Lindsay, A. W.,

This department offers the following courses of instruction. Although most of the courses are primarily designed for students in the College of Medicine and Dentistry, any of them are open to students of Arts or Science who have the necessary scientific training.

Course XI is especially designed for students who wish to make a life-work of Physiology or Pharmacology, and is open to senior students in the Department of Biology who have completed Physiology II, or to students of Medicine or Dentistry who have completed their preclinical studies and wish to spend a year or more in research before entering upon their clinical work.

Throughout the session oral and, as may be necessary, written examinations are held to ascertain the extent of the student's knowledge of the subject, and the results of these, as well as his general work in the laboratory will be used to determine his final standing.

Physiology I — L. G. Kilborn

An introductory course given to the Anatomy class to correlate function with structure. One hour a week throughout the first year.

Physiology II.

HUMAN PHYSIOLOGY. — L. G. Kilborn, D. F. Pen, D. R. Fung

Six lectures and ten hours of laboratory work a week throughout the Fall Term, second year.

The lecture course deals briefly with some aspects of general physiology, and then takes up the study of the physiology of the human body with especial emphasis on the physiological bases of clinical phenomena, such as shock, edema, abnormalities of heart rhythm, dyspnoea, glycosuria, deficiency diseases, diseases of the glands of internal secretion, etc.

The aim of the laboratory course is to familiarize the student with the procedure that must be followed in the solution of typical problems in physiology. The early experiments are made as simple as possible, and make use of the nerve muscle preparation of the frog and the turtle heart. These serve admirably to introduce the student to the quantitative study of animal function, and to teach him something of the behavior of the living as opposed to dead matter. Following this, the class is divided into small groups, each of which is a unit for carrying on mammalian experiments. In rotation each member of each group is anesthetist, surgeon, assistant surgeon, etc. Experiments of considerable difficulty are undertaken, but the work is done by the students themselves under the supervision of an instructor. A very few of the most difficult experiments may be carried out by the instructor as demonstrations. Wherever possible human subjects are used for experiments, the students themselves acting as subjects.

Physiology III.

JOURNAL CLUB. — Staff of the Department.

One hour a week throughout the Fall term of the second year. Each student is required to prepare and read a paper on an assigned subject at least once during the term. Subjects are assigned from the periodical literature, and are chosen because of current or historical interest. Following the reading of the paper, staff and students join in discussion of the subject presented. It is hoped that this journal club will help to familiarize the student with scientific journals, and also assist in the development of a critical attitude towards what he reads.

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Physiology IV.

NEUROLOGY. L.G. Kilborn

Two hours a week for the Spring term of the third year. This is a lecture and demonstration course designed to familiarize the students with the physiological and anatomical bases of clinical neurology, together with an outline of the methods used in the physical examination of the central and autonomic nervous systems.

Physiology V.

ORAL PHYSIOLOGY FOR MEDICAL STUDENTS Ashley W. Lindsay

The physiology of mastication. deglutition, respiration and speech will be stressed, particularly in relation to occlusion and to facial growth and form.

Physiology VI

ORAL PHYSIOLOGY. Ashley W Lindsay

This course will stress the function of the temporo-mandibular joint, the jaws, teeth, tongue, lips and cheeks, muscles of mastication, saliva, speech, etc.

Textbooks: Halliburton, "Handbook of Physiology" (Chinese edition); Evans and Kilborn, "Experimental Physiology" (Chinese).

Reference Books: Macleod, "Physiology and Biochemistry in Modern Medicine." (This book should be owned by each student, if possible.)
Textbooks by Howell; Starling: Bayliss.

Textbook in Neurology: Ranson, "The Anatomy of the Nervous System."

Reference Books in Neurology: Herrick, "An Introduction to Neurology," Tilney and Riley, "The Form and Functions of the Central Nervous System," and other monographs by Sherrington; Pavlov; Gaskell; Hewer & Sandes; Bianchi; Parker; Villiger.

Physiology VII

COLLEGE PHYSIOLOGY L. G. Kilborn, D. F. Pen, D. R. Fung.

This course consists of three lectures and four hours of laboratory work per week for the Fall term. It is open to students of Pharmacy and other departments in Arts and Science who have had training in general biology and chemistry. The course is sufficiently detailed to enable the pharmacy student to understand the action of drugs in altering physiological processes, when he comes to the study of pharmacology. yet it is also planned to give the student of general arts or science an appreciation of the mechanism of the body as a whole.

Text and Reference Books:—Halliburton's "Handbook of Physiology" (Chinese); Burton-Opitz. "Elementary Manual of Physiology; "Best and Taylor. "The Human Body and its Functions."

Laboratory Manual—Evans and Kilborn (Chinese).

Pharmacology VIII

MATERIA MEDICA.

Two hours a week for the Fall term of the second year. The course deals in detail with all the drugs mentioned in "Useful Drugs." In addition, certain other new remedies are discussed.

PHARMACY. E. N. Meuser

Two hours a week for the Fall term of the second year. This is a lecture and laboratory course on pharmaceutical technic, the writing and compiling of prescriptions, and the study of physical, chemical and pharmaceutical incompatibilities.

Pharmacology IX.

PHARMACODYNAMICS L. G. Kilborn, D. R. Fung D. F. Pen

Three lectures and six hours of laboratory work a week throughout the Spring term, second year.

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The physiological action of drugs is studied from the theoretical and practical standpoints. The laboratory course makes use of frogs, turtles, mammals and the students themselves in a study of the modification of physiological functions by drugs and poisons. Such Chinese drugs as have been investigated are included in the course.

Pharmacology X.

APPLIED ORAL MATERIA MEDICA. A. W. Lindsay

This course covers use, dosage, physiological action of drugs which are especially applicable to dental practice.

Text-books: Amer. Med. Assn. "Useful Drugs", (Chinese).
Bruce and Dilling, "Materia Medica", (Chinese).
Clark, "Applied Pharmacology", (English).
Edmonds and Cushny, "Experimental Pharmacology" (Chinese).
Read, "Manual of Toxicology" (Chinese).

Reference Book:
Textbooks by Cushny, Sollman, Meyer and Gottlieb (Henderson's Translation.)
Laboratory Manuals by Bush, Sollman, Jackson, Barbour.
Autenrieth, "Detection of Poisons."
Stuart, "Chinese Materia Medica."
Read, "Chinese Materia Medica."

Physiology and Pharmacology X.

RESEARCH. Directed by the Staff

Research is constantly being conducted in the department. Special problems are set and the work supervised for students of Medicine or Dentistry who have completed the first two years of the regular course and wish to spend an extra year in research work in this department. For students who wish to become university teachers in any of the pre-clinical sciences such a year of work is especially recommended.

DEPARTMENTS OF PATHOLOGY.

Including Bacteriology, Clinical Laboratory and Biochemistry, and Parasitology.

Williams, T. H., *Head of Division I*
Agnew, R. G., *Head of Division II*
Du, S. D.,
Lenox, J. E.,
Chow H. D.
Sharevitch, E.

Division I.

Pathology I.

BACTERIOLOGY AND IMMUNOLOGY. J. E. Lenox

Second year, Fall term, seven hours per week.

(*a*) Lectures. These include the history, development and scope of bacteriology, methods of culture and study, classification and biological properties of bacteria and their part in disease processes, in industry and in assisting natural processes. Special detailed study is given to those organisms met with in medical practice and in epidemics occurring in the Orient. The relation of bacteriology to Public Health and to commerce, theories and types of immunity, and serum reactions are described.

(*b*) Laboratory. This course includes general laboratory technique, staining, the making of media, the cultivation and examination of bacteria, the identification of the more common forms of pathogenic micro-organisms, and the making of vaccines.

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Pathology II.

PARASITOLOGY. T. H. Williams

Second year, two hours per week in the Fall term and three hours per week in the Spring term.

(*a*) A complete course on the biological, clinical, and preventive aspects of the animal parasites of men, their intermediate and reservoir hosts and vectors, with demonstrations and student diagnosis of fresh and preserved material.

(*b*) An opportunity is offered for intensive study of parasite infestation in this province.

Pathology III.

CLINICAL PATHOLOGY AND BIOCHEMISTRY. J.E. Lenox and H. B. Collier

Second year, spring term, six hours per week. This course includes a study of the theory and practice of the chemical, microscopic and other laboratory methods commonly used in the diagnosis of disease. It is mainly a laboratory course.

Textbook: Stitt, "Blood Work and Body Fluids" (Chinese).

Reference: Todd and Sanford, "Clinical Diagnosis by Laboratory Methods" (English).

Pathology IV.

GENERAL PATHOLOGY. T. H. Williams

Six hours per week in the Spring term, Second year.

A series of lectures and demonstrations in gross and histological morbid anatomy, illustrated by museum specimens and microscopic slides, together with instruction in the preservation of tissues, section cutting and staining.

Pathology V.

APPLIED PATHOLOGY. T. H. Williams,

Eight hours per week in the Fall Term third year.
Four hours per week in the Spring Term third year.

A series of lectures and demonstrations illustrated as in General Pathology by specimens dealing with the pathological findings in Internal, Surgical (including tumours), Obstetrical, Gynecological. Ophthalmological, Oto-rhino-laryngological and allied disease. Where possible, post-mortem demonstrations will be given.

Pathology VI.

CLINICAL PATHOLOGICAL CONFERENCES.
The Pathological and Clinical Staffs

One hour weekly during the Third and Fourth years. Joint conferences on such instructive cases and autopsy material as are available, the clinical presentation being made by the internes concerned.

Text-books:—

Zinsser's Bacteriology (Chinese).
Stitt's Practical Bacteriology, Parasitology and Blood Work (Chinese).
Stengel's Pathology (Chinese).
Clinical Methods—Hutchinson and Rainy (Chinese).

Reference Books:—

Boyd's Surgical Pathology and Pathology of Internal Disease.
McCallum's Pathology
Recent Advances in Haemocytology
Mackie's Introduction to Bacteriology
Stitt's Practical (Clinical) Pathology
Yorke's Parasitology
B.M.R.S. System of Bacteriology
Sahli's Diagnostic Methods

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Division II

Pathology VII.

ORAL PATHOLOGY. R. G. Agnew

Subsequent to the course in General Pathology a lecture course with demonstrations is given, dealing with the diseases of the mouth. The study includes pathological conditions of the enamel, dentine, pulp, pericementum, cementum, gingivae, alveolar and supporting bone, oral mucosa, maillae, temporo-mandibular joint, etc. In addition to characteristic lesions of the mouth, and oral manifestations of systemic disease, systemic disease resultant from oral foci of infection receives special attention.

The laboratory course illustrates the more important aspects of oral histopathology, utilizing non-decalcified and decalcified microscopic material. Methods of preparation of pathological material for examination are demonstrated, and the student is taught to perform the most useful of these processes.

Collateral reading from current dental and medical literature is assigned.

Pathology VIII.

ORAL MICROBIOLOGY. R. G. Agnew

Following the completion of the course in General Bacteriology and Immunology this lecture and laborator course covers a special study of the micro-organisms of the oral cavity and their relation to local and systemic disease.

The laboratory course includes methods of procuring material for examination and diagnosis. Routine procedures in root canal treatment, caries prevention, parodontal disease, etc., are taught.

Pathology IX.

SPECIAL ORAL PATHOLOGY AND BACTERIOLOGY FOR MEDICAL STUDENTS.

The course covers a consideration of oral manifestations of systemic disease, and the relation of oral foci of infection to systemic disease. Oral diseases *per se* are briefly discussed.

Text and Reference Works: Kronfeld, Bunting, Gottlieb, Box, Marshall, Goadby, Moorehead & Dewey, Appleton, Black, Fish, Orban, Colyer, Bulleid, Bodecker, Euler & Meyer, Häupl & Lang, Prinz, Haden, Siegmund & Weber, Stillman & McCall, Beust, Hopewell-Smith, Rosenau, Waldron, Cahn, etc.

Pathology X.

Oral Pathological Research:

Research in the field of dental and oral pathology is regularly carried on, and members of the College staff or students with suitable qualifications are invited to undertake the investigation of specific problems under the supervision of the head of the division.

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DEPARTMENT OF INTERNAL MEDICINE.

Best, A.E., *Head of the Department.*
Anderson, H.G.,
Du, S.D.
Lenox, J.E.,
*Millar, J.E.,
Lousley, H.M.,

Medicine I.

PHYSICAL DIAGNOSIS.

Four hours per week in the Spring Term of the Second Year. Lectures, demonstrations and case study aiming to link up the preclinical courses with physical findings in the normal and diseased, and initiate the students into the technique of physical examination.

Medicine II.

DIFFERENTIAL DIAGNOSIS.

Two hours per week in the Fall term of the Third Year. The fundamental principles (acquired in the preclinical training) involved in analysis of the various symptoms of ward patients are systematically discussed and detailed individual instruction given in the wards as under Medicine IV on assigned cases is made to harmonize as far as possible with this course.

Medicine III.

NEUROLOGY A.

This course is given in the Department of Physiology and Pharmacology (See Physiology IV.)

NEUROLOGY B.

Two hours per week of lectures. demonstrations and case analysis, given in the Fall Term of the Third Year.

PSYCHIATRY.

One hour per week in the Fall Term of the Fourth Year. A series of lectures and studies on cases seen in the hospital wards and in the City Asylum.

Medicine IV.

INTERNAL MEDICINE.

Four hours per week in the Fall Term of the Third Year.

Eight hours per week in the Spring Term of the Third Year.

Eight hours per week throughout the Fourth Year.

a. Case taking in the wards, in small groups and clinics on the cases assigned.

b. Reading on topics systematically assigned, and discussion hours to which the students are required to come prepared with what their text books have to say on the subject of the day.

c. Lectures and demonstrations on intra-thoracic tuberculosis.

Medicine V.

DERMATOLOGY AND VENEREAL DISEASE.

a. Dermatology.—One hour per week during the Spring Term of the Third Year, didactic, demonstrations and case study.

b. Venereal Diseases.—One hour per week during the Spring Term of the Third Year. The theoretical and practical aspects of etiology, pathology, diagnosis and treatment of the major venereal diseases are taught, and the social and public health aspects of these diseases emphasized

Medicine VI.

During the Fourth Year the students are regularly assigned cases among the inpatients on the Medical wards. In

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the Outpatient Department they are placed on a rotating service for all the Departments, where their work is closely supervised by Staff members.

The fifth and final year is entirely of Interne work in the three hospitals, where the students are placed on a rotating service according to a definite schedule so outlined as to insure the maximum time in those departments where most experience is required.

Internal Medicine for Dental Students.

The aim in these courses is to lead the student to understand the fundamental principles underlying the etiology and main symptomatology of disease in the human body, with special reference to the part played by oral disease.

Second Year, Spring Term, Medicine 1.

Third Year, Fall Term, Medicine 11.

Third Year, Fall and Spring Terms, Medicine IV, (a) and (b).

Internal Medicine, Subdivision of Pediatrics.

Medical Pediatrics.

Three hours per week, didactic and ward work, throughout the Fourth Year, dealing with the normal development and growth of infants, nutrition and nutritional discorders, infant feeding and preparation of foods, diseases of infancy and childhood. Pediatrics is included in the rotating schedule for the Outpatient Department.

During the Interne Year the students spend a definite part of their time on the Pediatric service.

Textbooks;—Chinese;

English;

Principles and Practice of Medicine—Osler
Clinical Methods—Hutchison and Rainy
Diseases of the Skin—Heimburger

Insanity in Everyday Practice—Younger.
The Practice of Medicine—Price
Textbook of Medicine—Cecil
Diseases of Infancy and Childhood—Holt and McIntosh

References;

Loose-leaf Medicine—Nelson
Differential Diagnosis—French
Diseases of the Chest—Norris and Landis
Tuberculosis in the Child and Adult—Pottenger
Introduction to Pulmonary Tuberculosis—Wingfield
Diseases of China—Maxwell.
Tropical Medicine—Manson-Bahr
Tripical Diseases—Stitt
Diseases of the Digestive System—Bassler
Nervous Diseases—Church and Peterson
Diagnosis of Nervous Disease—Purves Stewart
Diseases of the Skin—Stelwagon
Mental Diseases—Gulick
Physical and Radiological Signs of Pulmonary Tuberculosis—Crocket
Applied Physiology—Wright
Applied Pharmacology—Clark

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DEPARTMENT OF SURGERY

Wilford, E.C., *Head of the Department.*
Morse, W.R.,
Lindsay, A.W.,
Yang, D.G.,
*Crawford, W.,
Hsieh, H.H.,
*Millar, J.E.,
Lousley, H.M.,
Yang, Bert K.L.,

Surgery I.

SURGERY. The Staff in Surgery

Eight hours per week, throughout the third year.

A systematic course of lectures is given throughout the year on the principles of surgery. There is also clinical study in the wards, operating-room, and out-patient department. The students are instructed in case-taking, physical examination and diagnosis. The text-book (Rose and Carless) is followed fairly closely.

Surgery II.

SURGERY. The Staff in Surgery

Fourth year, six hours per week. Regular lectures are continued as well as more detailed and intensive instruction in wards and out-patient dept. The students give anesthetics and assist at operations, and are allowed to perform minor operations. They are assigned cases in the wards, and are required to write complete histories, make laboratory examinations, and give tentative diagnoses.

Surgery III.

ORTHOPEDICS AND BONE SURGERY. W. R. Morse, H. H. Hsieh

Instruction in the underlying principles, proceeding from a discussion of normal functions of bones, joints and other

structures to abnormal function in disease. Training in bandaging, use of plaster of Paris, braces, methods of examination and application in individual cases.

Surgery IV.

ROENTGENOLOGY. E. C. Wilford, H. H. Hsieh

One hour per week for one term. A course of 15 lectures and demonstrations is given in X-ray work, which includes fluoroscopy, roentgenography and plate reading.

Surgery V.

OPERATIVE SURGICAL TECHNIQUE. E. C. Wilford

A course of 2 hrs. per week for 1 term is given to the Fourth year. Operations are performed by the students, supervised by the teachers, on dogs. All the common abdominal operations are practiced. Anesthetics, asepsis, instruments, gowns, gloves, etc., are used as in the regular hospital operating rooms.

Surgery VI.

INTERNE WORK.

In addition to the regular interne duties of the fifth year the Interne is expected to attend all clinical conferences held, and definite reading is required from current medical literature. Clinical instruction only is given, as the regular lecture course is, as a rule, completed in the fourth year.

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DEPARTMENT OF OBSTETRICS AND GYNECOLOGY.

Liljestrand, S. H., *Head of the Department.*
Cunningham, G. S.,
Manly, M. E.,
Hsieh, Helen Y.,

Obstetrics and Gynecology. I.

THEORY AND PRACTICE OF OBSTETRICS AND GYNECOLOGY.

Four hours a week throughout the third year. Lectures and demonstrations.

This course includes:

a. Anatomy and physiology of the pelvic organs.

b. Pregnancy and mechanism of normal labor.

c. Complications and diseases associated with pregnancy.

d. Etiology, pathology, symptomology, diagnosis of gynecological conditions. Principles of treatment.

Obstetrics ond Gynecology II.

PRACTICAL WORK IN OBSTETRICS AND GYNECOLOGY.

Fourth year. Given at the Hospital for Women and Children, and in the Gynecologic and Prenatal Clinics of the Union Out-patient Dispensary.

a. Gynecology. As clinical clerks and internes the students study individual cases as to history, diagnosis and treatment. They also follow the pre-operative, operative and post-operative care of patients. Weekly ward rounds, quizzes and conferences. Diagnostic work in the out-patient department, with drill in History-taking and Methods of Examination.

b. Obstetrics. In the lying-in wards are given: management of parturition, care of the new-born; manikin demonstrations, ward rounds; Prenatal and postnatal clinics in the out-patient department.

c. Gynecologic and Obstetrical Pathology. Weekly meetings for the study of pathologic tissues by means of microscopes and projectors, using sections and gross specimens, with case histories. Spring Term, Fourth year.

ELECTIVE COURSES FOR INTERNES AND GRADUATES.

Obstetrics and Gynecology III.

Female Urology. Clinical demonstrations of the role of the urinary tract in gynecology and exercises in cystoscopy, ureteral catheterization and radiography.

Pathology. Gross and microscopic studies, including bacteriology of the genito-urinary tracts.

Textbooks:

DeLee: Obstetrics.
Kelly: Gynecology.
Graves: Gynecology.

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DEPARTMENT OF OPHTHALMOLOGY AND OTOLARYNGOLOGY.

Cunningham, E. R. — *Head of Division I*
Peterson, R. A. — *Head of Division II*
Lü, D. L.

Division I. Ophthalmology.

Ophthalmology I.

OPHTHALMOLOGY — E. R. Cunningham

A combined didactic and demonstration course of forty-five hours given in the fourth year on methods of examination, use of instruments, diagnosis and treatment of diseases of the eye. Clinical material from the out-patient department will be used.

Ophthalmology II.

CLINICAL OPHTHALMOLOGY — The Staff.

During the interne year each student, in rotation, will have the opportunity for intensive study of ophthalmology while serving in the department. Under the tutelage of the staff the student will be give the opportunity to assist in the investigation and medical or surgical treatment of all patients on the service. A large part of the student's time will be spent in the out-patient clinic observing and assisting in the examination, diagnosis and treatment of patients. Emphasis will be placed upon the evidence of general systemic disease as seen in the eye.

Textbook: Disease of the Eye—May (Chinese edition).

Reference: Diseases of the Eye—De Schweinitz.
Diseases of the Eye—Parsons.
Text Book of Ophthalmology—Fuchs (Duane)

Division II. Otolaryngology.

Otolaryngology I.

OTOLARYNGOLOGY — R. A. Peterson, D. L. Lü.

A lecture and demonstration course of 54 hours in the Fourth year. The course covers the special anatomy and physiology of the ear, nose and throat in its application to the various abnormal conditions seen in the clinic. Methods of examination, diagnosis and treatment of the various pathological conditions will be correlated through special studies, lectures and clinical demonstrations. Fourth year students will attend in rotation at least 24 hours of outpatient clinics.

Otolaryngology II.

CLINICAL OTOLARYNGOLOGY. — The Staff

A clinical course of 72 hours for the Fifth year students. This will be an applied course using the outpatient, ward and surgical services as a basis for study of the application of the various measures necessary to efficiently treat the more usual otolaryngological conditions.

Textbook:—Porter, "Diseases of the Throat, Nose and Ear" (Chinese).

Reference Books:—

Turner, "Diseases of the Throat, Nose and Ear"
Phillips, "Diseases of the Ear, Nose and Throat".
Kerrison, "Disease of the Ear".

Graduate Study in Ophthalmology and Otolaryngology.

The Department of Ophthalmology and Otolarngology gives a graduate course of two years' duration. Two applicants are accepted on the first of July of each year. The course is open to graduates of medical colleges recognized by the Chinese Medical Association who have completed at least one year's interneship in an approved hospital. During the first year the incumbent serves as assistant resident. The second year the student acts as resident, both years being spent at the Chengtu Eye, Ear, Nose and Throat Hospital, where the clinical teaching and research activities of this department are carried on. A thesis is required during the second year and a diploma is granted by the West China Union University on the satisfactory completion of the course and final examination.

In the Division of Ophthalmology, the elementary science underlying the study of ophthalmology, will constitute the basis of study for the first year. Anatomy, including Embryology and Histology, Physiology, including Physiological Optics, Biochemistry and Pathology and Bacteriology, will be studied during the first year in their relation to the eye as an integral part of the body mechanism. Elementary Optics will be also covered this first year. During the second year, courses, demonstrations and clinics will be given in the following subjects; External Disease of the Eye, Refraction, Diseases of the Retina and Optic Nerve. Disease of the Uveal Tract. Diseases of the Retina and Optic Nerve, Perimetry, Medical Ophthalmology, Slit Lamp Microscopy, Ultra-Violet therapy as applied to the Eye, Motor Anomalies with especial emphasis on the various forms of treatment of Squint, Radiology as applied to eye conditions and Operative Surgery of the Eye.

In this course, graduate work in the Division of Otolaryngology will, during the first year, concentrate on the coordination of the basic principles of Anatomy, Physiology, and Pathology as related to the Ear, Nose and Throat. Special emphasis will be laid on the application of the principles of physics and chemistry as exemplified in the structure and functions of the constituent areas under study. A detailed study and dissection of the head and neck will be made. The student will make a collection of plaster casts from his dissection, from anatomical specimens and from patients to illustrate anatomical and pathological relations. The dispensary and inpatient services will be fully utilized in the clinical application of the various principles studied. In the second year, an intensive survey of the field of otolaryngology will be made utilizing laboratory and clinical demonstrations, lectures and required reading. Operative surgery will be taught beginning with anatomical specimens and continuing in the laboratory and in the operating room clinics. Full use will be made of clincial and pathological laboratory facilities in diagnosis and study. Various forms of light therapy, ultraviolet therapy, the use of radiological measures in diagnosis and treatment, and studies on the relation of diet and environment to deviations from the normal will be made.

It is expected that other Departments of the University will cooperate in the giving of courses of lectures on the relation between their departments and the fields of ophthalmology and otolaryngology. In addition to his collection of casts, each student will have a collection of microscopic slides from various cases studied throughout the two years. Definite problems in sequence will be assigned for study and every facility will be afforded for making original investigations. A stipend conforming to the scale of University salaries for these grades of appointment will be paid to the incumbent.

Graduate students for shorter period will be admitted to any of the undergraduate courses and to parts of the two year graduate course. Intensive courses planned to suit the individual needs of the applicant may be arranged in the department. The student should consult the general section of this catalogue for information concerning fees for post-graduate work in this department.

Texts and Reference books include the following:—

Anatomy of the Human Orbit—Witnall.

The Development of the Human Eye—Mann

Anatomy and Histology of the Human Eye Ball—Salzmann

Recent Advance in Ophthalmology—Duke-Elder
Human Physiology—Starling
Medical Ophthalmology—Foster Moore, Knapp
An Introduction to Clinical Perimetry—Traquir
Diseases of the Eye—Parsons
Koby's Slit Lamp Microscopy of the Living Eye—Goulden and Harris.
Refraction of the Eye—Goulden
Pathology and Bacteriology—Collines and Mayou
Ophthalmology—Fuchs
Diseases of the Eye—De Schweinitz
Tropical Ophthalmology—Elliott
Ophthalmic Surgery—Meller
Neoplastic Diseases—Ewing
Operative Surgery of Nose, Throat and Ear—Loeb
Diseases of the Ear—Kerrison
Plastic Surgery—Gillies
Diseases of the Nose, Throat and Ear—Jackson and Coates.
Diseases of the Nose, Throat and Ear—Turner
Modern Otology—Keeler
Bronchoscopy and Esophagoscopy—Jackson
Pathology of the Nose and Throat—Beck
The Tonsil—Fowler
Texts by Keith, Skillern, Davis, Sluder, etc., also available.

DEPARTMENT OF ORAL MEDICINE AND SURGERY

Agnew, R. G., *Head of the Department.*
Lindsay, A. W.,
Mullett, H. J.,
Hwang, T. C.,

Medicine & Surgery I.

ODONTOLOGY.

Odontal Technology, Histology, Pathology. Physiology, Therapeutics, etc., will be reviewed and applied to a consideration of the causes, diagnosis and treatment of the diseases and lesions, the defects and malformations, of the dentine, the enamel and the pulp tissues of the teeth.

Medicine & Surgery II.

ORAL SURGERY & ORAL MEDICINE. Ashley W. Lindsay

Diseases and lesions of the mouth and its associated structures, other than those of the teeth and their immediately associated tissues will be studied and discussed in their local, general and specific manifestations.

Medicine & Surgery III.

PARODONTOLOGY. R. G. Agnew

The course treats of the disease processes occurring in the tissues immediately surrounding or adjacent to the teeth. Application of preclinical studies in dental embryology, histology and physiology is made, and the relationship between form and function is emphasized. The etiology of the various types of gingivitis and parodontoclasia is discussed in their local and systemic aspects, and the principles and rationale of treatment are discussed. Interrelationships with other branches of dental science, and systemic lesions resulting from parodontal foci of infection are studied. The social and economic aspects of the subject, due to the general prevalence of parodontal disease in China are given special attention.

Text and Reference works: Merritt, Box, Sorrin & Miller, Stillman & McCall, Neumann etc.

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Medicine & Surgery IV.

ORTHODONTOLOGY. H. J. Mullet

The course will take up bone growth and muscle function, evolutionary and racial influences, etc., of normal and abnormal occlusions. It will discuss history, etiology, diagnosis, treatment and prognosis of malocclusions of the teeth and jaws.

Medicine & Surgery V.

ORAL DIAGNOSIS. Ashley W. Lindsay

Students are taught the principles and practice of history taking, case reports and the making of a diagnosis

The procedures and value of making full and careful mouth examinations, using all diagnostic methods available, will be covered.

Medicine and Surgery VI.

PROSTHODONTOLOGY (*A*). H. J. Mullett

The various structures of the mouth are reviewed and discussed as they are related to artificial dentures. The whole procedure of the making of dentures is discussed under the headings of examination of the mouth, design of suitable appliances, impression taking, construction and insertion. Attention is given to retention, distribution of stresses, the study of facial types, preservation of harmony in form., color and arrangement of teeth, mandibular movements and balanced occlusion.

Medicine and Surgery VII.

PROSTHODONTOLOGY (*B*). T. C. Hwang

Students receive instruction in the various principles underlying crown and bridge restorations.

ORAL MEDICINE & SURGERY FOR MEDICAL STUDENTS.

The subject matter of the several oral specialties will be briefly taken up and all the co-relationships between medical and dental practice will be stressed.

DEPARTMENT OF ORAL SURGICAL TECHNOLOGY

Hwang, T. C., *Head of the Department.*
Agnew, R. G.,
Lindsay, A. W.,
Mullett, H. J.,

Surgical Technology I.

ANAESTHESIA TECHNOLOGY.

The course will take up the technique of all the branches of anaesthesia used in dentistry. Particular stress will be given to Regional Anaesthesia.

Surgical Technology II.

ORAL SURGERY TECHNOLOGY. Ashley W. Lindsay

The course covers all the surgical procedures employed in the cure or eradication of diseased tissues of the mouth, other than those of Odontal Surgery and Paradontology.

Surgical Technology III.

ODONTAL SURGERY TECHNOLOGY. T. C. Hwang

Techniques will be taught covering the restoration of lost tooth tissue and function; the protection of the pulp; the exclusion of moisture; root-canal surgery, etc.

Surgical Technology IV.

PARODONTAL SURGERY TECHNOLOGY. R. G. Agnew

The course covers various aspects of surgical technique as applied to the treatment of parodontal disease. This includes general prophylactic procedures; apoxesis and curettement, radical and conservative methods; application of

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pressure atrophy, etc. The principles governing balanced occlusal relationships are applied in the production of gliding articulation and harmonious functioning of the teeth. Manikin technique is largely employed in the course.

Surgical Technology V.

PROSTHODONTAL SURGERY TECHNOLOGY. H. J. Mullett

(a) The student applies the principles set forth in his lectures on the subject, such as the taking of impressions, construction of models, the arranging and articulating of full and partial dentures, waxing, flasking, packing, vulcanizing, finishing; construction of splints for fractured jaws, the design and construction of obturators, etc.. etc.

T. C. Hwang

(b) Techniques for the various types of crowns and bridges will also be covered.

Surgical Technology VI.

ORTHODONTAL SURGERY TECHNOLOGY.

The construction of regulating and retaining devices receive consideration.

Surgical Technology VII.

ORAL ELECTRO-DIAGNOSIS & THERAPEUTICS TECHNOLOGY.

The course is designed to teach the technique of operation and use of X-ray machines, trans-illuminators, pulp testers, ionization, ultra-violet-ray apparatus, infra-red and diathermy.

Surgical Technology VIII.

ANIMAL OPERATIVE SURGERY. Staff

A series of experimental operations will be conducted on dogs and other animals illustrating and employing surgical methods used in the treatment of various oral diseases.

Surgical Technology IX.

ORAL SURGICAL TECHNOLOGY FOR MEDICAL STUDENTS.

Oral techniques of value to the physician will be covered.

DEPARTMENT OF ORAL LABORATORY TECHNOLOGY.

Mullett, H. J., *Head of the Department*
Albertson, W. B.,
Chin, H. T.,
*An, C. L.,

Laboratory Technology I.

APPLIED PHYSICS AND TECHNOLOGY. H. J. Mullett

A large number of the subjects in the dental course have a definite mechanical side. Since much of the success of dental operations depends not only on the skill of the operator but also on the suitability of the materials used, an exact knowledge of their properties is requisite. It is the object of this course to consider the various handicraft manipulations with the underlying scientific basis of each.

Lectures and laboratory work cover such subjects as mechanics of solids, fluids and liquids, forces, levers, gears, friction, pressure, heat, electricity, light, motors and lathes; manipulative processes with gold, amalgam, cements, waxes, plaster, vulcanite, porcelain, steel, brass, tin, aluminum; cutting operations, sawing, filing, grinding, polishing, burnishing, plating, casting, swaging, drilling, soldering, rolling, burring, threading, strength of materials, stress, wear, lubrication, etc.

Laboratory Technology II.

METALLURGY. H. J. Mullett

The purpose of the course is to have the student become familiar with the physical and chemical properties of the metals so that he will be able to select suitable materials for his requirements and to apply the laws and principles governing the physical properties of metals in relation to the practice

of dentistry. Besides the physical properties of metals, also alloying, soldering, tempering, annealing, etc., will be considered.

Laboratory Technology III.

INSTRUMENTOLOGY.

This is a short course considering the various instruments used in the laboratory and at the chair in respect to their manufacture, classification of various types, cutting angles, method of use, sharpening, sterilization and care of instruments, etc.

Laboratory Technology IV.

ORAL TECHNICAL DRAWING — W. B. Albertson

This course is designed to meet a distinct need which arises in any scientific profession, both prior to, and following graduation, namely, the need for accurate illustration, and for training in the habits of accurate observation. The student is incidentally assisted in the training of the fingers, so essential in instrumentation, and in the cultivation of a sense of touch.

The course comprises—elementary perspective, freehand drawing of form and outline, elementary principles of light and shade, anatomical drawing, particularly of the head, teeth, investing structures, drawings of instruments and appliances, etc. Models, etc., are so chosen as to correlate work with the needs of the various departments.

Laboratory Technology V.

APPLIED PHOTOGRAPHY — H. T. Chin

Cameras, adjustments, lenses, shutters, screens, plates, films, lighting exposure, developing, illumination, especially of oral cavity and dental objects, enlarging and reduction; printing; lantern slides, photomicrography.

DEPARTMENT OF CLINICAL DENTISTRY.

Lindsay, A. W., *Head of the Department.*
Mullett, H. J.,
Agnew, R. G.,
Hwang, T. C.,
Chang, S. L.,
Chang, C. H.,
Hsia, Y. S.,
Sharevitch, E.
*An, C. L..

Clinical Dentistry I.

ORAL OPERATIVE CLINICS — Staff

During the third and fourth years students will be required to attend selected Chair-clinics. Attendance may be for observation or they may be called to act as assistants.

Ten cases of prophylaxis must be carried through to completion by each student of the fourth year.

Clinical Dentistry II.

INTERNE YEAR — Staff

The Interne year of the course in dentistry opens on the first of July and continues till the following July. Holidays: Two weeks during the summer and one week during the university mid-term vacation. Any student absent for more than one month, holidays included, shall be required to make up lost time before diploma is granted.

The student in the College Dental Infirmary or in other university hospitals is required to complete all cases assigned. Full opportunity is offered to student to acquire operative skill and to gain experience in meeting the demands of a dental practice.

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DEPARTMENT OF HYGIENE AND PUBLIC HEALTH

*Crawford, W., *Head of the Department.*
Best, A. E., *Acting Head of the Department.*
Lindsay, A. W.

Hygiene and Public Health I.

HYGIENE AND PUBLIC HEALTH. *W. Crawford

An intensive course of 75 hours for the Fourth year students of Medicine and Dentistry, which includes lectures, demonstrations, covering History of Public Health, advances in the branches of Epidemiology, Vital Statistics, Public Health Administration, with especial attention to its application to West China. In addition, the student studies water, sewage, and sewage disposal, ventilation, school health, scoring of private and public institutions, and the inspection of and methods for food control.

In all courses the liberal use of the several epidiascopes at the disposal of the college is made. The department has a good supply of film slides as well as glass slides, for use in the course.

Hygiene and Public Health II.

PREVENTIVE DENTISTRY FOR MEDICAL STUDENTS. Ashley W. Lindsay

The various preventive measures will be discussed and examples of western world experiments in this field will be noted.

Suggestions as to possible preventive programs for China will be covered.

Hygiene and Public Health III.

PREVENTIVE DENTISTRY. Ashley W. Lindsay

All phases of oral health and the preventive field will be studied.

A dental hygiene program for China will be presented and discussed. Students will be required to make studies of dental health conditions in Chengtu and to prepare suggestive health programs.

Hygiene and Public Health IV.

HYGIENE AND PUBLIC HEALTH. *W. Crawford

A course for university freshmen, compulsory for all students outside of the college of Medicine and Dentistry. The course includes health values, nutrition, disease prevention, communicable diseases and their control, water, waste, ventilation, heating and lighting, hygiene of schools and public buildings, scoring of same.

Here the epidiascope and film slides are made use of for the teaching course. Course includes one hour per week for the Fall term fourth year.

Hygiene and Public Health V.

COURSE FOR THEOLOGICAL SCHOOL STUDENTS. *W. Crawford

This course includes history of medicine, how we "catch" disease, control of epidemics, vaccination and immunization, first aid, health training in outstations, "Health clubs."

Hygiene and Public Health VI.

COURSE FOR MIDDLE SCHOOL STUDENTS IN UNIVERSITY MIDDLE SCHOOL. *W. Crawford

The course includes studies upon the human body, skeletal, muscular, circulatory, glandular; nutrition, waste disposal, water supplies, first aid, communicable diseases, etc.

Textbooks and Reference Books:—
Nelson's Loose Leaf Medicine, Vol. VI.
Rosenow; Fitzgerald; Overton and Denno.
Kenwood and Parker; Williams, Currie, MacNutt.

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SPECIAL SUBJECTS

Under the Director of the College

Technical English — J. M. Kilborn and Staff.

I. For Medical Students.

Technical medical and scientific English is studied throughout six years of the medical course. The objects of the course are: (1) to enable senior students and graduates to read and readily understand medical books and journals; (2) to give the senior students sufficient grasp of English to take lectures in that language and be prepared for doing post-graduate work in English-speaking institutions or countries; (3) to enable senior students to write histories and to express technical ideas in correct English.

No set course of instruction is followed, but the earlier years are devoted to the English of the pre-clinical sciences. In the clinical years use is made of Cabot's "Physical Diagnosis" and Service's "System of Case Taking." Detailed study is also made of the English of medical journals.

II. For Dental Students.

Technical Dental and Scientific English Courses are the same or similar to those given in medicine.

The courses will prepare the student to read dental literature and to take lectures in English in his last years. The graduate to keep up with the advances of the profession must be able to read technical books and journals in English.

Therapeutics

Therapeutics I. Dietetics. — M. C. Agnew

The applied physiology of nutrition as related to health and disease, and the food requirements in the various pathological states. Lectures and demonstrations.

Therapautics II. Principles of Therapy.
S. H. Liljestrand & Staff.

Discussions and bedside practice of the various therapeutic principles, and the problems involved; applied physiology and pharmacology, and deviations from physiologic norms. This involves discussion of recent advances in physiology, biochemistry and pharmacology, in their practical application to the treatment of disease. This course is given in years alternating with Therap. III., to the third and fourth year classes.

Therapeutics III. Physical Therapy. — S. H. Liljestrand.

Lectures and demonstrations on the use of electricity, mechanics, exercise, water, heat and cold, light, roentgen rays, and radium in the treatment of disease. Given in alternate years with Therap. II. to 3rd and 4th year classes.

Jurisprudence, Ethics, History.

I

Medical Jurisprudence.

A course of 12 lectures dealing with thanatology: the reality of death, post-mortem changes, etc., causes producing death by violence; wounds in their medico-legal relations; medico-legal aspects of the sexual functions, legitimacy, pregnancy, abortion, infanticide, rape, etc., blood stains and the examination of blood.

II

Dental Jurisprudence.

Dental law as it applies to public and professional relations will be discussed and explained. A suggested line of procedure for the enactment of laws to regulate dental practice in China will be covered.

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III

MEDICAL ETHICS.

A brief course of two or three lectures.

IV

DENTAL ETHICS.

The moral and social relations between the dentist and his patients: between his fellow practitioners; and between the community at large will be analysed and discussed.

V

HISTORY OF MEDICINE.

A course of 10 lectures outlining the development of the Science of Medicine from the earliest times to the present. The biographies of some of the men who have contributed most to the advancement of Medicine are studied.

VI

HISTORY OF DENTISTRY.

Designed to acquaint the student with the progress of dentistry and its position in the 'health program'; to attempt to link the student with world dentistry; to use native Chinese dental practice to provide examples of phases of the development of dentistry.

VII

DENTAL PRACTICE ANE ECONOMICS.

The course is given with the aim of meeting the problems of the graduate in hospital and private practice. Location, furnishing, light, apparatus, office administration, etc., will be discussed.

The management of a dental practice with reference to income, expenditure and the development of its full resources will be taken up.

FINAL YEAR THESIS

A thesis is required from all candidates for a degree. The subject of the thesis is chosen by the student after consultation with the heads of departments. The dean of the faculty in which the student is graduating will appoint an advisor to supervise the work in preparation for the thesis and the preparation of the thesis itself. The thesis, when written, must be approved first by the head of the department in which the work was done, and then by the dean of the faculty, who will then recommend it to the Committee of Studies of the University for acceptance.

Each student must select the subject for his thesis and have it approved within one month of the end of the fourth year. These must be completed each year by the date announced in the university calendar.

Information regarding further regulation for the writing of theses may be obtained from the registrar of the university.

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COURSE IN MEDICINE, AND HOURS REQUIRED

(Years of the five-year course)

See also required premedical Sciences.*

SUBJECT	First year		Second year		Third year		Fourth year		TOTALS	
	Fall	*Spring*	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*	*Spring*	*For Subject*	*For Group*
English	54	45	54	45	18	15	18	15	264	429
Technical English	36	30	36	30	18	15			165	
Anatomy	324	270							594	807
Applied Surgical Anatomy						15			15	
Histology & Embryology	108	90							198	
Biochemistry	126	120							246	759
Physiology			306						306	
Pharmacy & Materia Medica			72						72	
Pharmacology				135					135	
Bacteriology & Immunology			126						126	657
Pathology, General				90					90	
Pathology, Applied					144	60			204	
Clin. Pathology & Biochemistry				90					90	
Clin. Pathological Conference					18	15	18	15	66	
Parasitology			36	45					81	
Internal Medicine					72	120	126	120	438	945
Physical & Differential Diagnosis				60	36				96	
Neurology & Psychiatry				30	36		18		84	
Pediatrics I, and II or III							54	45	99	
Therapeutics						30	18	15	63	
Dermatology					36				36	
O.P.D. Medical						45	54	30	129	
Surgery					144	120	108	90	462	657
Venereal Diseases							18		18	
Roentgenology							18		18	
Orthopedics								30	30	
O.P.D. Surgical						45	54	30	129	
Obstetrics & Gynecology					72	60	54	60	246	246
Hygiene & Public Health								75	75	75
Ophthalmology								45	45	150
Otolaryngology							54		54	
Dental Subjects			18			15	18		51	
Jurisprudence, Ethics, History						15	36		51	51
Totals	648	555	648	525	594	570	666	570	4776	4776

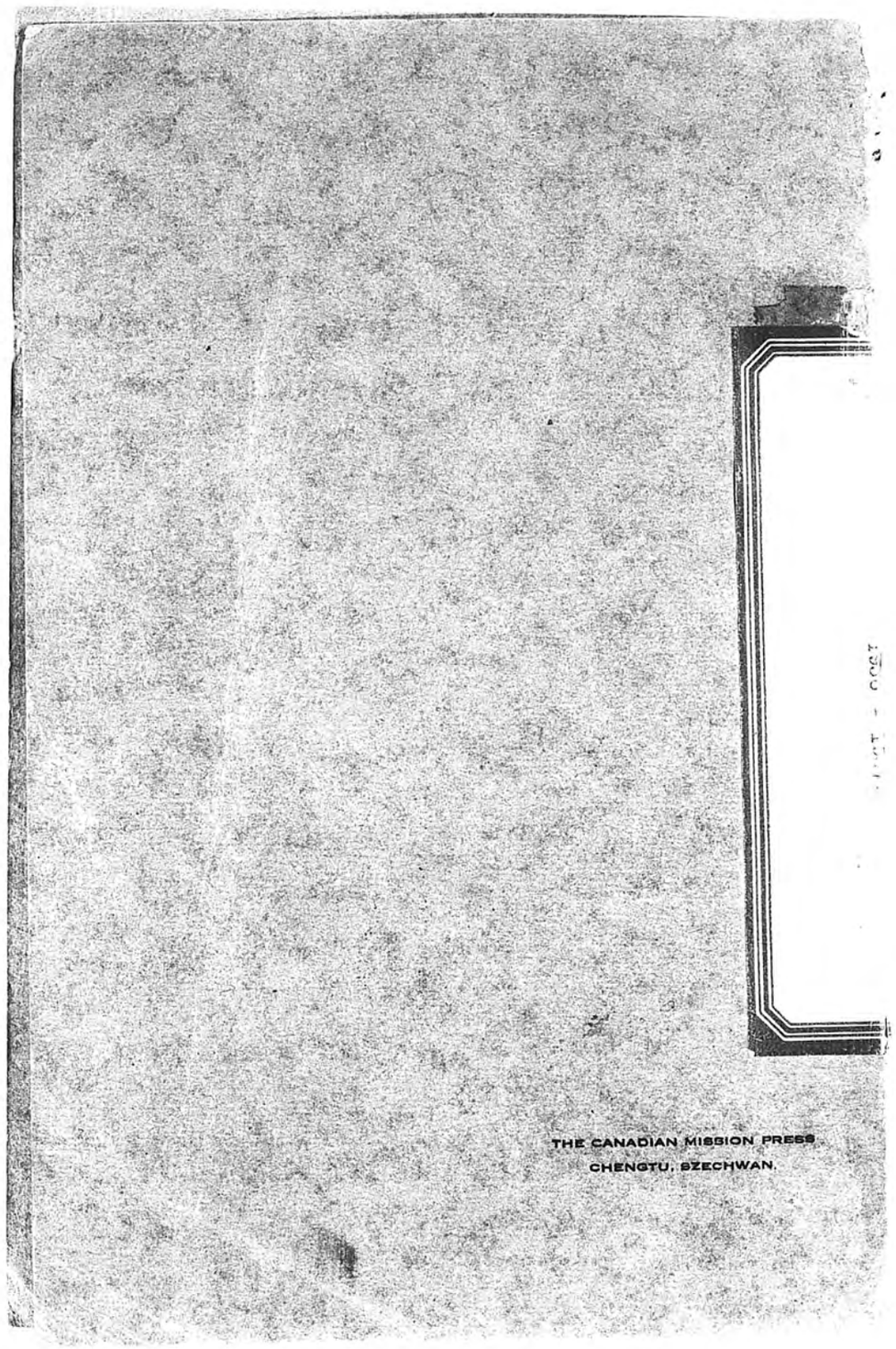
*The details may be found on another page. The Fifth year is a rotating interneship of twelve months. For the Prerequisite Sciences see another page.

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COURSE IN DENTISTRY YEARS

Department.	Subject	First year		Secong year		Third year		Fourth year		Fifth year		Total	Total
		Fall	*Spring*	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*	*Spring*			*Subject*	*Group*
English	General	54	45	54	45	18	15					231	
	Technical	36	30	36	30	18	15					165	396
Anatomy	Gross Anatomy	324	270									594	
	Gen. Histology	108	45									153	
	Gen. Embryology		45									45	
	Oral Histo-Anatomy					126						126	
	Applied Oral Anatomy							72	15			87	
	Comp. Oral Anatomy							36				36	
	Odontal Anatomy			54	45							99	1140
Biochemistry	Biochemistry	126	120									246	
	Oral Biochemistry							18				18	
Physiology and Pharmacology	Physiology 1,		306									306	
	Oral Physiology							36	30			66	
	Neurology A,			33								30	
	Pharmacology			135								135	
	Pharmacy & M. Medica		72									72	
	Oral Mat. Medica								15			15	624
Pathology	Gen. Pathology			90								90	
	Gen. Bacteriology		126									126	
	Oral Pathology						135					125	
	Oral Microbiology			30								30	
	Clin. Pathology & Biochemistry			90								90	471
Medicine	Physical Diagnosis			60		36						96	
	Medicine, Inc. Neurol, B.					108	120					228	324
Surgery	General Surgery					144	120					264	264
Hygiene Public Health	Hyg. & Pub. Health								75			75	
	Oral Hyg. & Prev. Dent.							36	30			66	141
Otolaryngology	Otolaryngology							36				36	36
Oral Laboratory Technology	App. Physics & Tech.					72						72	
	Metallurgy							15				15	
	Instrumentology								15			15	
	App. Photography							18				18	120
Oral Surgical Technology	Anaesthesia								15			15	
	Oral & Exodont. Tech.								15			15	
	Odontal Surg. Tech.							108	60			168	
	Parodontal Tech.								30			30	
	Prosthodontal Tech.					36	60	72	60			228	
	Orthodontal Tech.								15			15	
	Elec. Diag. & Therap.							18	15			33	
	Animal Oper. Surg.								15			15	519
Oral Medicine and Surgery	Odontology						30	36	30			96	
	Oral Surg. & Med.							54	45			99	
	Parodontology							54	15			69	
	Orthodontology							18				18	
	Oral Diagnosis							18	15			33	
	Prosthodontology *A*						30	36	15			81	
	Prosthodontology *B*							36	15			51	447
Special Subjects	Jurisprudence & Ethics								30			30	
	Dental History								15			15	
	Dental Practice							18				18	63
Clinical Dent.	Operative Clinics & Interne yr.								30	1800		1830	1830
	Total	648	555	648	555	558	540	720	615	1800		6639	6639

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THE CANADIAN MISSION PRESS
CHENGTU, SZECHWAN.

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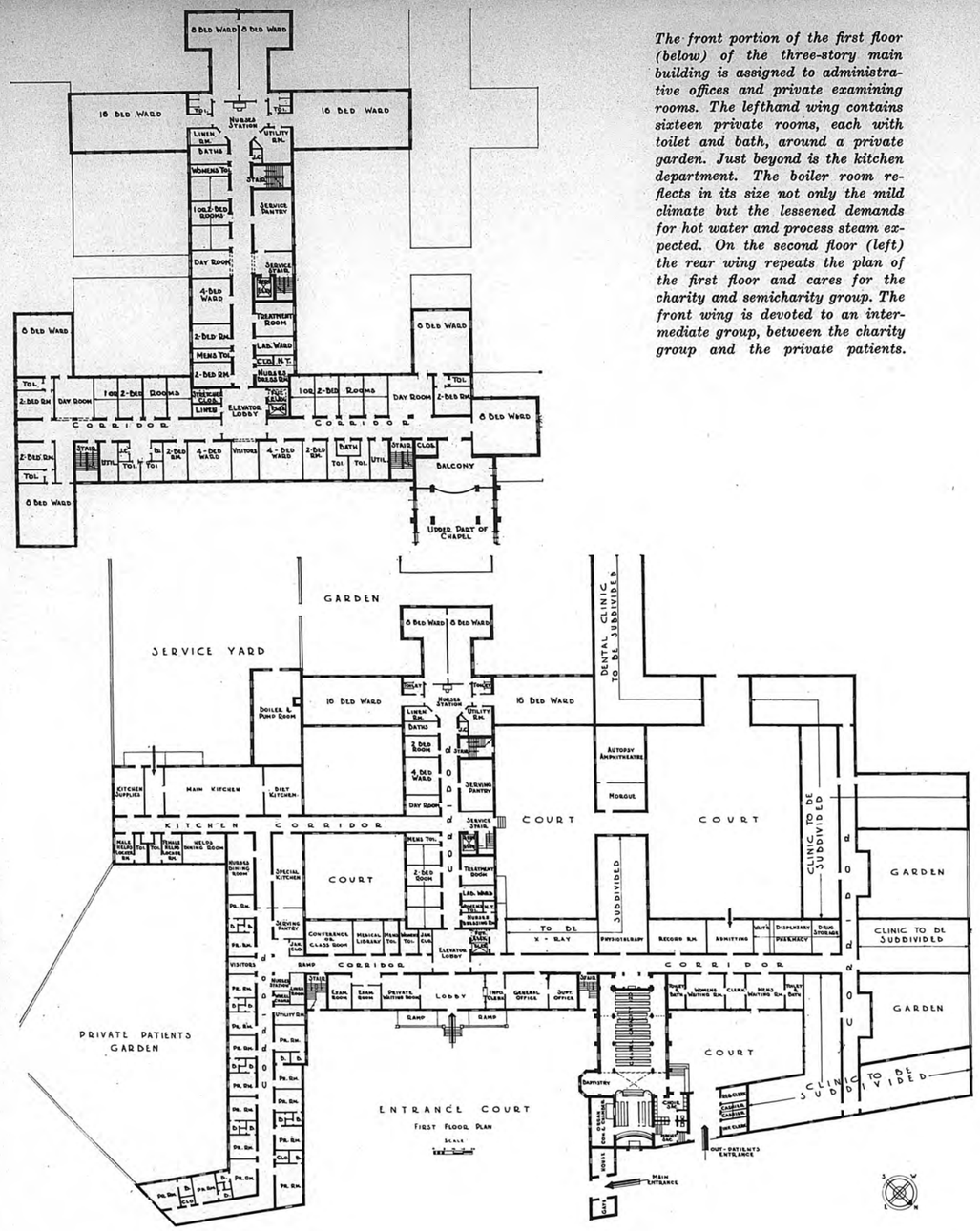


Two Civilizations Meet

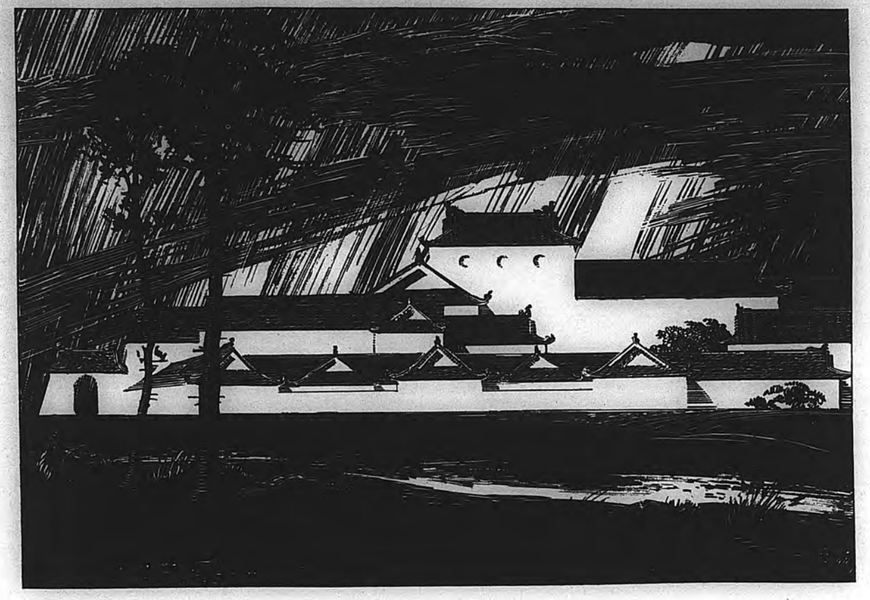
FOR THE HEALTH OF A NATION AND
THE RELIEF OF HUMAN SUFFERING

REPRINT FROM THE MODERN HOSPITAL—APRIL 1937

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The front portion of the first floor (below) of the three-story main building is assigned to administrative offices and private examining rooms. The lefthand wing contains sixteen private rooms, each with toilet and bath, around a private garden. Just beyond is the kitchen department. The boiler room reflects in its size not only the mild climate but the lessened demands for hot water and process steam expected. On the second floor (left) the rear wing repeats the plan of the first floor and cares for the charity and semicharity group. The front wing is devoted to an intermediate group, between the charity group and the private patients.



Two Civilizations Meet

By JOSEPH BEECH, D.D.

IN NEW YORK CITY or in Chicago it would be just another hospital, but the modern clinical medical center being planned for Chengtu, a city in the extreme West of China, near the "roof of the world," is such a stupendous undertaking that its completion will indeed be the miracle it will seem to the hundred millions of Chinese, Tibetans and aboriginal peoples it will serve.

To the hopelessly inadequate personnel of the twenty mission hospitals in Western China, the completion of this project will bring promise of a hospitalization more commensurate with the district's great demand for medical care. To the teachers and clinical staffs of the West China Union University Medical Dental College, it will be the means by which they may continue the teaching of scientific medicine and present day surgery in this area, 1,000 miles from the nearest medical college.

An adequate portrayal of the handicaps and discouragements encountered by teachers of modern medicine in hospitals of this character is difficult, but it is easily discerned that the finer and more sensitive the teacher, the more heavily these impediments weigh upon him. Denied a modern clinical hospital, the medical dental college would gradually move into the deepening shadows cast by outmoded and insanitary hospitals.

Let some well known doctor and teacher of clinical medicine, who may read this article, sleep tonight on his magic carpet and awake twelve thousand miles away in one of our outmoded hospitals. He will find himself surrounded by students eager to learn modern medical practices. He may reach for a faucet, he may look for a radiator, but he will reach and look in vain. For running water, hot or cold, for heat and for sewage, he must rely upon coolies.

His first impulse will be to hop on the magic carpet and head for home. But if he has eyes to

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see the multitudes suffering from all manner of diseases; if he has heart to feel for them; if he notes the rapidly increasing line of students hungry for knowledge, he will utter a hasty prayer for a modern clinical hospital and go to work, accomplishing wonders and surmounting difficulties by added devotion to his tasks.

Under such conditions has medical work in West China progressed since its beginning in 1892. In 1910 the West China Union University, with its faculties of arts, science, religion and education was founded by the foreign missions boards of the Methodist Episcopal Church and the Baptist Church of the United States, the Canadian Methodist, now the United Church of Canada, the Society of Friends and the Church Missionary Society of the Anglican Church of Great Britain. Its medical school was organized in 1914 and the dental school a few years later.

In 1933 the university was registered with the National Government of China as a university, with colleges of arts, science, and medicine and dentistry. In 1934 the university was given an absolute charter by the Board of Regents of the University of the State of New York, with authority to confer the degree of doctor of medicine on graduates in medicine and doctor of dental surgery on the graduates in dentistry.

During this period of development, the medical and dental faculty increased from four to thirty-five, and medical and dental students from eight to 160 in number, 35 per cent of whom are women. This high percentage of women is a significant departure from precedent in the West and an entirely new movement in the Orient.

New Medical Center Will Rise

The growth of medical work conducted in the three mission hospitals and two dispensaries in Chengtu may be seen from the following: The full-time clinical staff consists of eleven foreign and thirteen Chinese doctors, assisted by a large group of residents, interns, clinicians and administrative personnel. There are six foreign and twenty-nine Chinese full-time graduate nurses and eighty-five student nurses. The hospital beds number 300; the yearly in-patients, 5,718; the out-patients, 71,334. The fees received average $166,335, Chinese currency, over 97 per cent of all expenditure, exclusive of the salaries of the foreign staff contributed by missionary societies. These figures do not include the dental hospital, the university dispensary and dental infirmary, the midwifery school and clinic and the public health work, all integral parts of the medical and dental program.

Upon this foundation of staff, patients and income from fees, a new medical center of 500 beds and out-patient departments for 100,000 patients a year will be organized. Its purpose will be to bring the several classes of medical service together in one center; to provide for better medical treatment of patients and more effective cooperation in clinical instruction; to give to the college of medicine a clinical hospital adjacent to the college, designed for clinical instruction of a modern sort, and under its own direction; to more adequately accommodate the increasing numbers of patients, and, in coordination with other hospitals and agencies in the city, provide a complete medical service.

A Fine Testimonial

The volume of patronage and the amount of self-support we receive indicate the high place that Western medicine has won in Western China. Dr. A. Stampar, representative of the League of Nations to the National Health Administration of China, who visited West China last year, gives a fine testimonial in his critical report to the League and the Chinese Government, as follows:

"My conclusion, based on my visit and still more upon my impressions of its graduates whom I met at Chungking, is that the medical school is a good contribution to medical work in China. Its achievement is the more remarkable in view of the conditions under which it is working. It is self-supporting except for salaries of the foreign staff and for a small grant from the Ministry of Education. The university authorities, expecting help from the British Indemnity Funds, plan to establish a new clinical hospital; if this is carried through and the school were to receive a little extra assistance, both financial and technical, it could be suitably used as the main institution of medical education for the 100 millions of people living between Hankow and the Tibetan border."

Doctor Hume Reports

Dr. Edward H. Hume, formerly director of Yale-in-China Medical College and the Post-Graduate Hospital of New York City, reports to the China Foundation as follows:

"There has been built up in Szechwan, hitherto thought of as a remote and almost inaccessible province, a college of medicine and dentistry that ranks with the best in China. The Provincial Government might well give pause before setting up medical teaching and ask if a finer result could not be attained by concentrating on the medical dental college at Chengtu, making it serve as the provincial center for medical teaching by some form of cooperative arrangement."

The recently appointed provincial commissioner of health for the province of Szechuan has recommended to the government a program of cooperation along the general lines suggested by Doctor Stampar and Doctor Hume, with dependence upon the college for the training of large numbers of doctors, dentists, nurses and public health workers for the province, with adequate government grants to cover the added expense.

This new hospital, at the uttermost part of the earth, will be more than buildings, it will be the logical outcome of the high altruism that marks the onward course of the ministry of healing in its nobler aspects. Proper buildings it must have, and the final word of this story tells how they come. When Generalissimo and Madame Chiang Kai-shek were in Chengtu they were asked to endorse our request to the British Indemnity Funds Trustees for $100,000. They replied, "We will do it." They did it by telegraph and letter to both the British Indemnity Funds Trustees and the China Foundation.

The China Foundation has granted us $25,000 (Chinese currency) and the British Indemnity Fund Trustees $75,000 (Chinese currency), and more is expected in future from these sources. This, plus gifts from an American friend of the project, has made it possible to secure authority to proceed with the foundations as soon as plans are approved.

Plans and specifications for this hospital have been under consideration by the medical dental college for nearly a decade. The results of those studies have been submitted to Schmidt, Garden & Erikson, architects, Chicago. The tentative plans and designs, drawn in harmony with the university architecture, together with descriptions by Carl A. Erikson, picture in intriguing fashion this modern hospital of our dreams.

The Building and Its Plan

By CARL A. ERIKSON



A TOLERABLY long pin, pushed into the earth at New Orleans, would emerge near Lhasa, the Forbidden City of Tibet, the home of the Dalai Lama, 600 miles west of Chengtu. Another pin, inserted at Philadelphia, would poke through Chinese earth north of Chengtu.

In this area live a people who sometimes hear of a queer race living in these United States, who work while they sleep and sleep while they work. If they learn of our pride in irrigating systems they recall that Li Ping built an irrigating system for them 2,200 years ago that still irrigates a rich basin of 2,800 square miles. In the center of this basin lies Chengtu, a city of 600,000 persons.

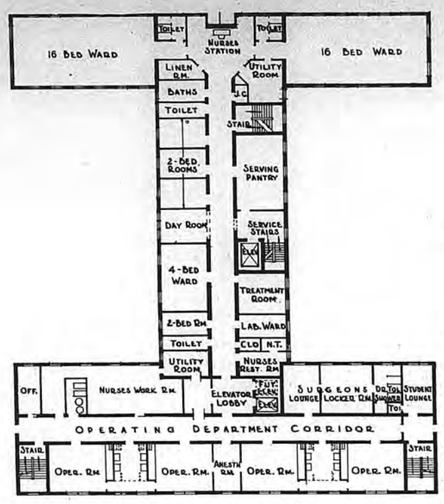
Only a few years ago it was a three-months' (1,500 miles) journey west of Shanghai via slow steamers and junks up the Yangtze-kiang to Chungking, then by shank's mare or coolie carried chair for 300 miles to Chengtu, the capital of the Province of the Four Rivers—Szechwan, with its population of 60,000,000, one-half of the total of the United States in one eighteenth of the area. Today's flying time is about seven hours.

Despite its remoteness from the sea the climate of Chengtu is not greatly different from that of New Orleans—few freezing days and summer temperatures not so high, but quite humid.

Chengtu knows little of many of our vaunted improvements. It has no municipal water system, so roofs, water carriers and the city's wells or one's own provide the limited supply. Sewage is too precious a fertilizer to be wasted; it is carefully collected and then distributed to the fields. Heating is a real luxury; a tiny charcoal brazier suffices for the aged and infirm in the most luxurious households. Electricity has only recently arrived, and it is hoped that within the next few years a railroad now under construction to Chungking will reach Chengtu so that it may more readily tap the resources of the rest of the world. Lugging a boiler 300 miles from Chungking, the head of water transport, to Chengtu, over bad roads by coolie labor does have its difficulties, as does the long haul by junk.

No part of the building process is quite as simple as it is here. There are no contractors, no yards of cut lumber, no material supply dealers. If one has the courage and faith to start building it must literally be from scratch.

Cement is far too expensive because of the transport so lime must be used, but it must first be burned. Lumber isn't to be had by reaching for the telephone. Here's the Chengtu alterna-



The front wing of the third floor contains the four operating rooms, each with a student gallery (reached from the attic), and usual accessories. The small number of operating rooms promises to be satisfactory because of the limited number of surgeons on this full-time staff. Sterilizers are expensive in Chengtu so the bulk of the sterilization will take place in the nurses' workroom.

tive: find a man who knows the forests in the mountains; dispatch him with sufficient funds to buy the standing trees and engage a crew to cut them down and carry them to the river edge. Two springs later the logs arrive on the shores of the Min-Ho River. They are then carried by coolies to the building site.

Here is to be found none of the paraphernalia we associate with lumber processing. A large gang of coolies—two to a saw—rip the lumber into timbers, joists or boards as needed. For window frames, doors and other finished work the Chengtuans substitute hand tools for the power driven machinery of our huge planing mills and cabinet shops.

In this, the most ancient civilization of the world, Occidental medicine was introduced and found a ready acceptance. Patients are too numerous for the limited capacity of the few hospitals, and students too many for the facilities of the one medical school.

It is against this background that the West China Union University proposes to build a modern hospital of 250 beds initial capacity (future 500 to 600 beds) with an out-patient service that may grow to tremendous numbers. It is to be the teaching hospital of the medical school, supplanting two or three old buildings remote from the medical school.

Aside from racial and climatic differences this hospital differs in one important respect from most of those in this country. Its teachers are all full-time men, actively engaged in the practice of medicine. They not only care for the in-patients but for extensive groups of free and pay out-patients.

To those who confuse the modern hospital with some of its trappings—chromium plating, electric signals, colored tile, pneumatic tubes and other gadgets—Chengtu would be an impossible place in which to build. There isn't a single plumber in the town, but on the other hand labor costs only a few cents a day. Many devices and details whose extra cost here is amply justified are ruled out there. They would be many times as expensive there as they are here.

Even fireproof construction is ruled out—cement, steel or tile would be prohibitively expensive transported from Shanghai, Europe or America. It will be as fire-safe as it can be made with wood joists, bearing walls and intermediate cross walls of brick, fire stops in the floors and other fire preventive and resisting precautions.

Floors will be wood; there isn't anything else available except at prohibitive cost. Walls will be painted plaster. Doors will be paneled, not flush slab. There will be no steel trim in the building. It will be the first large building in Szechwan with a central heating system, hot and cold water supply and a sewage system. Electricity will be used in sterilization, but it will be confined to a very few places. At least one electric elevator will be installed for food and patient transport.

Every plumbing fixture, every foot of pipe and every electric motor must be laboriously carried into Chengtu from Shanghai or abroad. Even cheap coolie labor cannot carry a bathtub as cheaply as our American railroads. These few construction details are cited to illustrate how every single item of American hospital practice must be revalued at Chengtu.

The science of medicine recognizes no barriers of creed, color, or nationality. But it is tempered by its art and transmuted by its practice to become the living thing that we know as the practice of medicine, varying widely from country to country, even from city to city.

The workshop of the practice of medicine, the hospital, will vary with that practice and necessarily with the customs of its people.

It might be argued that asepsis knows no country and that therefore a hospital with the hard sharp lines of a sterilizing machine, such as those proposed for Melbourne or Stockholm, would be equally appropriate at Chengtu. Perhaps, but wouldn't the psychologic trauma be considerable to a Chinese, accustomed to walled-in gardens and courtyards, beautiful overhanging roofs and lovely textures, if, when sick, he was introduced to one of these ultra-modern medical factories? They are hard, and inhuman in any country; they would be more so against the old culture of Chengtu.

The other buildings of the university carry on the tradition of the Chinese, so we have tried to catch something of the spirit of Chinese architecture, both in the plan and in suggestions for the exterior. The Chinese building, no matter what its purpose, is arranged within walls and in closed compounds or courts. The buildings were increased in size by adding more courts, not by adding more stories. This essential of Chinese planning has been followed except that the central building is three stories high, flanked by two and one-story buildings.

The other outstanding characteristic of Chinese architecture is the overhanging roof so evident in the sketches. While architectural details have not yet been developed, it is hoped to follow the spirit but not the letter of fine Chinese architecture.

The site for the hospital is ample. Basements are not permitted, and the western exposure is bad for patients. The out-patients' section will be on the right with various clinics in one-story buildings that may be inexpensively enlarged to meet future needs. An unusual requirement is separate waiting rooms for men and women. Another, that many an American out-patient service will envy, is the bathroom adjacent to each out-patient waiting room. The x-ray and physiotherapy department separate the out-patient service and the main hospital. The chapel is so placed that it may be used without entering the hospital.

The front portion of the first floor of the three-story main building is assigned to administrative offices and private examining rooms. The lefthand wing contains sixteen private rooms, each with toilet and bath, around a private garden. Just beyond is the kitchen department, differing from American ones in two essentials — the main kitchen is much smaller, owing to the simple Chinese menu; there is in addition, a "special kitchen" intended primarily for the preparation of Occidental or other unusual diets.

The adjoining boiler room reflects in its size not only the mild climate but the lessened demands for hot water and process steam expected.

The rear or central wing is practically identical for three floors. It is intended primarily for the charity and semicharity service in its two sixteen-bed wards, and two eight-bed wards, the one four-bed and five two-bed (or one-bed) wards.

Beyond the Main Hospital Building

The erection of this 250-bed hospital building, now assured by gifts from friends in the United States and China, constitutes an immediate and imperative call for equipment, furnishings and other provisions for its operation, and the extension of its services to the people.

First, in time and importance, is the supplying of necessary built-in and movable equipment, such as, water and heating plants, lavatories, sterilizers and refrigerators, equipment for operating rooms, X-ray and electro therapy, at least 200 completely equipped beds, one service elevator, kitchen and dietary equipment and other furnishings and supplies.

Other needs and necessities are:

The initial endowment or support of fifty beds for charity patients.

Erection and equipment of the out-patient buildings, adjoining the main hospital building, for the departments of dentistry; eye, ear, nose, and throat; medicine; surgery; obstetrics and gynecology; and pharmacy.

Buildings and furnishings for the home for nurses, and nurses in training.

Special wards or buildings adjacent to the main hospital for infectious cases, tubercular patients, pediatrics and public health services.

Endowment for equipment and maintenance of the main hospital and other services of the medical center.

From China come the first challenging gifts for the equipment of the main hospital building.

Many other gifts, both large and small, from many friends, are sought to initiate this interdenominational and international adventure in human welfare.

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"To the Glory of God . . . and the Relief of Human Suffering"

These words might well be inscribed above the portals of this West China University Clinical Hospital. They state the reasons for its inception, the progress that has attended it and are the grounds upon which you are urgently invited to help equip it for service to six thousand in-patients, and over one hundred thousand out-patients who will visit it annually.

The Erection of the Central Clinical Hospital, a Record of Co-operation and Confidence.

The erection is assured by three grants, of twenty-five thousand Chinese dollars each, from the Trustees of the British Returned Indemnity Funds, and gifts from America amounting to one hundred and twenty-five thousand Chinese dollars.

Total given for erection of the building, Chinese currency $200,000, equal to approximately *United States currency $66,666.*

The Minimum Building Equipment to Usher in the Transition from Antiquated Methods to Efficient Service.

This hospital building must be more than the conventional West China type of hospital building if it is to function as a model and modern hospital teaching scientific medical practice. It must be equipped with plant for hot and cold running water, lavatories, electric fittings and fixtures, heating facilities and at least one service elevator. To make a satisfactory beginning in the *installation* of such equipment ten thousand American dollars is asked, conditional upon a like sum being contributed in China.

Needed for Building Equipment, *United States currency $20,000.*

The Equipment of the Teaching Hospital Conditions the Spirit, the Character and the Quantity of Its Work

Recognizing this truth the China Foundation initiated the movement to provide suitable equipment for this hospital by two grants of twenty-five thousand Chinese dollars each.

Total given for Hospital Equipment, Chinese currency $50,000, equal to approximately *United States currency $16,666.*

This list of essential equipment, furnishings and supplies states imperative needs and offers opportunity for donors to designate their gifts.

Equipment for Operating Rooms:

	Costs Installed, U. S. Currency
Major operating room, fully equipped	$2,500
Delivery room, fully equipped	1,500
Emergency and minor operating room, fully equipped	700
	$4,700

Sterilizing Equipment:

	U. S. Currency
4 Combined utensil. water, and instrument sterilizers, $1,100 each	$4,400
1 Central combined dressing, utensil and instrument sterilizer	1,500
1 Central pair of water sterilizers	1,000
4 Bedpan washers and sterilizers, $150 each	600
1 Bedding and clothing sterilizer	500
1 Water still	100
	$8,100

Refrigerators: 4 electric, average $150 each $ 600

Hospital Beds, Mattresses, Bedding and Linens:

(May be provided as single beds or in ward units of 16 beds—$800; 8 beds—$400; 4 beds—$200, or rooms of 2 beds—$150; 1 bed—$75.)

200 Beds with mattresses $25 each; with share of bedding and linens $25 each, total $50	$10,000
50 Special beds with mattresses $50 each; with share of bedding and linens $25 each, total $75	3,750
	$13,750

Furniture, Utensils, Dishes, Supplies, Medicines and X-Ray $10,000

Charity Beds:

The dispensaries of this medical center will have from 100,000 to 150,000 out-patient visits yearly with none excluded because of penury. Many of these patients require hospital treatment, some are destitute. This Christian hospital should have at least *fifty endowed or supported beds* to enable the very poor to receive its benefits.

1 bed endowed, caring for about 25 patients yearly	$1,500
1 bed for five years, caring for about 125 patients	300
1 bed for one year, caring for about 25 patients	65

Aside from these charity beds our experiences demonstrate that current receipts will meet current maintenance. Your gift is sought to start a beneficent work that will continue through the years.

Forward gifts to:
ASS'T TREAS. C. A. EVANS

Address inquiries to:
CHANCELLOR JOSEPH BEECH,

WEST CHINA UNION UNIVERSITY

150 Fifth Avenue, New York, N. Y.

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COLLEGE OF MEDICINE
AND
DENTISTRY

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WEST CHINA UNION UNIVERSITY
CHENGTU, SZECHWAN
CHINA

REPORT
1937 - 1939

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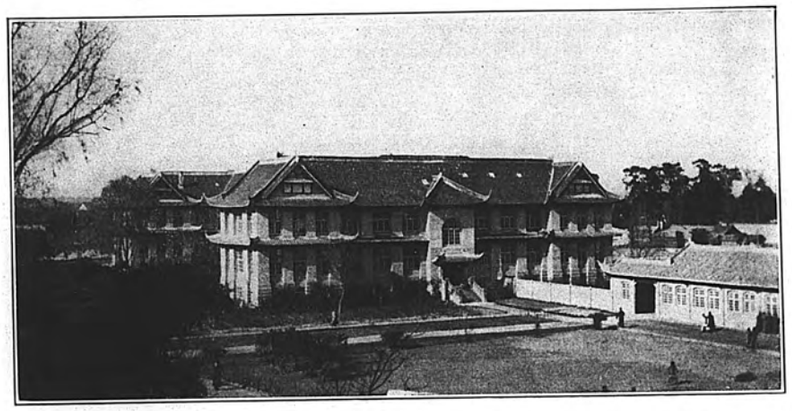
COLLEGE OF MEDICINE
AND
DENTISTRY

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WEST CHINA UNION UNIVERSITY
CHENGTU, SZECHWAN
CHINA

REPORT
1937 - 1939

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College of Medicine and Dentistry, showing a portion of the new Shops Building. Taken in December, 1938. The background is now occupied by the new University Hospital Building.

WEST CHINA UNION UNIVERSITY

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Representing the Missionary Society of the United Church of Canada:
Chancellor E. W. Wallace, James Endicott, J. H. Arnup.

Representing the Women's Boards:
American Baptist—Hazel F. Shank.
Methodist Episcopal—Mrs. F. E. Baker, Mrs. F. L. Reed (alt.)
United Church of Canada—Mrs. G. D. Atkinson, Mrs. H. Taylor (alt.)

Coopted Members:

Hon. Vincent Massey	Mr. K. N. Chang	Mrs. C. R. Carscallen
Sir Michael Sadler	Mr. H. B. Clark	Mr. Dean Sage, Jr.
Mr. J. H. Franklin	Mr. G. B. Huntington	

NEW YORK ADDRESS:
Care of the Associated Boards for Christian Colleges in China,
150 Fifth Avenue.

TORONTO ADDRESS:
Care of the Board of Foreign Missions, United Church of Canada,
299 Queen Street West.

LONDON ADDRESS:
Care of the United Committee for Christian Universities of China,
2 Eaton Gate, S.W. 1.

WEST CHINA UNION UNIVERSITY

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Registrar—S. D. Hwa, B.A.
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Director and Dean of Medicine—L. G. Kilborn, M.A., M.D., Ph.D.
Dean of Dentistry—A. W. Lindsay, D.D.S., L.D.S., M.Sc. (Dent.), F.A.C.D,
Secretary of the Faculty—J. E. Lenox, B.S., M.D.

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REPORT 1937 - 1939
WEST CHINA UNION UNIVERSITY
COLLEGE OF MEDICINE AND DENTISTRY

Historical Statement

The West China Union University was organized in 1910 by four missionary societies, representing three countries, United States of America, Great Britain and Canada. In 1918 a fourth society also from Great Britain, joined the union, and in 1925 the women's boards of these societies were added to the supporting bodies when the university became coeducational. The Faculty of Medicine commenced work in 1914 and the Faculty of Dentistry in 1919. These two faculties were united in 1929 to form the College of Medicine and Dentistry.

The university, including its three academic colleges of Arts, Science, and Medicine and Dentistry, is registered with the National Government of China and also grants degrees on the authority of the Board of Regents of the University of the State of New York. It is supported in the United States, Canada and Great Britain by the Board of Founders and in China by the Board of Directors. According to its constitution the various supporting mission boards contribute the missionary members of the staff and in addition make grants towards the support of the university and its residential colleges. The university also receives financial aid from the Ministry of Education, the Szechwan Provincial Bureau of Education, and various foundations, government bureaux, endowment funds and private benefactions. Receipts from student fees form a very small proportion of the university's annual income.

The university is organized on the basis of three academic colleges and six residential colleges. The College of Science includes a four-year course in pharmacy. Every student must register in one of the residential colleges as well as in an academic college and in the university. The medical course, according to government regulations, consists of six years. But an additional year of work in the basic sciences, languages and general culture is required. The dental course also consists of six years with a similar predental year. The final year of the six-year course is a rotating internship. The annual fees are N. C. $68.00; board and other expenses amount to approximately N. C. $200.00 per annum.

The two war years, 1937-1939, have been among the most significant in the history of medical and dental education in West China. The Autumn term of 1937 opened with a very much larger freshman enrolment than had been expected. This was due to an order from the Department of Education that all Szechwan universities should hold second entrance examinations in order that those students who had planned to enter "down-river" institutions should not be denied the opportunity of university education. As a result a huge and unwieldy class was admitted, and of this class a very large percentage signified their desire to study medicine or dentistry.

Our War-Time Guests

Early in the term we received inquiries from the Colleges of Medicine and Dentistry of the National Central University in Nanking and from Cheeloo University Medical School in Tsinan, asking for accommodation in Chengtu. Both institutions were assured of a welcome, and moved to Chengtu. The National Central University College of Medicine is a relatively new institution, having been established in 1934 with a six-year course. Hence in 1937 their most advanced class was commencing its third year. The first year was kept in Chungking, where it received instruction in the Science College of the N. C. U., for the main portion of that university had established itself in that city. The second and third year medical students numbered a few over thirty. Only the preclinical departments had as yet been organized, and these moved to Chengtu and were given accommodation in the buildings of the W.C.U.U. as follows:

The Department of Anatomy under Prof. Charles Chang
The Department of Biochemistry under Prof. Libin Cheng
The Department of Physiology under Prof. C. Tsai
The Department of Pharmacology under Prof. K. Y. Yü
The Department of Pathology under Prof. H. Y. Kang

In addition Prof. Y. L. Chen was in charge of neuro-anatomy, neuro-pathology and clinical neurology and psychiatry. The dean, Dr. S. N. Cheer, was concurrently professor of medicine. Equipment for these various departments was also brought to Chengtu, and set up in the laboratories of the West China Union

University. In order to provide sufficient accommodation various basement rooms were renovated, the attics in both wings of the College were equipped with dormer windows and glass tile and furnished for laboratory use, and partitions were used to wall off portions of certain larger rooms, ends of hall-ways, etc. A small addition was provided by adding a storey to the central extension from the west wing. In these ways and also by sharing classrooms and student laboratories and by a careful arrangement of time-tables the work of the two institutions was carried on without loss in efficiency. In fact both colleges made certain gains through the borrowing of equipment and of teaching. For instance, Central University taught neuro-anatomy, neuro-pathology, neurology and psychiatry, and also dermatology for the W.C.U.U., and West China teachers taught organic chemistry, parasitology and general and technical English for the N.C.U.

The W.C.U.U. arranged for personal accommodation for the staff of the N.C.U. by finding other quarters for the middle school students formerly housed in the Baptist Middle School Dormitory. This entire dormitory building was turned over to the N.C.U. staff as an apartment house, and has been so used by them for the past two years. The university also assisted the Central University authorities to secure from the municipality the use of a neighboring temple as a student dormitory. With some renovation this has quite satisfactorily served this purpose.

The National Central University School of Dentistry was not in the fortunate position of medicine. It was only a four-year school, and arrived in Chengtu with two classes, very little equipment and only four teachers, one of whom left before long. On account of the very great difference in standards between the W.C.U.U. and the N.C.U. in dentistry no amalgamation of classes was possible, although teaching assistance was given to the Central University by the West China staff. A temporary building was erected on the College site in which most of the classes of the N.C.U. were held. The dean of the Central University School of Dentistry, Dr. J. L. Wong, was anxious to secure a higher standard in dental education for this, the first governmental dental college to be established in China, but he was unable to obtain adequate support from the educational authorities, and at the end of the year he resigned. He has since accepted an appointment on the staff of the W.C.U.U. With the resignation of the dean, the school of dentistry was temporarily placed under the authority of the dean of medicine, where it has since remained. However, we note with great satisfaction the recent action of the Ministry of Education in finally agreeing to a six-year course in dentistry.

Soon after the arrangements had been made for the coming of the N.C.U. Colleges of Medicine and Dentistry a telegram was received from Tsinan asking if the W.C.U.U. would welcome the Cheeloo Medical students as guests in Chengtu. An invitation to staff and students was sent by return telegram, and soon after that about seventy-five students, accompanied by eleven members of the teaching staff and three technicians, arrived in Chengtu. They had travelled by train to Hankow, thence by river steamer to Chungking, and then by motor bus to Chengtu. When the first bus load arrived arrangements for their reception were not quite complete, but camp cots were hurriedly borrowed and the students established in the basement of the Si Shen Tsi Street Church of the Church of Christ, while members of the staff were entertained in the homes of the W.C.U.U. faculty. The following members of the Cheeloo staff arrived during the 1937-1938 session: Dr. Eugene Chan, (Ophthalmology); Dr. H. C. Chang, (Histology and Embryology); Mr. T. S. Chang (Physiology); Dr. P. L. Fan (Pediatrics); Dr. P. C. Hou, (Pathology); Dr. K. C. Lang, (Otolaryngology); Mr T. W. Li (Biochemistry); Dr. L. C. Lin, (Medicine); Dr. Y. Y. Liu, (Surgery); Dr. T. M. Pi, (Public Health); Dr. L. M. Yeh, (Anatomy).

The arrangements made with Cheeloo were quite different from those made with the National Central University. Cheeloo students registered in the W.C.U.U. as "guest students" and the Cheeloo staff members joined the W.C.U.U. faculty as guest teachers. No equipment was brought and no administrative officers accompanied the guest school. Hence the students joined with those of the W.C.U.U. in common classes, and for their instruction and housing were entirely dependent upon the equipment, supplies and accommodation of the host university. They paid fees to the W.C.U.U. (for the autumn term at a reduced rate because of their late arrival), and the Provincial Bureau of Education made a grant to the W.C.U.U. of N.C. $1,000.00 to assist in the preparation of dormitory accommodation. Cheeloo University continued to pay the salaries of its staff in Chengtu. No Cheeloo students of the interne class came to West China since this class had been assigned by the government for service with the air force, but students were received into each of the other six years.

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Photograph by A. E. Owen.

Students at work in a corner of the dissecting room.



Photograph by A. E. Owen.

A corner of the dental clinic in the College Building. The dental unit of the new hospital is a much needed section and has not, as yet, been provided for.

Graduating Class of 1938

The college graduated thirteen students in medicine and eight in dentistry in June, 1938, slightly the largest class to that date. But in many ways the work of the year was carried out under difficulties, not the least of which was the largest furlough list of staff in the history of the institution. No less than ten of the foreign staff were absent during most of the year, and two of the senior Chinese staff were abroad for study, while one other, Dr. Lu Djong-lin, associate professor of ophthalmology, resigned to enter practice in Chungking.

New Adjustments for 1938-1939

The academic year 1938-1939 was one of advance for the College, and many significant changes took place, most of which, we believe, indicate very decided progress.

When it became evident that the war would continue for some time the College felt the necessity of entering into a more permanent arrangement with the guest institutions than had hitherto been reached. It was quite possible to carry on the preclinical courses as in the previous session, i.e., complete union with Cheeloo and close co-operation with the National Central, but such an arrangement could not be extended into the clinical years without great difficulty. With the commencement of clinical work in the N.C.U. College of Medicine a *modus operandi* had to be discovered. Either complete union or complete separation seemed the only possible alternatives, and complete separation with the carrying on of rival hospitals seemed neither advisable nor Christian. Only with the greatest of difficulty could the N.C.U. have established a hospital in Chengtu and suitably equipped it in war time as a teaching institution. The third alternative of asking the N.C.U. to move to some other city, say Chungking, was not even seriously considered. Hence, at its January (1938) meeting, the faculty of the College of Medicine and Dentistry of the W.C.U.U. issued an invitation to Dr. S. N. Cheer, dean of the N.C.U. College of Medicine, to become director of clinical studies for the combined colleges in Chengtu.

Dr. Cheer finally agreed to accept the office upon one condition: that the various mission hospitals in Chengtu should be united into one institution with centralized administration and pooled finances. It will be necessary here to recall a few points in the history of the mission hospitals in Chengtu in order to make clear the reasons for this conditional acceptance of office by Dean Cheer.

Organization of the United Hospital

Of the five missions united in the W.C.U.U two only had commenced medical work in Chengtu prior to the establishing of the University. The United Church of Canada, formerly the Canadian Methodist Mission, had three hospitals in the eastern section of the city; a hospital for men, established in 1892, a hospital for women and children, established in 1894, and a dental hospital, established in 1909. The Methodist Episcopal Mission had established a general hospital in the southern part of the city in 1893, and this had been converted into a special eye, ear, nose and throat hospital in December, 1928. Schools of Nursing were established in both the Men's Hospital (1914) and the Hospital for Women and Children (1915). In addition the M.E.M. maintained a School of Midwifery founded in 1931. The only other forms of medical work under Protestant mission auspices in Chengtu were the University Student Health Clinic, the University Dental Clinic, and the West China Council on Health Education, which was a union project established for the general dissemination of public health information. With the exception of the Schools of Nursing and the School of Midwifery, which were loosely affiliated with the University, each of these institutions was used by the College of Medicine and Dentistry for clinical teaching. In order to better co-ordinate their work a Chengtu Hospitals Board was formed in 1929. Although it had been the hope of many at the time of the organization of the Board that it should eventually result in a complete centralization of control over the various hospitals, this hope had not been realized. The Hospitals Board remained advisory only, and for two or three years preceding the war it had met only on relatively rare occasions. However, the organization and aims of the Board had been sanctioned by the various Mission Boards, which owned and controlled the Chengtu hospitals. Thus, it made possible the immediate consideration of Dr. Cheer's conditional acceptance of the directorship of clinical studies in the suggested union set-up. A meeting of the Chengtu Hospitals Board

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was called, and it approved of the organization of a United Hospital, and forwarded this suggestion to the various mission bodies and universities concerned. In due time unanimous approval was given to the project, and the United Hospital of the Associated Universities in Chengtu was set up. Into this new organization went the Men's Hospital, the Dental Hospital and the Hospital for Women and Children of the United Church of Canada, the Chengtu Eye, Ear, Nose and Throat Hospital of the Methodist Episcopal Mission, and the West China Union University Dental Clinic, and later the Tuberculosis Sanatorium of the W.C.U.U. The new organization provided for a director, a general superintendent, unit superintendents of the various sections, a general superintendent of nurses to be concurrently the principal of the United School of Nursing, and pooled finances under a common treasury.

The officers elected were:

Director—
Dr. S. N. Cheer.

General Superintendent—
Dr. R. A. Peterson (in absentia)
Dr. H. G. Anderson, (acting) to July 1st, 1938
Dr. L. G. Kilborn, (acting) from July 1, 1938 to January 18, 1939
Dr. E. C. Wilford, from January 18, 1939

Superintendent of Nurses and Principal of the School of Nursing—
Miss Eva Liu

Unit Superintendents—

Men's Hospital—
Dr. A. E. Best, to March 23, 1939
Dr. J. E. Lenox, from March 23, 1939

Hospital for Women and Children—
Dr. Jean E. Millar

Eye, Ear, Nose and Throat Hospital—
Dr. C. C. Teng, (acting) to February 11, 1939
Dr. E. R. Cunningham, from February 11, 1939

Tuberculosis Sanatorium—
Dr. G. B. Lo, from March 25, 1939

University Dental Clinic—
Dr. H. J. Mullett

City Dental Clinic—
Dr. H. Chen

New O. P. D. Building

The large number of students included in the union institution made the former union outpatient department, located at the Hospital for Women and Children, much too crowded for satisfactory teaching work. Hence the provision of an enlarged O. P. D. was an immediate necessity. Many plans for this were considered, but finally it became evident that it would be necessary to build. Hence a new one-storey building was erected in front of the Men's Hospital. This building is brick up to the bottom of the windows and Chinese stucco above. The former O. P. D. entrance was rebuilt and the old original O. P. D. buildings and student dormitory buildings were remodelled and included in the building. The dental clinic was transferred to this section and the former dental hospital was made available as a dormitory for male students. The remodelling and building cost about N. C. $10,000. Towards this sum the China Foundation made a grant of $3,000 and the W.C.U.U. supplied $6,000. The latter grant was made possible by the Szechwan Bureau of Education granting $6,000 towards the budget of the College for the purchase of microscopes.

It was the hope of many that all O. P. D. work should be centralized in the new building in order to facilitate reference of patients from one clinic to another. However, this has not proved feasible on account of lack of space and other facilities. Hence the obstetrics, gynecology and public health clinics are carried on in the old O. P. D. building at the Hospital for Women and Children and the Eye, Ear, Nose and Throat clinics are maintained, as before, at the Shensi Street Hospital. However, the new O. P. D. is functioning admirably and has resulted in a much more efficient type of outpatient teaching than would have been possible in the congested quarters formerly available.

First Year's Operation

The organization and first year's operation of the United Hospital may be regarded as a success. Although many difficulties were encountered in organization and many doubts at first prevailed as to the possibility of successful operation of the new institution, most of these have been overcome. There is general agreement that the educational efficiency of the hospital for students, internes and other house staff has been increased. The number of patients treated has been greater than in any previous year, and financially the year closed with a balance on hand. It is true that this was possible only because of assistance received from the China Foundation, which granted N.C. $15,000 towards salaries and laboratory expenses, the West China Union University which made a grant of N.C. $3,000 for the maintenance of free beds in the hospital, the National Central University which took over certain salary payments, and also because fees were raised. Public ward rates were increased from 50 cents to 60 cents per day, and semi-private wards were made proportionately more expensive. In view of the very great change in the rate of exchange and the fact that most of the drugs and laboratory reagents must be paid for in foreign currency, this increase must be regarded as very moderate indeed.

Although the number of beds has been increased in both the men's and women's units, both hospitals have been well filled, and often it has been impossible to admit patients because of lack of space. This was in spite of the fact that forty beds previously devoted to tuberculosis were made available for other patients by the opening of the sanatorium. The present capacity of the various units is as follows:

Men's Hospital	175 beds
Hospital for Women and Children	125
Eye, Ear, Nose and Throat Hospital	80
Tuberculosis Sanatorium	40
	420 beds

Curriculum Changes

The organization of the United Hospital was but one phase of the united program in clinical teaching. In view of the fact that three medical schools were involved, all of whom had developed their individual peculiarities, the curriculum had to be unified. This involved fewer difficulties than was anticipated, for all institutions readily agreed to adopt in the fourth year a common curriculum which provided for certain individual modifications to accommodate the slightly different subjects that had been taught in the third year. For instance W.C.U.U. and Cheeloo had both completed the prescribed courses in physical diagnosis and in laboratory diagnosis but had postponed until the fourth year the work in special pathology. The N.C.U., on the other hand, had completed its course in pathology in the third year but had left until the fourth its courses in both physical and laboratory diagnosis. By careful arrangement of class timetables it was quite possible to provide for these differences. Otherwise everything, with one minor exception, was in union. With the opening of the autumn term in 1939 the work of the fifth year will be unified in similar fashion. Perhaps the greatest alteration in the curriculum is the proposed introduction of the system of clinical clerkship. The didactic work in most of the major subjects is now being completed in the fourth year so as to leave most of the fifth year free for the students to alternate as clinical clerks (junior internes) among the various departments. This has made the fourth year an exceedingly heavy one, but we are confident that the increased practical experience gained in the fifth year will fully compensate for the increased number of hours of work in the fourth year. During the fifth year we plan that lectures and general clinics will occupy not more than two hours of each day, probably the first and last hours each morning. In addition one afternoon a week will be devoted to the course in operative surgery upon animals.

The provision of several small laboratories for the exclusive use of internes is another important advance. Due to the greatly increased number of internes more detailed work and more laboratory work now is required from each student. Our former small classes did not permit of this important training, and most of the hospital laboratory work was delegated to technicians.

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Cheeloo: 1938-1939

A further change from the previous year was the altered status of Cheeloo University. With the coming of President S. T. Liu to Chengtu, Cheeloo University organized itself into a separate body on the campus of the W.C.U.U., using the buildings and equipment of the W.C.U.U. but having many of its own administrative officers. Dr. H. C. Chang was elected acting dean of the Medical School in Chengtu, and set up his own administrative office. The university accepted many new students and welcomed back many former students who had been scattered among other institutions or had not been in attendance at any college for the previous year. Cheeloo student dormitories for men and women students are now under construction on the campus of the W.C.U.U.

Tuberculosis Sanatorium

A further important addition to the facilities of the College during the year was the purchase and renovation of what has been known for many years as the Liu Pei-yuin Orchard property for a Tuberculosis Sanatorium. This is a property of some 14 Chinese acres, situated west of the Union Middle School and south of the Radio Station. It includes a large one-storey quadrangle style Chinese building, and this was very successfully remodelled to form a satisfactory hospital set in the ideal surroundings of an apple orchard and vineyard. Forty beds were installed, and under the superintendency of Dr. Gordon G. B. Lo this new venture has proved a great success. The idea originated with Dr. Harold G. Anderson, and before he left Chengtu in July, 1938, he had received the first subscription of N.C. $1,000 towards this project. A further $1,100 was received locally in subscriptions and the remainder of the cost, which amounted to about $24,000, including the erection of a residence for the superintendent, has been provided for by a grant from the C. M. S. and certain special subscriptions secured in England by Dr. Anderson. The College would record its gratitude to those who have made possible this very fine extension to its work.

Leper Hospital

In the summer of 1932 Dr. James L. Maxwell, accompanied by a group from the W.C.U.U., investigated the prevalence of leprosy in the Chien Ch'ang Valley region of south-western Szechwan. As a result of his studies Dr. Maxwell concluded that leprosy was as prevalent in this section of the province as in either Kwangtung or Shantung, previously considered to be the most seriously infested areas in China. Previous surveys by Dr. Wallace Crawford had indicated that leprosy also occurred in many other parts of Szechwan, where it appeared to be endemic in certain centers.

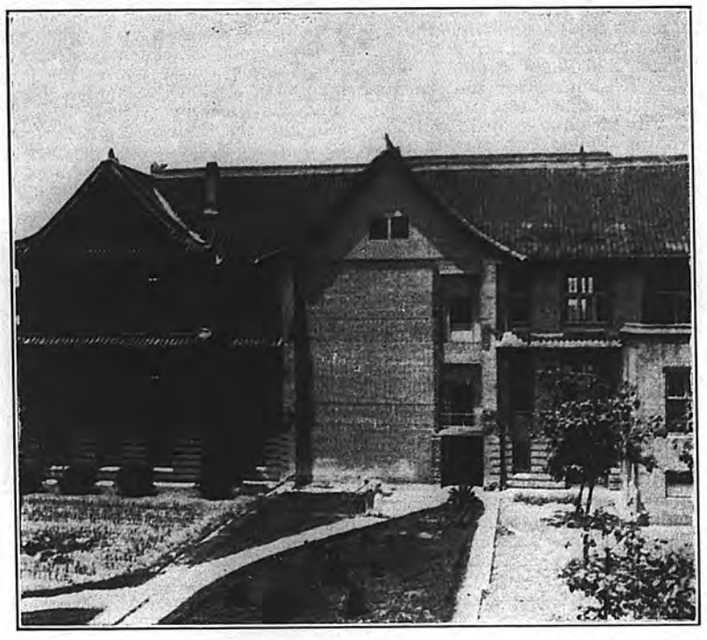
As a result of the information obtained from these surveys an appeal was made to the Mission to Lepers to provide support for a Leper Hospital in Chengtu. This the Mission generously agreed to contribute, and the hospital is now under construction. It consists of a series of one-storey buildings conveniently arranged like the spokes of a wheel. The site is south of the main college building, and immediately south of the proposed pharmacy building.

This hospital will supply a very distinct need in this part of the country by bringing hope to the most hopeless section of its population. Many of the lepers are aborigines inhabiting the border regions, and to these more primitive races the West China Union University has long felt a very special responsibility. We believe that the bringing of selected cases to Chengtu for treatment will not only do much for the individuals so helped, but will also contribute to the bettering of conditions for the whole borderland.

The College would place on record its gratitude to the Mission to Lepers for this generous assistance through the provision of a hospital and an annual maintenance grant. Dr. Wallace Crawford, as chairman of the Department of Hygiene and Public Health, will be in charge of this work, which will endeavor to minister to the spiritual as well as the physical needs of the lepers.

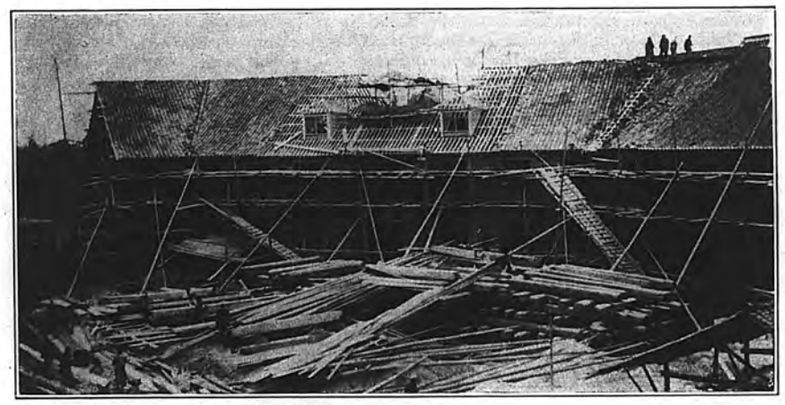
Construction of University Hospital

Actual construction on the new university hospital was commenced soon after the return from furlough of Mr. Walter Small, the building superintendent, in July, 1938. The laundry and shops had been erected during the previous year, and the laundry had then been turned over to the University of Nanking as a



Photograph by A. E. Owen.

West wing of College of Medicine and Dentistry, looking west from the East wing. The missing central portion of the building is badly needed to complete the College set-up. It could be built for about U.S. $20,000.



The first part of the new hospital to be built, isolation wards and internes' quarters. The break in the roof shows the location of a tower.

teaching building. This is a commodious building, and by using many temporary wooden partitions to subdivide the relatively large rooms a very great deal of accommodation became available for the use of one of the W.C.U.U.'s guest institutions. The Shops Building, which is connected at one end to the laundry, at present accommodates the machine shop, the tinsmith's shop, a hardware storeroom, the laboratory of odontology, and the preclinical and dental branch library. The machine shop is well equipped, and the College is grateful indeed to the China Foundation for its grant of N. C. $15,000 which enabled us to establish the shop. It has already proved its usefulness through the repair and manufacture of laboratory and hospital equipment.

The first section of the hospital proper on which construction started was the isolation wing and internes' quarters. The former was made possible by a special grant of U.S. $3,000 from the Rockefeller Foundation and the latter was the result of a promise on the part of the graduates in medicine to raise N.C. $15,000 by the summer of 1940. Some of this money has already been subscribed and is in the hands of the bursar. This building is now nearing completion, and may be the first part of the hospital to be occupied. The College wishes to record its gratitude to its graduates for their interest in their Alma Mater which has caused them to undertake this generous contribution towards the erection of one very important portion of the new hospital.

At the present time construction on the main part of the hospital is proceeding and the new O. P. D. building has already been roofed. Towards the cost of the latter the Rockefeller Foundation made a grant of U. S. $20,000 and also contributed U.S. $15,000 towards the cost of equipment of the hospital. The British Boxer Indemnity Fund Commission has contributed N.C. $75,000 towards the cost of hospital erection and the China Foundation a further N.C. $75,000 towards the cost of equipment. The balance has come from personal gifts, very largely secured through the efforts of Chancellor Joseph Beech. Medical education in West China has been placed in a position of permanent indebtedness to Chancellor Beech for his very successful work in obtaining the money necessary for the erection and equipment of the university hospital, and for his constant interest in the problems of medical and dental education here.

The Library

The library of the College has made further progress in at least two different directions during the past year. The former numerous departmental libraries have been discontinued, and instead of these three branch libraries have been opened. The preclinical and dental branch is housed for the time being in the new shops building and is under the efficient supervision of our first full-time librarian, Miss S. L. Lei. The greater portion of the clinical section of our library is located at the Men's Hospital, while the Eye, Ear, Nose and Throat branch is accommodated in the Shensi Kai Hospital. Many of the older books, however, have been left in the main library of the university since the accommodation in the various branch libraries is limited. The preclinical and general clinical branches are conducted as union libraries, for books and periodicals of the National Central University are included with those of the W.C.U.U., and librarians of the N.C.U. share the administrative responsibility with those of the W.C.U.U. We record our grateful thanks to the National Central University for a gift of N.C. $500 towards the cost of supplying new furinture for the branch libraries. With this money some very fine and permanent library tables and bookshelves have been built, and will eventually be transferred to the permanent library of the College.

The second advance made by the College library has been through the gifts of funds that have contributed towards the securing of many much needed books and periodicals. The Ministry of Education has for the past two years granted N.C. $2,000 each year towards the library, and the China Foundation made a grant of U.S. $3,000 for the purchase of books in 1938-39, and a second grant of N.C. $18,600 for similar purposes in 1939-40. These sums, when added to the regular university budget of U.S. $925.00 (most of which goes for periodicals), are enabling us to build up a much more adequate library. Much interest has also been aroused in England over library projects in China, and it is possible that we may receive assistance from that country in order to provide still more adequate library facilities for our abnormally large student body. In this connection it must be recalled that the entire Cheeloo staff and student body are dependent upon the library of the W.C.U.U., for Cheeloo brought no equipment of any sort to Chengtu.

Staff Changes

Staff changes have taken place to a considerable extent. The former director of the College, Dr. W. R. Morse, on account of ill health, resigned from the directorship this year, and at its meeting in December the College passed the following resolution of appreciation of Dr. Morse's great services. This was combined with a request to the Baptist Mission to return Dr. Morse to the university for another period of service.

Minute No. 1287. "Resolved that we record our deep appreciation of the very great services which Dr. Morse has rendered this College. From the time of his appointment to the University staff in 1914, when the University first undertook medical education, Dr. Morse's interests have never been limited to the subjects which he taught. Not only did he make the Department of Anatomy into one of the best in the institution but he constantly and persistently fought for medicine as a whole. Within the College his interests in all aspects of the curriculum tended to a constant increase of efficiency. His championship of the College at all times has helped greatly in winning for medicine a high place in West China. As a result this College is now in a position to make a real contribution to the future of medical education in China."

On January 3, 1939, Dr. R. A. Peterson, Professor of Otolaryngology, died in California. The following extract from the College Faculty Minute No. 1315 indicates the sense of loss that the College felt with the passing of Dr. Peterson.

"It is with sincere regret and a keen appreciation of our loss that the College records the death of Robert Alexander Peterson, Professor of Otolaryngology.

"Dr. Peterson passed away soon after returning to U.S.A. after an unsuccessful attempt to return to his work in Chengtu. Dr. Peterson contributed ten of the best years of his life to our College and aided in no small measure in the advance which has taken place in the last decade. Along with his associates he built up an Eye, Ear, Nose and Throat center at Shensi Kai second to none in China. He was especially active in commencing and developing post-graduate teaching in those specialties. Himself a surgeon of high order, a Fellow of the American College of Surgeons, he ever inculcated in his associates and students, and demanded from them, a high degree of efficiency.

"For many years he worked under difficulty owing to an obstinately recurring phlebitis of the right leg. For months before leaving Chengtu he was in constant pain and unable to wear a shoe. Finally, when forced to it, he returned to U.S.A. for treatment. In answer to an urgent request he started back to Chengtu but when the condition recurred in Hongkong he was compelled once more to return to the U.S.A."

At the present time a committee is working on suggestions for a suitable memorial to Dr. Peterson's life and work in West China. Mrs. Peterson has remained in Chengtu, and has contributed valuable service to the United Hospital.

Dr. Harold G. Anderson, associate professor of medicine, resigned in July, 1938, and returned to England to assume the office of medical secretary for the Church Missionary Society. Dr. Anderson's resignation has left a gap which it will be difficult to fill. The College's appreciation of his work in Chengtu is indicated by the following extract from Faculty Minute No. 1231.

"That this resignation be accepted with sincere regret, and that we record our appreciation of the very great contribution that Dr. Anderson has made to this College during the ten years of his association with it. The contribution has been threefold: academic, administrative and personal. Through the work of Dr. Anderson the place of tuberculosis in the academic and clinical life of West China has been placed upon a permanently high standard. Dr. Anderson's contribution to the general policies of the College have been outstanding, and his Christian character has left a deep impression upon both students and staff. The best wishes of the College go with Dr. and Mrs. Anderson as they depart to take up their new work in London."

We have learned with appreciation of the appointment of Dr. and Mrs. F. J. D. Knights by the C. M. S. He is a specialist in tuberculosis, and will succeed Dr. Anderson on the staff of the College in the Department of Internal Medicine.

Dr. H. Bruce Collier, associate professor and head of the department of biochemistry, resigned in the Spring of 1939. Dr. Collier's resignation has created a gap that will be extremely difficult to fill. The College records its appreciation of the very great contribution that Dr. Collier has made to its work, and to the work of the university as a whole, during the five years that he was associated

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with it. All had hoped that with the greater facilities now being made available to us Dr. Collier would have been able to take a leading place in the development of biochemistry in West China. However, we congratulate MacDonald College (the Agricultural Colleges of McGill University) upon having secured a man of Dr. Collier's ability and personal gifts, and express to Dr. and Mrs. Collier our best wishes for success and happiness in their new work in Canada.

Dr. S. Y. Gin, instructor in pediatrics, resigned in the Spring of 1939. Although Dr. Gin had been with us for only two years, we had hoped for a considerable contribution from her in this important field. The best wishes of the College will follow her into her new field of activity.

Three members of our staff have secured special fellowships for study in Toronto, Canada. Dr. H. H. Hsieh, associate professor in the department of surgery and in charge of X-ray work, has gone to the Toronto General Hospital for work in roentgenology. Dr. Helen Yoh, instructor in obstetrics and gynecology, has gone to the Women's College Hospital, Toronto, for work in her specialty, and Mr. D. F. Pen, senior instructor in physiology, has obtained a fellowship in the Department of Physiology, University of Toronto. Dr. Y. S. Hsia of the O. P. D. Dental Clinic, received an internship appointment in the Forsyth Dental Infirmary, Boston, but will delay his trip to America until next year. During the academic year 1938-39 Dr. Yen of the Department of Anatomy has been at work under a British Boxer Indemnity fellowship in anthropology in the Academia Sinica in Kunming, and Dr. Y. T. Beh, also of the Department of Anatomy, has been working on a special fellowship in histology and embryology from the Commission on Medical Education of the Ministry of Education under Dr. Y. L. Chen of the National Central University.

We would also record our indebtedness to the C. M. S. for having lent to us Dr. and Mrs. J. H. Lechler for the year 1937-38. During that year Dr. Lechler not only tided over the furlough of Dr. E. C. Wilford in the Department of Surgery, but also made a valuable contribution to the life of the college and community. We wish them every success in their work in Edinburgh, where Dr. Lechler has assumed the superintendency of the Edinburgh Medical Missionary Society.

For a month in the Spring we were privileged to have as a visiting member of our staff Dr. Horace E. Campbell, formerly of Foochow, Fukien. Dr. Campbell is a surgeon of ability and one whom we would delight to welcome as a permanent member of our staff. The university has requested his mission (the American Board) and his church (Plymouth Community Church, Cleveland), to appoint Dr. Campbell to the W.C.U.U. We very much hope that our request may be granted.

During the past session also we were glad to welcome to our midst Dr. Y. P. Chen, of Cheeloo University, who had just returned from study in physiology in Northwestern University, Chicago, and also the following members of the National Central University: Department of Surgery: Drs. P. C. Tung and Y. C. Yin; Department of Otolaryngology: Dr. M. R. Hu; Department of Medicine: Dr. S. C. Kuo and Dr. Katherine Chen (Pediatrics).

Scientific Activities

The general interest of faculty and students in extra-curricular scientific activities has greatly increased. This is evidenced on the one hand by the increasing number of journal clubs, special lectures and scientific societies, and on the other by the research work being attempted.

Almost every department or group of related departments has organized a journal club or has announced a series of special lectures open to the public. Several scientific clubs and societies have been formed, the most outstanding of which is the Chengtu Branch of the Chinese Physiological Society. During the 1938-39 session this society held three meetings, at which a total of 25 papers were read. All these papers represented original work done in one or other of the preclinical departments of the various colleges.

The Department of Anatomy has been interested in a study of the mummies found in West China, in both temples and in burial grounds. A paper on this subject is now in press. The Department of Biochemistry has conducted a vitamin C survey in tuberculosis, carrying on this work in co-operation with the Tuberculosis Sanatorium. In addition several nutrition surveys have been carrried out. Both these departments have worked in close co-operation with those of the Central University. The staff of the Department of Physiology of

the Central University, under Prof. C. Tsai, has been particularly active in research work and some excellent papers have resulted. Towards the carrying on of some of this work the W.C.U.U. was glad to contribute equipment as well as accommodation. The Department of Physiology and Pharmacology of the W.C.U.U. has made a study of the Chinese drug *ya tan tsû*, reputed to be a specific in amebic dysentery. Preliminary work on further metabolism studies has been commenced. The Department of Pathology, in addition to rendering a real service to many hospitals through its tissue diagnosis, has carried through various parasite surveys in rural populations and in domestic animals. Each of the clinical departments continues active in reporting interesting cases.

Much more can be done to advance our research activities, and the increase of this type of work in the immediate future is essential.

Graduating Class 1939

In June 1939 we graduated 23 students in medicine, and 12 in dentistry, and in addition Cheeloo University graduated 16 in medicine and the N.C.U. graduated 10 in dentistry from the shorter courses. Twenty-three nurses graduated from the School of Nursing of the United Hospital, and three diplomas in Hospital Technology were granted to those who had completed the three year course. Ten diplomas in public health nursing were granted to graduate nurses who had completed the six months' course. Two diplomas in Ophthalmology and Otolaryngology were granted to the candidates who had successfully completed our two-year course in these specialties.

The student body was distributed as follows:

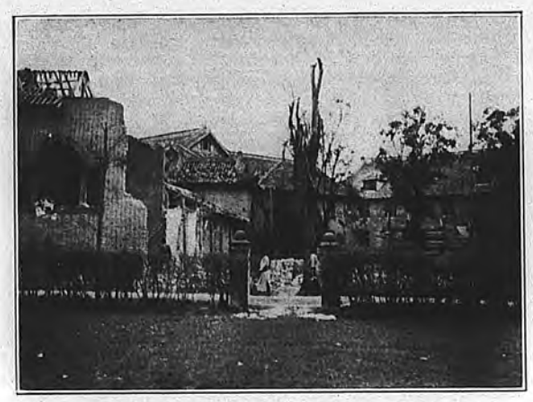
	W.C.U.U. Med.	W.C.U.U. Dent.	Cheeloo Med.	N.C.U. Med.	N.C.U. Dent.	Totals
Premedical	28	12	12	—	—	52
1st year	42	16	21	32	6	117
2nd year	36	15	10	27	14	102
3rd year	19	12	11	15	12	69
4th year	23	11	13	16	10	73
5th year	18	7	16	—	—	41
6th year	24	12	16	—	—	52
Postgraduate ..	7	2	—	4	—	13
Totals	197	87	99	94	42	519

Some Effects of the War

The greatest effect of the war upon this college has been, of course, the bringing of large numbers of students from other provinces, in addition to the staff and students of the guest institutions now working on our campus. Whereas formerly we were predominently West China in composition as well as in name, now the dialects of every province in China can be heard throughout our classrooms and laboratories. This mass migration of China's student population has brought with it not only enlarging horizons to our provincially minded and stimulation to our placid ways, but also many problems of adjustment to both the down-river Chinese in our midst and to the original Szechwanese. We are confident, however, that the final result will be a great broadening of vision and a new realization of our responsibilities to the country as a whole. The intellectual life of West China is being quickened in such a manner that return to the pre-war isolationist tendencies is quite impossible. Szechwan, from being an outlying and semi-independent province of China, has become the heart of the nation. She herself is now conscious of her place in China's destinies, and the nation as a whole has awakened to the enormous potentialities of her own interior provinces.

It is true that for the time being the war has brought to us many urgent problems of temporary importance from the coast. Instead of being able to bring our goods up the Yangtse River, as has been the time-honored custom, new routes have been laboriously sought out. Motor trucks have been bought and driven by members of the staff from Kwangchowan, from Haiphong and Hanoi in French Indo-China, from Kunming at the head of the French Railway into Yunnan, and before long will probably be coming also over the Burma highway. With the arrival of so many millions of refugees to the province, building materials have soared in price and have been difficult to secure. Imported articles are now scarce and expensive. The airplane is constantly made use of for transporting small articles, and for carrying members of our staff to and from the coast. The old

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A corner of the W.C.U.U. campus after a Japanese bomb hit it.



A street in Chengtu on June 12th, 1939.



Removing the wounded—scene on verandah of the Administration Building, W.C.U.U., morning of June 12, 1939.



Wreckage caused by a single demolition bomb in congested city suburb near the W.C.U.U.



Windows broken, and many torn from their hinges, North-east corner of College of Medicine and Dentistry.

days of sedan chair travel have passed, and already we find students wishing to come from Chungking to Chengtu at a complete loss if bus tickets are not readily available. In spite of war time difficulties with the new methods of transportation the country refuses to return to the old, slow, primitive, but relatively sure methods.

Our university has also felt the direct as well as the indirect effects of the war. In November 1938 Chengtu was twice visited by Japanese bombing squadrons, but on both occasions they confined their attentions to the air fields. However, on the evening of Sunday, June 11, 1939, a squadron of twenty-seven Japanese planes bombed the city, and dropped scores of incendiary and demolition bombs. A considerable portion of the city was burned, and five or six hundred people were killed. Over three hundred of the wounded were treated in our hospitals and in the university health center. Four bombs fell on the campus, two of which fortunately did not explode. One exploded a few feet from the Baptist Middle School Dormitory, and destroyed the whole north end of the building. Another wrecked one of the residences of the Methodist Episcopal Mission. One girl student was killed, and several injured. The north end of the newly erected hospital laundry building was damaged, and practically all the glass in the building as well as in the isolation wing and internes' quarters and much of that in the college building was shattered. Doors and windows were blown from their hinges, and plaster fell in many places. The total damage to the university buildings was estimated at N.C. $50,000.

Since final examinations were scheduled to commence on the morning after the bombing, most of these were postponed until September in order to allow the student body to get over the effects of its first direct experience of the war. Senior students, however, took their examinations after a delay of only a few days, and Convocation was held at the announced time, towards the end of June.

Future Needs

Staff: Our needs in staff are numerous, and of two sorts, missionary and Chinese. At present the co-operating mission bodies make very unequal contributions in staff. It is the unanimous desire of the college that all missions speedily strengthen their contributions. We would remind the various Missions Boards of our numerous losses during the past year, and point out to them the unprecedented opportunities facing the College and University at the present time. The W.C.U.U. has a greater opportunity than ever before of imparting a Christian influence to the professions of medicine and dentistry in China. And yet every contributing mission has fewer missionaries on the staff of the college than it had two years ago.

Our Chinese staff is still young and few Chinese are as yet holding senior positions. This is a deficiency that time is remedying. But to secure for the Chinese members of our staff the best possible training we must have constantly available facilities for sending them to other institutions in China and to universities and hospitals abroad. At present the only two institutions in China offering advanced work (the P.U.M.C. and the Lester Institute) are in Japanese occupied territory, and hence many loyal Chinese do not feel able to enter these places. We must provide opportunities for them to go abroad.

To retain the best men on our permanent staff we must have endowed chairs to which we can invite those with superior qualifications. At present we have no permanently endowed chairs in the college, although for some years past the Ministry of Education has been providing funds for a chair in Pathology and another in Dentistry. We would suggest to those interested in supporting medical and dental education in China under Christian auspices that they seriously consider the endowing of chairs in the major departments of the College. Such chairs, for the time being, might be occupied by either missionaries or Chinese, but the understanding should be that as soon as suitable Chinese became available they should be appointed in preference to missionaries.

Buildings and Equipment: Our building program is far from complete. Not only are more funds required to complete the new hospital and to furnish it, but the central section of the College building is also a very pressing need. The east and west wings of our main building were erected in 1927 through the generosity of the United Church of Canada, but the central portion of this building has remained unbuilt now for twelve years. This section will accommodate the college administrative offices and library, and the Departments of Biochemistry and of

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Hygiene and Public Health. These are, at present, located in other university buildings. Not only is the space they occupy much needed by other colleges, but the unity and efficiency of the College will be greatly increased by having all work centralized in the College and Hospital.

Also, a great deal more money will be required before the new hospital is adequately furnished, the plumbing and central heating installed, and the actual essential scientific equipment completed. This hospital, which will be the largest in West China, should also be the best. As the main teaching hospital of the West China Union University, it must be adequately equipped for teaching work. It will also be the main center in West China for diagnostic and certain types of therapeutic work. Other medical institutions in the western part of China will look to it for assistance along many lines. Hence in equipment, as well as in staff, it must have the best possible.

Some sections of the hospital building have not yet been commenced because of lack of funds for their erection. Among the most urgent of these are the dental unit and the chapel. It is essential that the dental wing be built as soon as possible, for at present an impossible situation of overcrowding exists, and the dental clinic is squeezed into one section of the central teaching building. This must be remedied at the earliest possible moment.

The nurses' residence for the new hospital is also a pressing need. The Baptist Mission has agreed to hand over to us their middle school students' dormitory as a nurses' residence as soon as money can be found for the erection of a new dormitory on the site provided near the Middle School building. Not only must the money be found for the erection of this new building, but the old building now needs extensive repairs because of the damage done during the bombing of June 11th, and also some sections of the building must be increased one storey in height in order to accommodate the number of nurses needed to staff our hospital.

Hopes and Aspirations

After the war, and after the return of Cheeloo, National Central and the other guest universities to their own homes the W.C.U.U. will again be thrown upon its own resources. The awakened West will be deprived of many of its borrowed institutions of higher education, but the demand for scientifically trained physicians, dentists, pharmacists, nurses and technicians will not be reduced. West China has been awakened as never before to the necessity of modern health services. The various interior provinces have established bureaux of health and public health services. These alone will absorb many trained men and women. For instance, this year the newly established Szechwan Bureau of Health under the very capable administration of Dr. C. C. Chen, desired at least twenty qualified physicians to take up the special training course leading to government appointment. They have been able to secure only two or three, while a host of inadequately trained men have applied. The public health services of all the neighboring provinces have sent requests for physicians, and in addition the Red Cross and Army Medical Corps are clamoring for men. Had one hundred graduated in medicine in Chengtu in June instead of less than forty all could have been placed with the greatest of ease.

It is obvious that we can never return to our pre-war level of perhaps a dozen men in medicine and another half dozen in dentistry. The demand is too insistent, and as the only institution of medical and dental education in Szechwan we must be better prepared to meet our vast responsibility. It is inevitable that before many years another medical college will be established in the province, perhaps in Chungking. But for the present the government is depending upon the W.C.U.U. to be the medical college for Szechwan. It has no plans to duplicate our work in the National Szechwan University. To measure up to this great responsibility more staff, more equipment, more maintenance grants must be made available. Private benefactors and various foundations have shown their interest and the national and provincial governments have made grants in aid. But all must be increased if we are to proceed along the path upon which our feet have been set. Our course has been marked out for us. There are many details to be filled in, but to turn back and become anything less than a real vital factor in the creation of a properly trained health service, under Christian auspices, for West China is unthinkable. Our founders were men of vision. Let us go forward and bring their visions into reality.

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Statement of the University Hospital project to the Board of Governors' Executive Meeting at New York, January 18, 1939.

Upon request of the Secretary of the Board of Governors, I submit the following brief statement of the University Hospital undertaking in order to give up-to-date information and supplement previous reports; E-1355 and G-1567.

I. Buildings: As, at present planned, the hospital comprises the following units:- (See plans of architect)

1. The Laundry and Shops (erected)
2. The Isolation Ward and Internes Residence (erecting)
3. The Special Patient and Maternity sections
4. The "H" shaped Central Hospital Building
5. The Chapel and Electro-therapy units
6. The Power House, Kitchens, Dining and service sections
7. Pharmacy and EENT sections
8. Other Medical O.P.D. Dept.
9. Dental O.P.D. Dept.
10. Nurses Building

(Space is reserved in the layout of the "larger hospital" for the specialties, as the children's unit, the tuberculosis unit, etc.)

II. Building Funds: Funds, believed to be adequate for the erection of all of these units (with the exception of the Dental O.P.D. and the Nurses Bldg.), have been provided, as follows:-

1. The Laundry ($5,000), and Isolation Section ($5,000) by grants from the Associated China Colleges Emergency Committee.

2. The Shops (NC$15,000), and the Internes Residence section (NC$15,000) by the China Foundation and the graduates in Medicine respectively.

3. The special private patients and maternity sections, the Central Hospital Buildings and the Chapel and Electro-therapy units by the Moore gifts of $50,000.

4. The Power House, Kitchens, and dining and service stations by grant from the Board of Trustees of British Indemnity Fund of NC$75,000.

5. Pharmacy, EENT sections, and the other medical O.P.Departments by grant from the Rockefeller Foundation of $15,000 (LC$93,028).

A gift of $5,000 is being sought for the Dental O.P.D., and a legacy is expected to provide for the Nurses Building.

A grant of £4,000 for the materials for modernization of the buildings and the costs of installation is being sought from the Trustees of British Indemnity Funds. (See letter).

For the detailed sources of building funds, their present disposition and rates of exchange for U.S. currency, see A^1 and A^2 exhibits.

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III. Funds for Hospital Equipment and Furnishings, and Other University Special Items:-

1936 to 1938

15 individual gifts.....		$1,556.85	
18 " "		2,011.74	
5 " "		1,295.00	4,843.59
Gifts due from Wesleyan University.....			900.00
Gift of EENT instruments (minimum value).....			500.00
Rockefeller Foundation Grant for Equipment.....			20,000.00
(Of this grant $15,322.59 expended to date)			
Gifts for Equipment from China Foundation:	1936.....		NC25,000.00
	1937.....		NC25,000.00
	1938.....		NC25,000.00

(These have been paid to the University account in the Bank of China - Shanghai and Chengtu)

The total amount of gifts, paid and due, for hospital equipment, furnishings, or special University items, is approximately $26,250. (See exhibits B^1 and B^2)

It may be as encouraging to you, as it is cause for thanksgiving to me, to make record of the fact that gifts amounting to $7,125 have been secured since the Governors meeting in July, and that now well over $100,000 U.S. currency (including the $8,000 grants from the Emergency Committee) is available for buildings; and that about $26,250 U.S. currency has been secured for equipment and other uses.

Equally gratifying is the fact that NC$180,000 has been secured from Chinese for buildings and equipment (including $15,000 promised gifts from Medical graduates.)

It may be somewhat assuring, also, to quote the minute of the Hospital Building Committee at their meeting September 28, 1938.

> "Reported that the builder has checked over the accounts estimated (at the January 7th Executive Meeting E-1555), and concluded that if conditions concerning building trade continue as at present, the silver currency estimated previously submitted will be sufficient." (NC$201,000 -$208,000)

Record should also be made that Schmidt, Garden & Erikson have presented their complete account, amounting to $2,990., and that it has been paid in full, - thanks to Mr. Evans.

Finally, it would be an unkind omission if I failed to record my sincere thanks for all the gracious services given and acts of kindness rendered to me by of officers and staff of the Associated China Colleges.

Submitted with respects

JOSEPH BEECH
Chancellor

New York, January 18, 1939

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REPORT OF WORK DONE IN UNIVERSITY HEALTH CENTRE FROM SEPTEMBER 1938 to June 1939.

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Patients	1198	1233	1716	2112	2228	1323	2591	2877	3057	2776
Average Daily	47.5	60.4	67	81.2	85.7	60	96	115	114.6	106.5
Injections	90	123	53	20	34	35	28	974	37	564
Outcalls	6	4	6	4	6	4	23	20	11	17
Dental Attention			17	31	35	26	39	33	34	28

Baby Welfare Attendance 1688 babies.

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DENTISTRY
IN
CHINA

A Review of the Work of
the Dental College
at
WEST CHINA UNION UNIVERSITY
Chengtu, China

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Translation of
A Farewell Address to

DR. JOSEPH BEECH

Penned by

GENERALISSIMO CHIANG KAI-SHEK

SINCE CHINA OPENED HER DOOR, the sages of the western countries came thousands of miles with the love of Jesus Christ to spread the Gospel, and to open schools. Their religious zeal and spirit are admirable. According to what I have seen, the greatest of these enterprises is the West China Union University. The man who has the patience and who gives the effort to realize this great project is Dr. Joseph Beech, President of that University. Early in the year 1904 he succeeded in uniting the representatives of different Missions in planning the establishment of a university in West China, with patience, efforts, and plans, for six years. The University came into existence, and Dr. Beech was elected President three years later. The creative effort of a pioneer, such as Dr. Beech, is an example to the citizens of this country. The funds he raised amount to far more than half a million dollars gold. Thus he is enabled to build up a few tens of fine large buildings on the campus, with splendid and adequate equipment. The Medical and Dental College of the West China Union University is famed throughout the land. And the University itself has become one of the greatest centers of learning, with outstanding scholars and professors whom Dr. Beech has engaged both in China and abroad. Dr. Beech is indeed worthy of highest admiration. His whole life has been given for the education of this country. He now returns quietly to his own country, without any idea of partaking of the fruit of his labors. As a humble token of the gratitude of this country, the Chinese Government has proclaimed a Special Order, and conferred on him the Diploma of the First Class, and the decoration of the Jade Medal. The great personality and spirit of Dr. Beech will be immortal with the enterprise which he has created here in this country. He will be remembered forever by the Chinese scholars and students. "Educating the coming generation," said Mencius, "is the supreme joy of life." Dr. Beech has enjoyed this kind of pleasure. On the eve of his departure for the United States of America, I particularly desire to offer him these words in grateful remembrance, and wish him a good voyage.

Signed by the Great Seal of Chiang Kai-Shek

Eighteenth of March, 1940, 29th Year of the Republic of China.

Thirty years ago a group of Christian missionaries broke the first ground for a college building on a campus, near the city of Chengtu, China. Throughout the previous ten years, these men had been planning for a college that would draw its students from the whole land of China.

Chengtu is a flourishing city located 1,600 miles inland from Shanghai and more than 1,000 miles beyond the present line of fighting in the Sino-Japanese War.

Ten years before the start of the college, Dr. Joseph Beech had a vision of the need for such an institution. His whole life has been devoted to Christian work in foreign fields, and for the last thirty years he has been largely responsible for the West China Union University in Chengtu.

The campus now occupies 154 English acres. It has thousands of trees and shrubs along its miles of roads and paths. This campus represents an expenditure of over $100,000 gold. Its assembly of 21 permanent college and dormitory buildings and 48 residences, with the teaching equipment, represents a cost of one-half million more gold dollars. Owing to the low costs of construction and exchange value of American money, the buildings and grounds equal our best American University standards.

Our large American colleges with their huge endowments, excellent facilities, modern buildings, and staffs must be admired for their work. Yet how much more difficult has been the task of Dr. Beech and his associates who had to convince people that large sums of money could be well spent in endowing and supporting a college to educate a foreign race in a land thousands of miles away.

The dental college and clinic are only a small part of the integrated university in Chengtu. One of the following pages shows several of the buildings on the West China Union University campus. These accompanying photographs give an idea of how well designed and solidly built are the buildings at the University. The structures have been planned by prominent American and British architects, to combine the Chinese type of architecture with New World standards of construction.

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Buildings and equipment offer but one comparison between West China and American universities; another and more important comparison is the need for each, the job each has to do.

There is need for all and more than can be accomplished by our American universities. Yet America is blessed annually with a small army of college graduates trained for teaching, business and the professions. In dentistry alone there graduated last June from American colleges about 1,600 doctors.

West China Union University has the only major school of dentistry in China today. When the need and the demand for trained dentists in China is considered, we quickly realize how totally inadequate is the present equipment of West China's school.

Statistics show that there is one dentist for about every two thousand people in the United States. Compare this to China where there are not more than four hundred dentists adequately equipped with knowledge and facilities to service the dental needs of more than 400,000,000 people. To make this further impressive, just consider the implications if there were only ten dentists to service the dental needs of the entire population of the metropolitan area of New York City, including northern New Jersey, Long Island and Connecticut.

Costs of construction offer another comparison.

Due to the current exchange rate, an American dollar today (June, 1940) is the equivalent of approximately $14.00 in Chinese currency. Also costs in China, despite the war, are much less for the same articles and services. While one American dollar represents $14.00 in Chinese currency due to the exchange rate, the actual work done by one American dollar in China will amount to almost fifty times the work that could be done with that same dollar in the United States. This is due to the normal low cost of Chinese labor and materials multiplied by the present abnormal exchange rates.

This approximate ratio of "50 to 1" makes possible an understanding of what can be done today in constructing a building at West China Union University.

It will not seem possible that $3,000 (Three Thousand Dollars) could build a sound, modern attractive one and a half story structure 168 feet long and 42 feet wide. This is the total cost in American dollars of the new, modern dental college and clinic planned by Dr. Beech and his associates.

This building will be constructed of only the best materials, and workmanship will be equal to that of our best builders. It is a permanent building that has been designed and will be constructed to endure for many years.

You will be interested to know of others who have helped build this center of learning at Chengtu, China.

Dr. Beech has just received a $50,000 contribution for the erection of the new university hospital. The Rockefeller Foundation has given $15,000 to construct the out-patient department of this hospital and $20,000 for equipment for the present hospital.

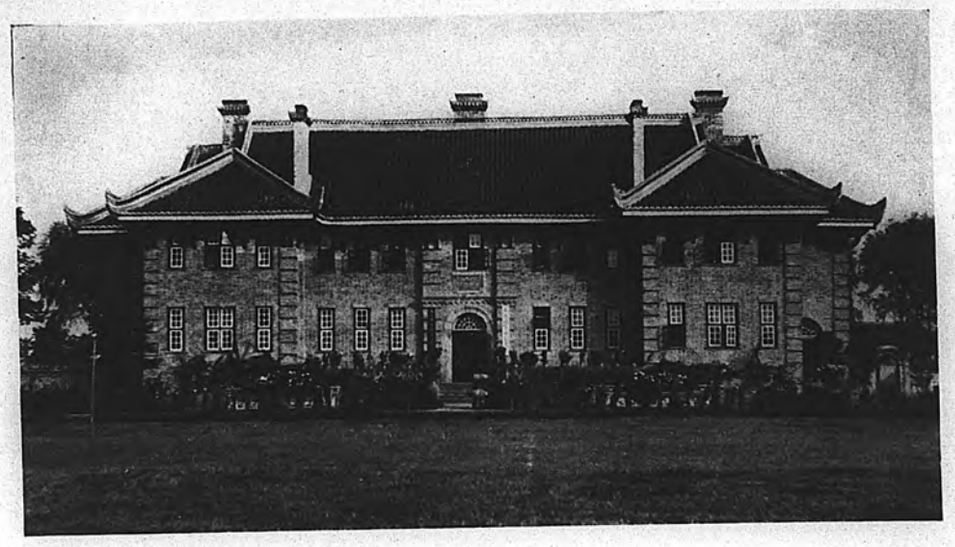
Some of the previous grants to West China Union University are:

Name of Building	*Donated by*
Administration Building	Mr. and Mrs. J. B. Merrell, Northport, N. Y.
Vandeman Memorial Library	Vandeman Family, Indianapolis
Scattergood Middle School Memorial	Mrs. Thomas Scattergood, Philadelphia
Atherton Biology Building	Atherton Family, Honolulu
Lamont Library	Mr. and Mrs. B. C. Lamont, Aberdeen, S. D.
Coles Tower and endowment for repair of buildings	Mr. J. Ackerman Coles, New York City

These are only a few of the individuals and organizations who have made contributions.

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SEVERAL OF THE BUILDINGS AT WEST CHINA UNION UNIVERSITY







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There follow some comments made by Dr. Ashley Lindsay, Dean of the College of Dentistry, in a recent letter to Dr. Beech:

"Dental education in China has had its inception in the West China Union University, and the University has received a good deal of publicity throughout China because of high standards and the type of men who have graduated and gone to all parts of China. It would seem but natural that an adequate plant should be provided a faculty which has brought and is bringing prestige and favorable comment from all parts of the country.

"More than five years ago I told you that by the year 1938 the floor space of the Dental Clinic would no longer meet our minimum needs. This proved to be true before that time, and it has been necessary for the preclinical dental departments to give up space, and the Dean actually has no office in the building. Every basement and attic room is crowded with laboratories and storerooms until there is not another inch of space available. Our teaching is greatly hampered because of lack of display and use of equipment which we have—actually we have had to take over one of the large rooms in the workshop section for one of the fundamental pre-clinical labs.

"Anyone who has any knowledge of modern dental teaching requirements would consider our clinical quarters out of date and indicative of being entirely out of touch with modern methods. It has been quite impossible to adapt the space, walls and internal fittings intended for laboratory use to provide a modern Dental Clinic.

"I would not plead for a dental building which would suit a United States University, as I do not believe that such a building would suit the conditions of a dental college in China, but the clinic must be adequate and fit into the high standard of teaching which we are promoting. Our present quarters certainly do not.

"Perhaps it is not necessary that I should give details demonstrating the inadequacies of the present Clinic to fit the teaching programs of the various clinical departments, and inculcate the proper spirit of hospital discipline, cleanness, order and administration and care of our patients. The present clinical rooms necessitated a make-shift arrangement for all of our services. It is to be hoped that not many more students will pass through our institution without the privilege of training in a clinic which will set the pattern for their future practice. Already we are having students coming back to our College for dental post-graduate study. These men should not have to return to the same demonstration of inadequacy.

"I might add more reasons for the immediate erection of the dental unit, but I hope that the above lines have indicated that there is a real need. Perhaps you realize how small a sum of United States currency would be required to erect this building at present. A couple of years ago I believe you put that figure at U.S. $7,000. Less than half that amount would erect the building now."

Dr. Joseph Beech, Comptroller and Executive Manager of West China Union University, supplements Dr. Lindsay's letter with these remarks:

"I received an urgent petition from the Medical-Dental Faculty for permission to proceed with the erection of the Dental Building. The only way by which that could be done was to use money given for other buildings or purposes for the erection of this Clinic. I was compelled to wire and write them that it was impossible for this reason to grant their request.

"As if in response to their petitions for the erection of this Dental Clinic, at about that time there came a 'tumble' in exchange. The hitherto unheard-of and un-

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thought-of quotation of twenty Chinese dollars for one American dollar was registered. There was at that time a fear abroad lest it indicated the collapse of the currency and perhaps of the Government; but that fear has not been realized, and confidence in regard to the currency has again returned, but the old rate of about five or six to one, which was the rate a year ago, has not returned. Last week's quotation for drafts on New York was 15½ for one American dollar. The value of the currency has gone up slightly in the last day or two—14½ to one was the last quotation I received.

"Considering the urgent need for this building, and the fact that exchange values of China now make the American dollar worth fourteen dollars in Chinese currency, I am sure you will agree with me that it would be excellent business to proceed at once with the erection of that Dental Clinic."

There is the challenge. It would seem a particular challenge to the American Dental Trade.

This pamphlet is sponsored by individuals and has neither asked nor received approval of the A.D.T.A. yet it is believed the appeal here made will receive the hearty endorsement of most A.D.T.A. members.

At a time when the great Chinese Republic so sorely needs our moral and financial encouragement, the citizenry that constitutes the membership of the A.D.T.A. will gladly respond.

Picture to yourself the scene at Chengtu, 1,600 miles inland in China, when Dr. Beech reads to the faculty and students the cabled message that friends of the American Dental Trade Association have subscribed the full cost for the new Dental College Clinic Building.

Then please read—fill out—sign and mail the accompanying blank.

S. D. MADDOCK
One Park Avenue
New York, N. Y.

You may count on me and my associates to send our checks as itemized below, payable to West China Union University, as our contribution toward the cost of the Dental College Clinic Building at Chengtu:

_____ $_____
Subscriber's Name *Subscription Amount*

_____
Address

_____ $_____
Subscriber's Name *Subscription Amount*

_____
Address

_____ $_____
Subscriber's Name *Subscription Amount*

_____
Address

_____ $_____
Subscriber's Name *Subscription Amount*

_____
Address

The understanding is that you will write for our checks when total subscriptions by the Trade equal $2,250. You and your associates have agreed to contribute $750 if the Trade subscribes $2,250. This total fund will be administered by West China Union University (a New York Corporation) to pay the costs of constructing the new Dental College Clinic Building.

Return

March
1940

Hospital - West China.

REPORT OF WORK

Superintendent of Construction

West China Union University Hospital .

Since no report was sent to the Board of Governors last year, this report will cover briefly the period from June 15, 1938 to March 31, 1940.

Arriving in Hongkong, we spent a busy twenty days, selecting and purchasing hardware and glass for the New Hospital. Then came the problem of getting customs and official papers to enable us to move forward.

At Haiphong we were delayed for eight days, and only by having definite evidence that our goods were for the West China Union University, did we get permission to go through Indo-China on a Transit Pass, thereby saving the examination of the whole of the 350 cases of goods in our charge.

From Haiphong we went by rail to Kungming, there to await the arrival of our freight. Owing to landslides and railway wash-outs, we were delayed for twenty-one days before the goods arrived. Due to this delay large consignments of freight had accumulated and it was impossible to get the freight moved forward. After many arguments and much effort we obtained one two-ton truck and loaded forty large cases for Chungking and Chengtu, with the promise that the balance would be forwarded as soon as possible. A few days later I went by plane to Chungking and Chengtu. Arriving there, we began to make plans for the Big Push.

Large quantities of material, for which I had made contracts before furlough, had been delivered in my absence, so it was possible to get started with the minimum of delay. Changes in the plans necessitated alterations in the foundations which had been put down before I left for furlough.

The Isolation Block was the first order of the day, so brick work was commenced. After some discussion with the Medical-Dental College group, it was decided to complete the shell of the whole section, which included Isolation, Private Wards, and Maternity Section. This was pushed forward and roofed over in good time.

The North Central Unit was our next piece of brick work. This is the largest unit and is three and a half storeys high. This is roofed over and the interior work is being pushed forward. It was decided that the foundations for the South Central Unit should next be put down and the work was completed some months ago.

About this time a cable was received intimating that a gift had been received for erection of the O. P. D. but that in order to retain this money it was necessary to complete this block in record time. After due consideration it was decided to accept the challenge. The foundations were commenced on this unit, 360 ft. x 48 ft. In spite of all the material collected during my absence, this large building soon made our piles of brick disappear, but in their place we saw a fine medical unit rising.

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New problems arose, owing to the fact that due to Japanese bombing thousands of families had been driven by the Government from the city to the country to live. This made a great demand for building material, and prices began to soar. Contracts made with merchants with whom we had been dealing for twenty years went by the board and it was necessary to negotiate all over again. This turned out to be a continued struggle, for prices changed more rapidly than the moon. Never in my thirty years of work here have I met with so many difficulties in obtaining material. Hundreds of thousands of refugees arrived and had to be taken care of. Some had money and were able to build homes for themselves. Wealthy men found it profitable to erect small houses and rent them for fabulous sums and so were ready to go on the market and pay high prices for quick delivery. This meant that we had a large group to compete with. However, our past relationships with merchants stood us in good stead, and the enclosed list of buildings erected or under construction will give you some idea of the volume of work carried through. It has been the most strenuous year that I have known in all my time in China, but I thank God for health and strength to carry the load, and rejoice in the opportunities of service.

Difficulties with Chinese merchants were not the only problems that had to be met. The men who work in the various departments are equally keen to see progress made with the block in which each has a particular interest.

By no means the least of the pressure came from the Dental Clinic, for which there was no money, but my Committee gave me loyal support in refusing to begin work on a block for which no grant had been made. Recently the Dental Faculty has managed to borrow money with which to erect their block, so the pressure gauge is rising once more, and it will not make life any easier.

Recently a new member has been added to the staff: Dr. Brown, who has been invited to become the General Superintendent of the University Hospital. Like all new comers he is full of ideas. Many of them would have been excellent two years ago before the buildings were erected, but some are rather belated. We have spent much time in discussing his desire to enlarge the Entrance Lobby. This entrance, as Dr. Beech can explain, is 34 ft. x 17 ft. Dr. Brown would like to enlarge it. Unfortunately the brick wall goes up three full storeys and supports three floors and two large roof trusses. The first suggestion was to take down the whole three storeys of brick work and commence at the foundation and build two large arches in order to carry out an enlargement scheme. I protested the expense, which was countered by an offer to pay. After much discussion and several headaches, Dr. Beech suggested a compromise of making a sixteen-foot opening in the middle wall. I protested that this was too wide in view of the great weight to be carried and also because in summer the whole area around us is water sogged, which often causes uneven settlement. The motion, however, was finally carried, even though I protested and stated that I would do it against my own best judgment and with a rider to the minute that I would in no way be responsible for settlements afterwards.

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The struggle to keep pace with all the demands is terrific, but we have been fortunate in having material come along with fair regularity. At present we are going slow awaiting lumber, but the dam at Kwanhsien was opened yesterday, and soon the logs will be flowing this way.

Labour has increased from fifty cents per day to one dollar, lime from one cent per cattie to four, lumber from $1.10 per cubic foot to $5.00, bricks from $150 per ten thousand to $500, other commodities in like proportion.

With prices so uncertain it is exceedingly difficult to make any kind of an estimate of final costs. The thing that I am striving for is to complete certain units before commencing others.

The National University was making some alterations, and a contractor gave an estimate. Red tape necessitated a delay of three weeks and when the acceptance was given, he refused to take it unless the price were doubled.

Program of the Superintendent of Construction:

New Hospital:	
Isolation and Internes, 2 storeys.	Complete
Maternity and Private Wards, 2 storeys.	Roof on; interior proceeding.
Central Block North, 3½ storeys.	Roof on; interior proceeding.
Central Block South, 3½ storeys.	Foundations complete.
Kitchens.	Complete except floor.
Chapel.	Foundations complete.
O. P. D.	Nearing completion.
Leper Hospital, 8 one storey units.	Nearing completion.
Social Center.	Complete.
Chemistry Building.	Brickwork 2nd storey nearing completion.
Dental Clinic.	Foundation finished.
Animal House at Medical College	Complete.
Residence for Superintendent of Sanatarium	Complete.
4 Residences for Teachers	
Guest Rooms and Gymnasium for Woman's College.	Complete.
Single Teachers' Residence, 2 storeys.	Roof on, interior proceeding.
Dairy Barn for Madame Chiang's cattle.	Complete.
Woman's College, 2 Residences.	Complete.
Gymnasium and Music House for Ginling.	Complete.
University of Nanking Agriculture Offices.	Complete.
Shops along boundary of University property (14)	Under construction.

This is all new work. In addition there is the care of and upkeep of the University buildings, with many alterations to meet present needs. Next week we hope to commence rebuilding the burned out West Wing of the Medical-Dental College.

Walter Small

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Hospital - West China
1941

West China Union University

file

A Report of the University Hospital Building Program with Recommendations Submitted to the President of the University and Board of Governors.
by
Robert E. Brown M.D. Director of the Hospital

The two buildings of the College of Medicine and Dentistry-No.1-2 on the plot plan determined the location of the new hospital which is now nearing completion. Any one familiar with medical work in China will agree that in this conveniently located group of buildings lie the possibilities for one of the outstanding medical centers in China. A plot plan of the building accompanies this report. When a building is described as completed it means, Walls, floor, roof and doors are in place but without electric wiring, plumbing, heating or furniture.

The Central building of the College group No.3 is urgently needed to provide additional laboratories and class rooms and to free space in other colleges now occupied by medical departments.

Machine Shop and Garage - No.4 is one storey and is completed. It is the one building in the hospital group that is being used for the purpose for which it was constructed.

The China Foundation grant for the purchase of the equipment from a local machine shop put this department in operation three years ago. It has ten power machines, four lathes, drills etc. It serves all four universities besides the campus community and some outside business. It is able to make some equipment and repairs everything from dental chairs to typewriters and microscopes. It will be an increasingly valuable department to the new hospital.

The Morgue, Laundry and Workmen's quarters-No.5 is two storeys and completed. It was erected in 1938. It is now loaned to the Nanking University College of Agriculture for Class rooms and laboratories.

Building No.6 is two storeys and completed. It will contain the Isolation Department for infectious diseases on the first floor and Internes and Staff rooms on the second floor. It was finished in 1939 and has an octagonal tower. Its rooms are now loaned to the Ginling Women's College. It also houses the Clinical branch of the Medical library and the hospital director has been living in some of the rooms for the past two months until his own house can be vacated.

Private Patients Wing No.7 is two storeys and nearly completed. When modern plumbing can be provided this wing will have 16 rooms with private and semi-private bath and toilets. There are 17 additional private rooms for one or two patients without bath. The obstetrical department which was located on the second floor of this wing has been moved over the X-Ray department in wing 13. This increases the number of private rooms and gives them more quiet.

Kitchen - No.8 is one storey and partly under roof. It is conveniet ly located behind the private wing and in front of the patients ward building. The central location, convenient to stairs, corridors and future elevators will make for efficient food service. It is now being used for lime storage.

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Main Building -No.9 is 3½ storeys and largely completed. It will have on the first floor the main entrance and lobby: administration and nursing offices; a waiting room connected with a private patients consulting and examination suite and a doctors coat room and toilets. The second floor will contain public or third classwards for about 60 patients with the necessary unsing services. The third floor is for the four main operating rooms with minor rooms, sterilizing and nurses work rooms and doctors dressing and shower rooms. The half height fourth floor contains the galleries from which students may watch operations. Several valuable store or living rooms are on this floor back of the galleries.

Central Service and Supplies- No.10 is 3½ storeys and not built although foundations were laid in 1938. It is located along the corridors connecting the main building with the future patients ward building. It will contain the main central stairs, future elevators, business offices, central supply and linen rooms, treatment rooms, nurses toilets etc. The water tower will be located above the elevator and stair well of this guilding.

This Central Service building has the walls built only to the floor level. It was awaiting the return of the director for final arrangements.

The nurses and staff dining rooms were planned to be in the future patients ward building. Since the ward building can not be constructed at present these dining rooms can be most conveniently located in a second storey above the kitchen along the main corridor.

Admitting and Emergency Unit- N.11 is not yet built. It was planned to be near the pharmacy building which was not near the wards or business offices. This new location is between the two patients buildings and near the X-Ray, business offices and main stairs. This department will attend to, admissions, admitting baths, discharges, deaths, transfers, inpatients fees, scheduling operations, night emergencies etc. The night telephone opeerator will be on duty to receive patients coming during the night.

X-Ray & Obstetrics Wing -No.13 is three storeys and largely completed. It has the X-Ray department on the ground floor with an outside entrance connecting with the Emergency department. On the second floor is the Obstetrical department with the nursery and obstetrical wards adjoining on the west. The third floor of this wing has additional ward space.

The Chapel - No.14 foundations are laid but funds are not available for its construction. To give the proper emphasis to the Christian purpose and spirit of this hospital it would be very desirable to have the chapel ready for use when the hospital is opened. We could then start regular religious services to help the hospital personnel in their daily lives and service to the patients. The director believes that the chapel is needed before additional hospital buildings and trusts that every effort will be made to secure the necessary funds.

Pharmacy and Physiotherapy-No.15 is two storeys and completed. It connects the hospital proper with the Out Patient Building over a covered drive way. The pharmacy is on the first floor and probably the Physiotherapy will be located there also. The second floor is shared by the nursery, the obstetrical wards and the out patient department for ophthalmology.

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The Out Patient Building-No.16 is a spcious building 330 feet long with three wings taking the shape of an "E" and is finished. It can easily handle 500-600 patients daily. In addition to the large main waiting room there are four departmental waiting rooms.

Each of the four major departments has a section of the building with service rooms grouped around the waiting room. A large clinic lecture and demonstration room where interesting cases are presented for teaching purposes is above the main waiting room. Some of the rooms have been loaned during the past year for teaching purposes to refugee colleges. The University Health Service is now being reorganized and is already operating in this building.

The Dental Clinic-No.17 is 1½ storeys and completed. It stands between the Out-patient Building and the College Building No.3. It is more nearly ready for occupancy than any of the hospital buildings. This is because they have their equipment, instruments and supplies ready to move from the present Dental Clinic in building-No.2.

School of Nursing. The best available site for the school of nursing and dormitory for graduate nurses is that now occupied by the Baptist Middle School Dormitory-No.23. The Baptists have agreed that when we build them another dormitory of equal accommodation on other land belonging to them, we may have this building. The original dormitory would need some changes to become suitable for a school of nursing. This is one of our urgent needs.

Comments. This hospital plant when finished and properly equipped along with the College buildings will complete one of the finest medical centres in China and the best in all West China. The elaborate Chinese style of architecture conforms to the general university plan but increases construction and maintenance costs and sacrifices some conveniences for a hospital. The spacious corridors and rooms will also increase operating costs. The floor plans in general are well designed especially the nursing units,and the operating floor. The building was planned for modern conveniences and central heating.

Numerous changes are required to adapt it to present China conditions. There are no chimneys for heating stoves. The stairs were not designed for carrying stretchers. There are no outside or back stairs for carrying water and toilet buckets to and from the wards. There is no provision for screening the windows and where the hospital "guests" are often infected with malaria, typhoid or other insect born diseases screening ceases to be a luxury. Bed nets are a miserable substitute when careing for the sick and a large number are almost as expensive as screening. Screening the windows as they are now is one of our most difficult nusolved problems.

Recommendations

I. That we unite our first efforts towards the completion, equipping and opening of the hospital buildings that are finished or partly constructed. This will include the following:-

1. Construction work to complete the buildings.
2. Electric wiring installation.
3. Water Supply pump and sufficient piping to have 15-20 water taps in important places.
4. Dipper toilets local made and Chinese wood bath tubs for temporary use until the war is over.

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5. Scientific and Mechanical Equipment which can not be made in China- Staff and nurses call systems, telephones, instrument, drugs, surgical supplies etc. Dr. Beech has lists.
6. Beds, furniture, shelving etc. which can be made locally.
7. Hospital operating expenses. Due to unfavorable exchange and for additional equipment during the first few years we should have a subsidy of US$5000.00 per year. A teaching hospital will always need some subsidy for the more elaborate examinations and proceedures that are necessary.

II. That the Main Patients Building No.18 be constructed as soon as the first recommendation is completed and war and transportation conditions permit and that reinforced concrete- terrazo floor and stair construction be used to make the building semi-fire and rat proof and that provision be made for screening against insects.

There are several reasons for postponing further buildings at this time. Shortage of funds is the immediate reason. Experience gained from the use of the present buildings for a year or more will indicate valuable improvements; for the patients ward building. It is impossible at this time to bring in certain necessary building materials without which any important building becomes a makeshift. Important government buildings and schools constructed just before the war are of the type recommended. We should not construct buildings in a center like Chengtu of which we will be ashamed in five years. It will be better to organize and train an entirely new hospital team for a 150 bed hospital than for one of 300 beds. This is especially true in a country where a large part of the new personnel have no previous knowledge of the purpose or proceedures of a hospital.

III. That the Modernization of the hospital buildings be undertaken as soon as possible. This would include the following installations, the first three of which should be done before or at the same time as the construction of the ward building.

1. Steam boilers to provide steam for heating, sterilizing, hot water supply, cooking, laundry etc.
2. Steam radiation and piping for heating.
3. Cold and hot water lines with a moderate amount of plumbing fixtures.
4. Laundry machinery so hospital linen can be sterilized during washing.
5. Refrigerators for necessary ice and cold storage supplies.
6. Elevators for moving patients from floor to floor.
7. Possibly a steam engine- electric generator for essential current supply when the city current is off. Such a generator is a good talking point to keep electricity rates from going too high.
8. Pressure steam cooking kettles for the kitchen can be made locally.

P.S. Wages, carpenters and masons, 1939--1941.
Per day, $1.00, $2.40, $3.50, $6.00, $10.00, present rate.

Materials.
Bricks, $240.00 per ten thousand, 1939.
$2000.00 per ten thousand, 1941.

Lumber. $2.50 per cubic foot, 1939.
$7.50 per cubic foot. 1941.

IV. Physiotherapy, including facilities fo occupational therapy, as well as electro-therapy, mechano-therapy and helio-therapy, etc. is of increasing importance from both the service and educational point of view. Hence adequate provision should be made for such a department.

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WEST CHINA UNION UNIVERSITY

STATEMENT OF HOSPITAL BUILDING FUNDS FOR THE YEAR

1940-1941

BUILDINGS:

Receipts:		
Balance on hand July 1, 1940		C$133,364 35
Internes fund		2,250 00
Rent from Ginling College		600 00
Contribution from Ginling College for private wards		50,000 00
Gift through U.C.C.M.		122 00
Funds from treasurer in New York: US$15,000 00 average 19. (Total US$18,008 48 - 15,000 00 leaving balance US$3,008.48)		285,000 00
Total receipts for year ending June 30, 1941 .....C$		471,336 35
Expenditures:		
Central building		318,971 03
Grounds		4,058 85
O.P.D. building		31,648 07
Dental Clinic building		74,980 57
Expenses for plant:		
Architect	3,897 00	
Insurance	856 59	
Office supplies and expenses	559 00	
Cement etc. (not distributed)	1,626 14	6,938 73
Total expenses for year ending June 30, 1941..... C$		436,597.25
Balance on hand July 1, 1941 C$		34,739 10
US$		3,008 48

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THE COLLEGE OF MEDICINE AND DENTISTRY

WEST CHINA UNION UNIVERSITY

1943

1942

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Expenditures for the Academic Year 1941-1942
Medical Property Account for Year Ending June 30, 1942

Associated Boards for Christian Colleges in China
150 Fifth Avenue, New York 11, N. Y.

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I. The College of Medicine and Dentistry

Present Status - Clinical Facilities, etc.

1943

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THE COLLEGE OF MEDICINE AND DENTISTRY

WEST CHINA UNION UNIVERSITY

1943

History and Organization: Medical education was commenced in 1914 and dental education in 1919, each being organized as a faculty of the West China Union University. In 1929 these two faculties were united to form the present College of Medicine and Dentistry. The College has two deans, one responsible for the affairs of the dental students, the other for medical. For external contacts both courses are united under one director.

Student Body: The present student body (Fall Term, 1941-42) numbers 296, of which 212 are studying medicine and 84 dentistry. These students come from 20 different provinces in China, but almost one half (145) are from Szechwan. Slightly more than one third of the student body are women.

Graduates: Up to and including the class of 1941 the College had graduated 20 classes of medical and 15 classes of dental students, whose numbers totalled 171 medical doctors and 77 dentists, or a total of 248 for the College. In June 1942 we expect to graduate 23 in medicine and 6 in dentistry, thus bringing the total for the College to 277. Among our graduates are representatives of two of the aboriginal races of Western China, Miao and Nosu, as well as overseas Chinese, Russians and one American. Before the war they were widely distributed over China. Now the vast majority are in Free China.

Staff: The present staff of the College numbers sixty full time teachers and four part time instructors of various ranks. Twenty-two of the full time staff are of professorial rank. The part time staff includes one honorary professor and one professor of another university who exchanges certain classes with one of our regular staff. In addition to the above we have one professor emeritus living in retirement. In addition twelve members of the staff of the Cheeloo Medical School teach in joint classes with Cheeloo students. The latter number 122. We also contribute 14 hours teaching per week to the Dental School of the National Central University. Of our staff seventeen full time and two part time teachers are Westerners. The remaining 45 are Chinese. The above figures do not include teachers of Colleges of Arts and Science who carry the teaching for medical students for the first two years of their course.

Course of Instruction: From middle school graduation to graduation in either medicine or dentistry seven years' work is required. During the first year the student registers in the College of Science. During the second year, although registered as a "first year" medical student, he still takes almost all his work in the Colleges of the Science and Arts. These two years are followed by two more spent mostly in pre-clinical sciences, then two years in the clinical sciences and a final year of interneship in the hospital. The second to the last year is also largely practical clinical work, when the students act as clinical clerks in the hospital wards. The interneship is a rotating interneship of 12 months, and includes one month on public health work.

Language of Instruction: is Chinese in the main. But a thorough knowledge of English is required, and much assigned reading is to English references, etc. Some clinics, clinical conferences, etc. are conducted in English.

Library: is the best medical library in free China. We subscribe to nearly 200 periodicals, and have a large collection of books and bound periodicals.

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Buildings: For the first two years classes are conducted in the science buildings. For the next two years most of the class work is in the College Building. This building, of which the two east and west wings were erected in 1927-28, is still incomplete, as the main block remains to be built, as well as the museum section. Each wing is 152 feet long by forty feet in width, and three and a half storeys in height. The east wing houses the Departments of Anatomy and Physiology and Pharmacology. The west wing houses the Department of Pathology (including Bacteriology and Parasitology) and Dental Preclinical Departments. When built the central block will contain the Department of Biochemistry, the Department of Hygiene and Public Health, the College Library and administrative offices. A second block will contain the museum and general assembly room.

The university hospital is not yet complete, but when fully open will accommodate at least 350 beds, and include a large outpatient department capable of caring for 500 patients a day in departmentalized clinics. The hospital will include all clinical departments, public wards, private wards, isolation block, chapel, dining rooms and kitchen, laundry, machine shops, garage, internes residence, school of nursing and nurses' dormitories, etc. The dental clinic will be included in the general hospital administration.

Tuberculosis Sanatorium, consists of modified Chinese buildings located in a fruit orchard of about 17 mow of land. This accommodates 38 patients.

Leper Hospital, accommodating 40 beds, is also located not far from the College Buildings.

Present Clinical Facilities: Consists of the United Hospital. This includes the Canadian Mission Hospitals (General, Women's and Dental); the Methodist Mission Hospital (Eye, Ear, Nose and Throat); the University Dental Clinic and The University Tuberculosis Sanatorium. The total beds available for clinical teaching is approximately 400. In addition adequate outpatient and dental clinic facilities are provided for our educational work. The daily out-patient attendance ranges from 200 to 500 per day.

The above mentioned various units of the United Hospital are administered under one centralized control. This is almost entirely in the hands of the College of Medicine and Dentistry, but the control is at present shared with the Cheeloo Medical School, as they are war-time guests within our institution.

The present budget of the United Hospital is about $3,000,000.00 per year. Most of this is income from patients, but the annual deficit is made up by grants from the medical colleges and by gifts and donations from government or philan-thropic institutions or individuals.

A Public Health Center is maintained in Wenkiang Hsien, about 40 li from Chengtu. This is administered in cooperation with the other two medical colleges in Chengtu, the hsien government, the provincial health administration and the Rockefeller Foundation. Internes receive a part of their training in this center, and in the associated rural health stations. Some staff is also provided from the College for this Center and the rural stations.

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Subsidiary and Associated Schools: The College conducts a school for the training of hospital technicians. This is a three year course. So far we have graduated over fifty technicians, and most of the time have about 15 to 20 students in the school.

Associated with the College is the School of Nursing of the United Hospital, with a history of almost thirty years. At present the school has about 100 students.

A School of Midwifery is also conducted near the College and in loose affiliation with it. It has a history of about 10 years, and had graduated more than fifty midwives.

The hospital also provides opportunities for experience for pharmacy students from the Department of Pharmacy of the College of Science.

Research Work: This has been carried on by various members of the College staff, and publications have included studies on nutrition, metabolism, physical standards, parasites, actions of various Chinese drugs, diseases, certain public health procedures, etc. Most of our staff have published through the regular medical journals. The college does not issue its own journal. It has also issued many popular public health leaflets, posters, etc., in an effort to increase such information among the general public. It carries on the manufacture of bean milk powder in cooperation with the provincial health administration.

Special War-time Service: Since the early months of the war, in the Autumn of 1937, we have given accommodation and assistance to refugee colleges from the war areas. The Cheeloo Medical School has now been a guest in our college for almost five academic years. They have students and some staff here, but no equipment. For their apparatus, class-rooms, laboratories and hospital facilities they are entirely dependent upon the W.C.U.U. They have this year 122 medical students and about 12 teachers in Chengtu. Classes are pooled, and the teaching staffs of the two institutions are united.

From 1937 to 1941 the Colleges of Medicine and Dentistry of the National Central University were also guests of the W.C.U.U. Although they brought some equipment with them and had considerably more staff than had Cheeloo, they were dependent upon the W.C.U.U. for class-room, laboratory and hospital accommodation. Classes in the three senior years in medicine were pooled, but on account of their courses being shorter than ours, the pooling of junior classes and of dental classes was not possible. Considerable exchange of teaching, however, was done in these years.

The W.C.U.U. is now the only medical school in China still open and running in its original pre-war site, and with its full prewar equipment and plant in use. Hence, it is able to continue an uninterrupted and high standard type of medical education, such as other schools have had the greatest difficult in keeping up.

Needs: Some of our most urgent needs are:

Endowed chairs in the major departments.
Endowed free beds in the hospital for teaching purposes.

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The College of Medicine & Dentistry -4-
West China Union University

The completion of the College Building.
The completion and equipment of the Hospital.
Scholarships for post-graduate study abroad of junior staff.
Further income for maintenance, new equipment and research work.

The above article was written in the spring of 1942. Since then progress has been made in the University Hospital Building, so that the Department of Obstetrics, and the out-patient department have been in operation since February 23, 1943. On April 10th the formal opening of the Hospital took place.

Sent by Marjorie Robertson, April 15, 1943
Received by A.B.C.C.C., June 18, 1943

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II. Twenty-Five Years of Dentistry

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TWENTY-FIVE YEARS OF DENTISTRY

in

WEST CHINA UNION UNIVERSITY

This Spring the twenty-fifth anniversary of the commencement of dental teaching in the West China Union University is being celebrated.

As early as 1907 the United Church of Canada Mission inaugurated a dental clinic in Chengtu. This health service developed rapidly and has proved to be of considerable value in the maintenance of the health of missionaries and other western residents in West China. For ten years in Chengtu city a general dental practice which gradually won favour in the Chinese community was carried on. All this time Dr. Ashley W. Lindsay, the pioneer dentist, held to his vision of training Chinese dentists until finally in the year 1917 it became possible to open a Department of Dentistry under the College of Medicine, the dental staff then having increased to three by the addition of Dr. John E. Thompson and Dr. Harrison J. Mullett.

In the first years students were few in number but in 1919 when the University established a College of Dentistry, six or eight, or even ten entered every year. Teaching was given at the City Dental Hospital, so that the University was involved in no additional cost. The first graduate to win the degree of D.D.S., in 1921, was Dr. Whang T'ien-chi, and he is still connected with the University, being Superintendent of the City Dental Unit of the United Hospital.

The University was to be closed in 1927 when all westerners were ordered to leave Chengtu, but before the last group had a chance to get away, conditions changed and it was unexpectedly found possible to reopen Arts, Science and Medicine. The three dental faculty members were amongst those who had got away earlier, therefore dental students thus left without anyone to care for them transferred into Science or Medicine. When the College was reopened in 1928 there were only a dozen boys in various stages of their course to re-enter dentistry.

For ten years the Colleges of Medicine and Dentistry operated side by side. But it was recognized that it was unnecessary to develop two staffs for the pre-clinical teaching of medicine and dentistry. The number of students in both colleges was not large, the classrooms at their disposal were limited, and it became apparent that the type of dental education which was developing could be taught in very close conjunction with medicine. Therefore, in 1929, the two Colleges united to form the College of Medicine and Dentistry. So far as administration was concerned the two colleges were united on an equal basis, but in regard to number of students and budget the ratio of one dental student to two medical has been followed.

Medical and dental students are instructed in close cooperation. Similar entrance standards are required. Pre-clinical and pre-dental subjects are the same. All students receive the same classroom and laboratory instruction in biological and medical sciences. An equal number of years of study is required for graduation. Only when medical students begin the study of such specialties as obstetrics, gynecology, parasitology, otolaryngology and ophthalmology, and undertake their internal medicine and surgery ward requirements do the dental students separate and study the dental prosthesis specialties, the oral phases

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of anatomy, physiology, pathology and hygiene, and other dental subjects. The medical intern spends his final year in a rotating hospital service, and the dental intern spends a similar twelve months in a rotating clinic practice covering the phases of oral diagnosis, preventive dentistry and public health, minor oral surgery and medicine in their dental phases, parodontal surgery, hospital ward and O.P.D. observations and clinical and laboratory prosthesis, covering the reparative and restorative tooth-tissue techniques, and a full and partial denture reconstructive prosthesis.

West China Union University Dentistry is primarily a division of the whole field of health service - not a specialty of medical practice. Emphasis is placed on the biological phases of oral health maintenance and therapies. The main object is to train health workers, not technicians. The years of study are longer than those required in western countries, in order that graduates may be able to give more attention to health and functions than to the production of artificial restorations - the objective being to train leaders, teachers, administrators, not private practitioners.

To be more specific, our aims are:

1. To educate an oral health personnel rather than to train dental prosthesis technicians. Both types are needed to develop a Chinese health service, but, due to limited funds and to lack of qualified Chinese dental teaching staff, the University has concentrated on the one type only. Logically, the preparation of biologically-minded men and women capable of guiding the future development of dental practice and education is our most valuable and useful contribution.

2. To provide dental education in an ethical and Christian environment.

3. To present a model of dental education.

4. To guide the national and provincial health administration and government authorities towards the establishment of a type of dental service best suited to the needs of China.

5. To provide in Chengtu dental clinics for humanitarian service.

6. To produce, in particular, dental staff for health institutions, such as hospitals, health centres, public health clinics, school clinics and the like; teachers and leaders for public health service; dental administrators and teachers for the dental colleges which are about to be organized throughout China.

Since 1934, when the West China Union University was granted an Absolute Charter by the Regents of the University of the State of New York, our dental graduates have qualified for the New York State D.D.S. degree. Before the war our dental graduates, of whom there have been ninety odd, could be found in the P.U.M.C. and Municipal Health Stations of Peiping, Tsingtao, Shanghai, Nanking, Hangkow, Wuchang, Kweilin, Ichang, Changsha, Chungking; now they are scattered all over Free China in government and private hospitals and institutions. A few have entered private practice.

Until 1939 the West China Union University was the only institution in China giving university grade dental education. In that year the National

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Central University from Nanking organized a dental department under its College of Medicine.

Government funds are granted for a chair in Dentistry and the College has a limited number of research and study fellowships. The growing demand for a dental health service in China can be met through our educational programme only if we are able to secure an adequate endowment for its development. At present and for some years to come dental teaching will depend upon our leadership. In the very near future a high type of personnel will be needed urgently in order to staff the dental colleges which the government is now planning to organize in many sections of the country. With the staffing of these colleges in view it will be wise for those graduates who have the ability and the experience to take advantage of one or more years of post-graduate study in the States and Canada. Funds are needed for the travel and other incidental expenses involved.

For many years it was not possible to house the teaching clinic of the College in quarters primarily erected for the purpose. Then in the spring of 1941, through the efforts of Dr. Joseph Beech in enlisting the interest of Mr. Sydney D. Maddock, necessary funds were secured from the American Dental Trade Association, and a unit of the new University Hospital with facilities for the operation of a modern teaching clinic was opened. Unfortunately the Sino-Japanese war has prevented the furnishing of this clinic with the most recently manufactured operating equipment. However, though far from adequate, the old equipment can be utilized. This new clinic is a vast improvement on the former one which was but an adapted laboratory, affording very crowded quarters. The clinic is now operated by a staff of twenty men and women, of whom all but Dr. R. G. Agnew, Dr. W. G. Campbell and Dr. A. W. Lindsay are graduates of our own University. During these war years the securing of essential supplies has been a constant problem. However, before Hongkong fell a priority - permit secured a moderate supply coming in regularly by C.N.A.C. planes; then packages came by way of Indo-China and the Burma Road until these routes were closed; now by one means and another it has been found possible to bring in a few of the most urgently required goods, not a very generous supply, of course, but a working minimum to enable the clinic to continue its teaching programme and the service of its large clientele.

Sent April 15, 1943 by Marjorie Robertson
Received June 18, 1943, A.B.C.C.C.

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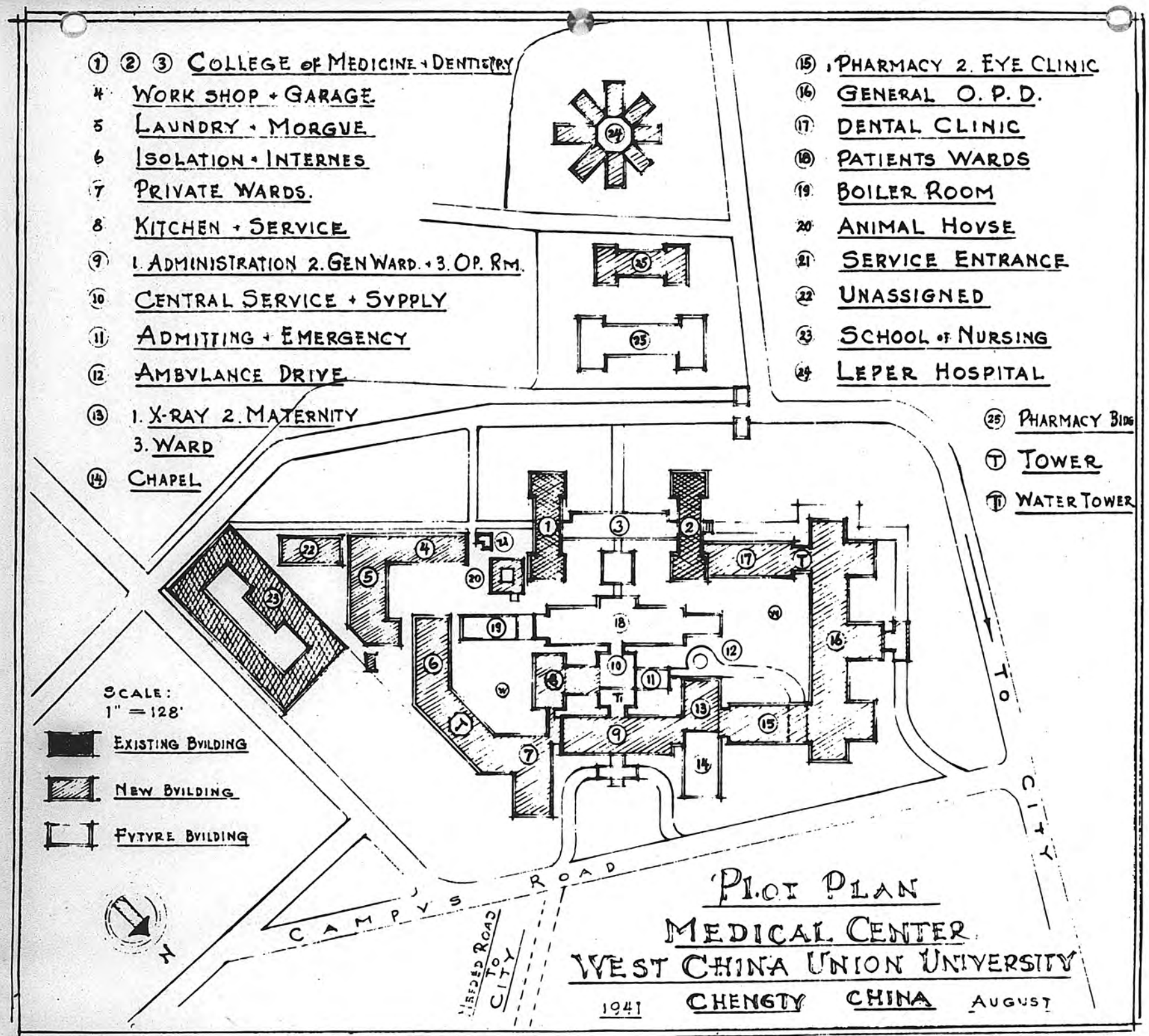
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III. University Hospital Building Situation

Plot Plan of Medical Center
University Hospital Building Situation
The University Hospital Building Is Now Open

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① ② ③ College of Medicine + Dentistry
4 Work Shop + Garage
5 Laundry + Morgue
6 Isolation + Internes
7 Private Wards.
8 Kitchen + Service
9 1. Administration 2. Gen Ward. + 3. Op. Rm.
10 Central Service + Sypply
11 Admitting + Emergency
12 Ambvlance Drive
13 1. X-ray 2. Maternity
3. Ward
14 Chapel
15 1. Pharmacy 2. Eye Clinic
16 General O. P. D.
17 Dental Clinic
18 Patients Wards
19 Boiler Room
20 Animal Hovse
21 Service Entrance
22 Unassigned
23 School of Nursing
24 Leper Hospital
25 Pharmacy Bldg
T Tower
Ti Water Tower
Scale:
1" = 128'
Existing Bvilding
New Bvilding
Fvtvre Bvilding
N
Campvs Road
Needed Road To City
To City
Plot Plan
Medical Center
West China Union University
1941 Chengty China August

From: West China Union University
Received May 5, 1943

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UNIVERSITY HOSPITAL BUILDING SITUATION
March 10, 1943

The first regular in-patients were received in the University Hospital on February 23, when the temporary Women's Hospital in the Canadian Mission, Girls' School Buildings on Fang Cheng Kai was closed and all patients moved to the University Hospital. Two days later the O.P.D. building was opened up in greater degree than previously by making use of the main entrance, waiting room, registration facilities, etc.

At this stage a full report of the present building situation is submitted to indicate what buildings have been completed, what are still in process of erection, and what are still needed. Reference should be made to the architect's Plot Plan, a copy of which is attached.

The first building of the hospital group to be built was the laundry and Servant's quarters (5) built in the Autumn of 1937 when our Building Superintendent was still on furlough. This was rushed up by a "Building Committee" in order to provide additional housing space for some of our guest institutions who moved to Chengtu early in the war. Except for one room used by Mr. Small as an office, this entire building has been used by the University of Nanking ever since its completion, that is their occupancy is now in its sixth year. This is a two storey building with a commodious attic. It was divided into many small rooms by the U.of N. who used wooden partitions for this purpose. It houses a considerable portion of the College of Agriculture of the U. of N. but other classes are also held in this building.

During the summer of 1938 the Workshops and Garage (4) was built, also before the return of Mr. Small from furlough. This is a long one-storey building, and at present houses the Machine Shop, Carpenter Shop, Architect's Office and Garage. The Machine Shop was equipped by a generous donation from the China Foundation, which enabled us to purchase the entire equipment of a good shop in Chengtu that was ceasing operations. It is at present operated on a union basis, with representation on the Committee of Management from the College of Medicine and Dentistry, the College of Science, and the Hospital of the W.C.U.U., and the College of Agriculture and the College of Science of the University of Nanking. The garage has space for two trucks or ambulances, and in it are now kept the truck and station wagon presented by the American Bureau for Medical Aid to China.

The small building marked 21, is the gateman's room, with a small firehall attached. In the latter is kept a gasoline-run fire engine purchased in Hongkong and brought in over the Burma Road by Dr. Best in 1940. It is capable of throwing two streams of water over the top of any of our buildings.

The Isolation Building and Internes' Dormitory (5) was largely erected in 1938-39 as well as the Private Patients' Building (7), of which only the shell was built at that time. These are two storey and attic buildings, the latter was only completed by means of a gift from Ginling College of N.C.$50,000. In return for the gift Ginling College was permitted to occupy the Internes' Dormitory except for the extreme south end, which is now used by women staff members of the College and hospital. The two buildings meet in a very fine octagonal tower, the beauty of which has been very much remarked upon. The ground storey of the Isolation-Internes' Building at present houses a portion of the College Library, the X-ray Department, and various nurses rooms.

In 1942 Ginling College provided a further N.C. $50,000 towards hospital building expenses, and for this were permitted to occupy the second floor of the

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private patients' building. Thus they now occupy almost the entire second storey of the building 6-7.

Construction next began on the Outpatient Department Building (16), which was built during the year 1939-40. This large two-storey and attic building was a gift from the Rockefeller Foundation, but as the money from the Foundation has been insufficient, parts of the building remain in rather an unfinished state. For a time the University Health Service was run in the south end of this building, but it has now been merged with the regular O.P.D. work. A special ward service for tuberculous students is also conducted in this building, on the second floor of the central portion. The large amphitheater over the central waiting room is in constant use. The N.C.C. occupy offices in the north end of the building, and the Public Health Department is also temporarily housed in the north end. An O.P.D. laboratory has been furnished and is in the process of being equipped. The Social Service Department of the University of Nanking has offices here, and operates in cooperation with our O.P.D. service. To open the building two toilet buildings had to be erected, one on either side of the main entrance. These were in the original plans, but have been reduced in size to save expense.

At present the only part of the O.P.D. building not yet in use is the Eye, Ear, Nose and Throat section, although some parts of the building have not yet been opened to their permanent departments.

The Dental Clinic, with a tower connecting it with the general O.P.D. was next constructed, and was opened in full in the Autumn of 1941. This is a storey and a half building, and is in full use except for some of the rooms in the upper part of the tower. The main floor houses the clinic, and the upper storey accomodates offices and the laboratories of the Department of Odontology. On the plot plan this building is No. 17.

The work on the main administration building, with operating floors and one floor of wards (9) and on the building (15) connecting this with the O.P.D. was also carried on throughout 1940-41-42. The former of these was finally finished later in 1942, and the latter somewhat earlier. Along with these was also built the extension to the south (No. 13) with provision for X-ray department, delivery section, and some ward accomodation.

No. 9, main floor, is entirely given over to offices for hospital staff, including nurses, except for one large room used as a staff dining room. The main lobby is an exceptionally fine piece of work, and has been favorably commented upon by all visitors. The second floor is made up of wards, and these are now entirely occupied by the obstetrics and gynecology patients, recently moved out from the temporary hospital at Fang Djen Gai. This floor communicates with the delivery rooms (13) and nursery in the east end of 15. The third floor contains four very fine operating rooms, along with the necessary wash-up rooms, anesthetic rooms, and service rooms of the Department of Surgery, such as sterilizing rooms, plaster, various store rooms, etc. etc. The fourth floor gives access to galleries overlooking the operating rooms, and on the rear contains a row of resident staff bedrooms.

Building 15 contains the main hospital pharmacy, now being furnished, and also certain rooms which may be used later for physiotherapy, but at present used by the University of Nanking for classrooms. The main floor of 13 (X-ray) is also at present entirely occupied by the University of Nanking and Ginling College for offices.

The Kitchen (8) was built early (1939 or 1940). For a time we hoped to raise this one storey building to a two-storey one so as to provide an adequate staff dining room on the second floor, but on account of lack of money this plan could not be

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carried through. However, since the U. of Nanking was in occupancy of our laundry, the kitchen was divided by a light brick wall so as to separate off the north-south portion as a hospital laundry. To provide water for the kitchen and laundry some temporary wooden tanks were erected on stands in the courtyard, and water is pumped from the well. We had neither money nor piping to provide a full water supply.

The brick work of the central service section and water tower (10) was put up in 1942. The building (10) is four storeys in height, but only the two lower floors have been even partially finished. The upper storeys stand without ceilings or floors, and with gaping holes for windows, doors, etc. No stairway makes ascent to the tower possible, only the empty stair-well is there. Still less possible has been the installation of an elevator. The partially finished ground floor contains some bath rooms, and the rest is used at present for storage purposes. The second floor contains a "drying room" for laundry, but most of it too is unfinished.

The boiler house (19) has been built in a modified form and largely at the expense of the Friends Ambulance Unit. It provides garage and storage space for the F.A.U. for the duration of war. It can later be modified to its original purpose. Adjoining this a small morgue has been built, as this was an unfortunate essential.

To complete the picture of the whole center, an animal house (20) was built in 1939, the cost having been provided by the China Foundation. This opens into a court approached only through the medical building.

The central section of the College of Medicine and Dentistry (3) is now under construction. Building commenced early in January 1943, although the foundations for this building were laid in 1927.

It is difficult to state which of the unfinished or unbuilt buildings are most desperately needed. The hospital, which was planned as a complete whole, needs each if it is to function properly.

Two buildings, however, stand out as our most serious needs.

18. The main ward building. It is a peculiar institution indeed, which has provided for almost every sort of accommodation except the patients. For a plant as extensive as this we have practically no ward accommodation. We have most of the accessories necessary to provide for the care of patients, but we have very little place to put the patients. One floor of building 9 is almost all the ward accommodation we have available, and these are all small private or semi-private rooms. In addition we have the Private Patients' Building, but these rooms are all occupied either by our war-time guests or by nursing staff.

23. School of Nursing. This is an equally great need. At present with only about forty inpatients our nurses are taking up what is really accommodation for patients. When more patients come out, we shall need more nurses, but we have no place for them. We have an agreement, extending back to 1936, and frequently confirmed, with the Baptist Mission, by which they agree to turn over to us their Middle School Dormitory when we provide them with another dormitory on their site at the Middle School. When we secure possession of the present dormitory, however, it will have to be rebuilt as a two-or three storey building to provide sufficient space for the nurses.

14. Chapel. It is an anomalous situation which gives us a Christian Hospital, but without a chapel of any sort. This is much needed.

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11. The Admitting Department is only a small building, but its erection is necessary if we are to properly control the admission of patients, and also to provide an adequate emergency service. With greater industrialization and motor traffic the amount of emergency work is steadily increasing, and this is much needed.

8. A second storey over the kitchen is much desired to provide proper dining room facilities for our staff.

10. The completion of this building is perhaps the first essential. It would provide more ward space, and also the hospital laboratory.

Finally we need very, very much more money for the completion of the hospital furniture. Evan locally built furniture we are still extremely short of.

To summarize, the following buildings have been erected and are used for the purposes indicated:

17. Dental Clinic: 1½ storeys, plus Tower.
Ground floor: dental clinic
Second floor; offices; Department of Odontology Laboratories.

16. General O.P.D. 2 storeys and attic. Attic only partially floored.
Ground floor: General O.P.D., including waiting room, registration, laboratory, social service, and examination rooms for medicine, surgery, and temporary eye, ear, nose and throat clinic. North end also contains University Department of Public Health, and several offices for N.C.C. Also, Miss Sawyer is living here.
Second floor: O.P.D. for Department of Obstetrics and Gynecology; General clinical amphitheater for all departments; and temporary accomodation for Tuberculous Students.
1 Attic: Temporary servants' quarters (men servants).

15. Eye Clinic and Pharmacy, etc. 2 storeys and attic. Attic not floored.
Ground floor: Main hospital pharmacy now being furnished. Rooms for future physiotherapy use, now used by University of Nanking for classrooms.
Second floor: Eye clinic , not yet in use. May be soon used for wards. Nursery, etc., as adjoining the delivery section (13).

14. Chapel: Foundations laid. No building here, but much needed.

13. X-ray and Delivery Unit: 3 storey building.
Ground floor: For future X-ray department. At present occupied by University of Nanking and Ginling College.
Second floor: Delivery unit, in full use.
Third floor: One large ward, and several smaller ones. Expect to be in use as soon as we can furnish.

9. Administration Building and Surgical Building: 3½ storeys.
Ground floor: Offices for hospital and nursing staff.
Staff dining room.
One room occupied by University of Nanking.
Second floor: Wards. In full use by Department of Obstetrics and Gynecology.
Third floor: Operating rooms and all accessory rooms for Department of Surgery. This floor is in partial use.
Fourth floor: Galleries for operating room toward front of building.
Staff bed rooms and store-rooms in rear. All occupied.

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10. Central Service Building, and Water Tower. 4 storeys. Tower much higher
Ground floor: Unfinished. Bathrooms and some unfinished storerooms in use.
Second floor: Unfinished. A drying room in use.
Third floor: Very much unfinished. For hospital laboratory.
Fourth floor: Completely unfinished.

8. Kitchen: 1 storey.
This has been divided to provide space for laundry as well.
Is in full use.

7. Private Patients: 2 storeys and attic.
Ground floor: Nurses and women medical staff.
Second floor: Ginling College.
Attic. Women servants.

6. Isolation and Internes: 2 storeys and attic.
Ground floor: Nurses; X-ray department; Part of College Library.
Second floor: Ginling College; Some West China Women staff.
Attic: Ginling College.

19. Boiler House: One storey. Smoke stack not erected.
Used by F.A.U. for ambulance and garage.

5. Laundry and Men Servants: 2 storeys and attic.
Ground floor: University of Nanking (except for one room for building Superintendents office).
Second floor: University of Nanking
Attic: University of Nanking, except for one end used by some hospital technicians as bed-rooms.

4. Shops and Garage: One storey.
Machine Shop (shared with University of Nanking).
Carpenter Shop.
Architect's Office
Garage for two cars or trucks.

21. Gateman's house and fire engine room 1 storey.

20. Animal House: Not a hospital building, but incinerator is used by hospital.
Morgue: One storey

1-2-3. College of Medicine and Dentistry: 1 and 2 are three storeys and finished attic. 3 is four storeys. Not hospital buildings.

22. Small Building: One storey. Built by University of Nanking, and used by them. After the war reverts to the Hospital or College.

23. Baptist Middle School Dormitory: At present mostly a one storey building with one section two storeys. This is site of future School of Nursing. At present occupied by University of Nanking.

11. Admitting Building: A future building. Probably one storey.

18. Main Ward Building: Foundation laid in 1937. Very much needed.

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The following institutions have been accommodated in the University Hospital for approximately the periods indicated.

University of Nanking:

College of Agriculture: Has used practically the whole of the large laundry and servants' dormitory building from their arrival late in 1937 to the present. Also have shared with the W.C.U.U. in the use of the Machine Shop and its equipment since this was built and equipped in 1938-39.

Department of English: Accommodated for two years in the isolation block, and now for nearly a year in the X-ray block. Has about four offices and seminar rooms. In addition uses lecture rooms in the O.P.D. and College buildings for about 36 hours per week.

General Class Rooms: Has use of two large and three smaller lecture rooms in the hospital building. This is full time use. Since Sept. 1940.

Ginling College:

Dormitory accommodation for about 80 students and for the majority of the staff. Takes entire second storey of private patients' building and all the rooms for men internes.

Three offices in X-ray block, for Departments of English, History, and Sociology respectively.

National Christian Council:

About four offices. Formerly in main building, now in O.P.D.

Friends Ambulance Unit:

Boiler house for garage and store-room. Also have dormitory in fourth storey of College Building.

National Central University: Had accommodations for one year for Department of Histology and Embryology in Isolation Block. For past year has shared with W.C.U.U. - Cheeloo the use of X-ray equipment and space.

W.C.U.U. Dental Department: After the fire in the west wing of the college several dental departments were temporarily accommodated in Isolation Block. Department of Odontology had a laboratory in Shops building for over a year until new clinic was completed.

Tuberculous Students Wards: Largely financed by Relief money. Accommodation for students from W.C.U.U., Cheeloo, Ginling, Nanking, National Central, and the Theological Colleges, in the O.P.D. building.

College Library: A portion of the library of the College of Medicine and Dentistry accommodated first in Shops Building, later in Isolation Block. This will later move to College Building when the central block has been completed.

Offices of Superintendent of Construction and Architect, W.C.U.U.

In Laundry Building and Shops Building respectively. Work done from here for all departments and Colleges, not just W.C.U.U.

Chinese Industrial Cooperatives.

Has one large room in College Building. This is their head office.

Yenching University: Expects to move into College Building on completion of central block. Department of Mathematics and Physics only.

National Central University:

Colleges of Medicine and Dentistry were accommodated in the College Buildings for about four years.

Cheeloo University:

Shares with the W.C.U.U. in use of all the College and Hospital Buildings for the teaching of medical students.

Student Health Service:

In O.P.D. building, conducted for W.C.U.U., Nanking, Cheeloo, Ginling, Nanking and West China Theological, and the Middle Schools.

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THE UNIVERSITY HOSPITAL BUILDING IS NOW OPEN

(Broadcast from Chengtu by Dr. A. E. Best, April 13, 1943)

In no race, in no country in the whole world, are there many human beings, rich or poor, who do not at some time in their lives need skilled help to relieve their physical or mental ills. This skilled help and the knowledge necessary for the rendering of efficient service, have always been and still are in the possession of too few people, localized in too few centres and too inadequately at the disposal of the poor who need them most.

Practically all the knowledge and most of the training which have come to us of the medical profession have come from the past, from other people - so that, upon us rests the double responsibility to pass on that knowledge with the highest possible ideals to a carefully selected group who will serve effectively the coming generation, and personally to help as many as possible of the present generation.

On Saturday, April 10th, a part of the new University Hospital building of our College of Medicine and Dentistry was officially opened. Until 1st July in-patient work will be confined to Obstetrics and Gynecology, this department having recently moved from temporary quarters in the Canadian Mission Middle School buildings in the city where it has been accommodated since 1939 when the Women's Hospital at Hsi Dye Kung was destroyed by fire.

As soon as possible after July 1st, the Pediatrics Department will be moved out from the Hospital at Sze Shon Tse, and immediately afterwards at least fifty beds in Medicine and Surgery to be occupied before the opening of the autumn term.

We are deeply conscious of the fact that this new hospital lacks a very great deal in the way of equipment, modern equipment which we had hoped and planned to have installed before any work was attempted, equipment that is univsally recognized as essential if complete hospital efficiency is to be attained.

There is no elevator; no running water (carriers sometimes, but very seldom, run when they carry water), therefore modern washing, bathing, and lavatory service is impossible; wooden beds have been made locally; there is no central heating plant; the drug room and laboratories are short of many drugs which are essential to modern methods. Present economic conditions are such as to make it extremely difficult to hold an efficient attendant service long enough to train adequately.

One phase of health service will be centred in the Outpatient Department of the New Hospital. It is there that we hope to demonstrate the most modern concepts of community health service, - to reach people in the neighborhood who are liable to become sick, or who are already partially sick, but not quite sick enough to come into the Hospital, - and those who, through ignorance, or for economic reasons, do not enjoy that abundant health which is the birthright of everyone, rich or poor. There is time here to outline the possibilities of but four of the main divisions, curative, preventive, sociological and psychological.

Under the heading "Curative" may be placed the purely physical, minor ailments that can often be treated by simple measures, very special stress will be laid upon preventive methods. Why wait until a building is burning fiercely to

call out the Fire Brigade? Usually a little care will prevent the fire getting started. Similarly, why wait for people to become sick, when a few cheap measures are available to prevent that sickness? Often all that is necessary is the expenditure of a little time, care and forethought. Vaccination against small-pox is, as almost everyone now knows, not only highly effective, but cheap and easily performed. What is not so well known, however, is that there are a number of deadly diseases, which by vaccination or inoculation may be just as easily prevented.

Again, careful physical examination often reveals certain physical or nutritional defects which, if corrected immediately, particularly in children and young adults, would prevent serious disease or disability. We believe strongly in the principle expressed in an English proverb: "An ounce of prevention is worth a pound of cure." Routine physical examination of all students and teachers of the cooperative universities is now being carried out, and the information thus secured is amply justifying the time and effort. Similar service is being offered for a merely nominal fee to as many of the neighboring schools as it is possible for our staff to care for.

In addition, our Public Health nurses visit in their homes certain specially referred cases. Sometimes as in the case of tuberculosis, other members of a family have the disease, or some one member may unwittingly be a source of infection to the others. Later, as finances permit, we hope to have a sufficient number of these trained workers to investigate every case, in-patient or out-patient, who presents a public health or sanitation problem.

Through the courtesy and cooperation of the social service departments of other Universities residing on our campus, particularly Ginling, we are now happily able to offer a form of service which formerly was not possible. This comes under the Department of Social Service, and deals particularly with the economic problems of our patients. Many people are ill because they have not the money to buy enough or the correct kind of food. Some cases are just sufficiently ill to reduce their earning capacity, and these seriously affect the welfare of those ordinarily dependent upon them. The amputation of a hand or a foot, a mild disability such as chronic tuberculosis or heart disease may necessitate a patient learning a new and easier trade. By acquaintance with people who are willing to help the Social Service Department may enable a patient to find such a trade or even may teach him some means of making a living.

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IV. Statement in Regard to Cooperation

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STATEMENT IN REGARD TO COOPERATION IN MEDICAL EDUCATION, CHENGTU.

1937 -- 1942

In view of the fact that many details in regard to the cooperative work in medical education in Chengtu are not fully appreciated, the following statement is made. Date: April 22, 1942.

In the Autumn of 1937, a few months after the outbreak of the Sino-Japanese war, an invitation was extended to the Colleges of Medicine and Dentistry of the National Central University, Nanking, to come to Chengtu and be the guests of the College of Medicine and Dentistry of the West China Union University. Both of the Nanking colleges accepted the invitation, and moved to Chengtu with as much apparatus as could be transported, and with all their teachers and students.

Since this statement will deal mainly with medical education, little more will be said regarding dentistry.

The College of Medicine of the National Central University was a relatively new institution, having accepted its first class in the Fall of 1935. Hence when it moved to Chengtu it had only three clases of students. The first year, being entirely devoted to the premedical sciences, was left in Chungking with the College of Science of the N.C.U., and the second and third years only came to the W.C.U.U.

The departments that reached the W.C.U.U. were, therefore, only the preclinical departments, since the clinical departments had not yet been organized. Classroom and laboratory accommodation was provided in the buildings of the W.C.U.U. but in the main the N.C.U. classes used their own equipment and their own teachers. Union in classroom work between the two schools would have been difficult, since the W.C.U.U. is a seven year school, whereas the N.C.U. is a six year school. However, there was considerable exchange of teaching and of equipment. For example, the N.C.U. had no staff in Parasitology. The W.C.U.U. therefore did all their teaching in parasitology for the four years, 1937-41, during which they were associated with us. Similarly we provided teachers in English, Technical Medical English, Organic Chemistry, etc. On the other hand they assisted us by doing teaching in neuro-anatomy, neurology and psychiatry.

One of the W.C.U.U. middle school dormitories was vacated by the students and used for four years by the N.C.U. staff as a teachers' residence. A temple in close proximity to the university was found as a student dormitory.

Soon after arrangements had been completed with the N.C.U. a telegram was received from the Cheeloo Medical School asking if we would welcome them to Chengtu. A reply was at once sent extending an invitation to the Cheeloo students and staff to come to the W.C.U.U., especially the more senior classes. About 60 students and ten staff members accepted our invitation, and arrived here in the Fall of the year. Since no equipment had been brought, and since the Cheeloo School and that of the W.C.U.U. were both seven year institutions with very similar curricula, no great difficulty was experienced in fitting the students into the W.C.U.U. classes, and in pooling the faculty. All the Cheeloo teachers attended West China faculty meetings with full rights of discussion and voting. They were elected to committees and administrative positions the same as were W.C.U.U. teachers.

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In the following year, 1938, in response to continued pressure from some of the Cheeloo staff members, the W.C.U.U. faculty supported a request to the Cheeloo staff in Tsinan that an acting dean of the Cheeloo Medical School in Chengtu be elected to represent the college in outside contacts, with the government or other agencies. At the same time it was stipulated that in all internal affairs the Cheeloo and W.C.U.U. schools should be entirely united. However, beginning with Fall Term of 1938, Cheeloo students registered with Cheeloo University instead of with the W.C.U.U. as guest students. This was due to the fact that with the arrival in Chengtu in the summer of 1938 of the president of Cheeloo that university had organized its entire administration here on the campus of the W.C.U.U., and had also erected temporary dormitories on the campus of the W.C.U.U. But in spite of this new set-up on the part of Cheeloo University, in internal affairs the combined Cheeloo and West China medical schools continued as during the previous year. Some Cheeloo staff members were elected to headship of departments in an attempt to make the union still more complete.

With the beginning of the 1938-39 session the N.C.U. had to provide for a fourth year class. Since in Nanking this medical college had not yet organized its clinical departments, this called for an entirely new set of teachers and equipment, including hospital facilities.

With a view to increasing cooperation between the three medical schools, the faculty of the W.C.U.U. issued an invitation to the other two schools to join with it in a joint or united hospital administration. Since the hospitals that had been used by the W.C.U.U. ever since its inception in 1914 were mission owned, and not directly under the university, and since the agreements between the various hospital owning missions and the W.C.U.U. had been very informal, the N.C.U. especially felt that a more formal type of organization was required. As a result, a formal contract was drawn up and agreed to by the three universities and the various missions having hospital interests in Chengtu. By this contract all the mission hospitals and clinics were formally united under one centralized administration, finances, staff, equipment, and all facilities were entirely pooled. Dr. S. N. Cheer, the dean of the National Central Medical College, was elected director of the United Hospital, and efforts were made to distribute department chairmanships as evenly as possible among the three medical colleges. All administrative officers were elected by the Chengtu Hospitals Board, upon the recommendation of the deans of the three schools. The contract stated that the three universities were responsible at the close of the contract period for restoring the various hospitals and their equipment to the same state as that existing at the beginning of the contract period.

At the same time that the United Hospital was formed all class work in the three senior years in medicine was also pooled, and Dr. Cheer was made director of clinical studies. Each school had in some respects to modify its previous curriculum, but this was accomplished with good will. It was still not possible to pool teaching in the junior years because of the different lengths of courses required by the government school and the two mission schools, and by the fact that the first year students of the N.C.U. remained in Chungking, as previously. But W.C.U.U. and Cheeloo work was entirely in common. Exchange of teaching continued between the W.C.U.U. and the N.C.U., and as before class-room, laboratory and teachers' residences for the N.C.U. was provided by the W.C.U.U.

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Towards the close of the 1938-39 session it was evident that some of the Cheeloo teachers were not too happy over the administrative setup for the two mission schools, and so the W.C.U.U. faculty issued an invitation to the Cheeloo faculty to formally join with them in a Joint Faculty, to be known as the Joint Faculty of the College of Medicine and Dentistry and the Cheeloo Medical School in Chengtu. This invitation was accepted, and the deans of the two faculties presided in rotation at meetings. Cheeloo men accepted a certain number of departmental headships in Joint Departments, and were freely elected to college committees. The main difference between the new arrangement and that existing previously was the name of the Cheeloo Medical School now appeared jointly with the name of the College of Medicine and Dentistry in all actions. Cheeloo was no longer a guest but a full partner in her own right, even though the majority of her faculty still remained away from Chengtu, and even though she had provided no equipment or supplies. Maintenance costs were divided between the schools, Cheeloo making a definite cash contribution and the salaries of her own staff.

During the third war-time session, 1939-40, everything was carried on very amicably, and the various arrangements made during the previous session were continued with minor modifications. The contract governing the United Hospital was renewed with a few minor revisions. Cheeloo's financial contribution was revised somewhat, so that she now paid on a pro rata basis her share of the combined budgets of the two colleges, the amount being determined by the number of students in each college. Dental students of the second and third years, whose work was in common with medical students, were included as if they had been medical students of the W.C.U.U.

The fourth wartime session, 1940-41, brought more changes. The N.C.U. medical college had its first graduating class in the Spring of the year. There were now three full medical schools depending upon the United Hospital for their clinical work. At the same time the United Hospital facilities had been decreased through the loss by fire of the Canadian Mission Hospital for Women and Children. Although a temporary hospital was set up in a vacant Girls' School, it was much smaller than the destroyed Women's Hospital, and was situated at an inconvenient distance from the Men's Hospital, which was now forced to become a General Hospital by accepting a certain number of women patients.

It was obvious that clinical facilities, which before the war had been ample for one medical school, were inadequate for three medical colleges. In addition the very high cost of living was making the staff of all three schools restless, and a marked tendency to engage in outside practice or to accept part-time contracts with other hospitals, was apparent. This tendency was especially evident among the staff of the N.C.U., and one department head resigned rather than give up his private practice. The N.C.U. administration felt that they could obtain more clinical facilities for their students if they had their own hospital, and that they could better control their own staff in a non-union enterprise. Hence, they gave notice of their intention to withdraw from the United Hospital and from the campus of the W.C.U.U. The faculty of the W.C.U.U. tried hard to prevent the withdrawal, but without success, and the N.C.U. on July 1, 1941, left the union in which they had worked for almost four years. They set up their own medical school and hospital and since then have been entirely independent of the two mission institutions. However, a certain amount of exchange in teaching is still kept up.

Statement in Regard to Cooperation -4-
in Medical Education, Chengtu

Their leaving the union was most unfortunate from many points of view. Their hospitals are now running in competition with ours. They compete with us for government grants and for relief funds. Being a government institution themselves they have secured considerable sums of money for their work that we feel could have been spent to better advantage in a union effort. Their leaving was very expensive, in that large sums of money were necessary, and had even half the amount been spent in bettering and extending existing union facilities we believe that much greater benefits would have resulted both to themselves and to the students and staff of the other two schools. Another very unfortunate impression was created at the time of the withdrawal of the N.C.U. by their failure to assume their share of the cost of certain renovations to the hospitals they had used for three years in order to place those buildings again in a condition somewhat comparable to that existing when the United Hospital was initiated. (This matter may not yet be entirely closed).

The Cheeloo Medical School also insisted on withdrawing from the joint Faculty also very much to the disappointment of the W.C.U.U. faculty, which did all in its power to urge them to remain within the union. By this withdrawal they took no part in the administrative work of the two colleges. However, the W.C.U.U. faculty insisted that even though the Cheeloo staff were unwilling to engage in either departmental or college administrative duties, there could be no separation in class work or in curriculum as long as the Cheeloo Medical School remained in Chengtu. Hence, complete pooling of students and staff has continued, with the Cheeloo members of the staff taking no part in administrative work. The W.C.U.U. faculty extended to the Cheeloo faculty members an invitation to attend all meetings and to take part in the discussion. Some of the Cheeloo staff have done so very regularly. They have been notified of all meetings through their dean. Their withdrawal from the Joint Faculty was a move that is still quite incomprehensible to the faculty members of the W.C.U.U. College of Medicine and Dentistry. It is true that their work has been lightened by their refusal to take part in administrative work or to act on committees, etc. but why they should wish to have no voice in deciding college policies is difficult for us to understand. However, we have at least prevented any separation of class-room work and duplication of teaching.

After the withdrawal of the N.C.U. from the United Hospital, the two remaining colleges organized a new United Hospital, somewhat modifying the previous contract. The new contract hasbeen prepared and sent to the various missions for ratification, but some have not yet taken action. Through the United Hospital Cheeloo members in clinical departments are represented in hospital administrative work. It is only in preclinical departments and in general curricular matters that they have no voice (at their own request, this must be again emphasized).

The session 1941-42 has thus continued with the two schools cooperating in the United Hospital, in all laboratory and class room work, with the complete pooling of all classes and staff. Everything has been most amicable, and the spirit prevailing between the two schools has been good. However, the steadily increasing costs of living are again troubling all members of both faculties, and the question of outside work by faculty members is ever a troublesome one. Unless very substantial salary increases are found it is going to be difficult to insist on no such extra work being done. It is quite impossible for our men to make ends meet on present salaries.

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Statement in Regard to Cooperation -5-
in Medical Education, Chengtu

The question has frequently been raised as to whether or not we are over-staffed as an institution. The following facts should provide an answer to that question.

In the year 1937-38 the W.C.U.U. had a staff in medicine only of 36 full time and three half time teachers, making a total of approximately 37½ teachers, including graduates of the rank of assistant, but excluding technicians.

In 1941-42 the W.C.U.U. had a staff of 40 full time and three part time teachers, of the same ranks as above, say a total of 41½ teachers. This represents an increase of 10% in teaching staff.

During these five years our staff losses have amounted to 12½, including 7½ missionaries. Our gains have been 16, including only one missionary. Since most of the missionaries occupied senior positions on our staff, and since the majority of new appointees are still in junior positions, there has been a net loss in the number of our teaching personnel.

During the same period the medical students (including second and third year dental, for whom medical teachers are responsible) have increased from 118 to 178, an increase of 51%. Hence, our staff increases have not kept pace with our student body increases. These figures do not include Cheeloo staff or students.

In 1937-38 Cheeloo Medical School brought 59 students to Chengtu (for second, third, fourth and fifth year work). These students were accompanied by a staff of 10 men.

In 1941-42 the Cheeloo Medical School had 75 students here, above the premedical courses, and a staff of 12. This represents an increase in the student body of 27% and an increase in the staff of 20%.

If the above figures are combined, we find that in 1937-38 the two schools had 177 students in Chengtu, excluding pre-medical students, but including dental students of the second and third years. In 1941-42 the same group numbered 253.

The combined teaching staff in 1937-38 was 47½ and in 1941-42 it was 53½.

Hence, the student body increased by 43%. whereas the teaching staff increased in number by 12%. But at the same time the W.C.U.U. teaching staff decreased in the proportionate number of senior men, the increase being largely in the ranks of assistants and junior instructors.

At the same time other teaching duties of the medical faculty have been considerably increased. These have been due to (1) increased number of students taking pharmacy, and demanding work from medical teachers in such subjects as physiology, pharmacology and bacteriology; (2) increased number of students in biology in the various universities in Chengtu. Of these biology students those from Ginling, Cheeloo and W.C.U.U. receive courses from medical teachers; (3) opening of work in household economics by Ginling and W.C.U.U., these students also taking work in medical subjects. Whole laboratory sections in such courses as physiology and pharmacology have been opened in order to accommodate students of the above groups.

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The presence of two (and until recently three) medical colleges has greatly increased the amount of administrative work. Much more time is spent in consultation than was formerly necessary.

The reorganization of the former hospitals into a United Hospital has greatly increased the time required for consultation with missions, etc. The building of the new hospital also takes much time. In addition a Tuberculosis Sanatorium and a Leper Hospital have been added to our hospital group during these five years. The closing of routes to such places as the P.U.M.C. has very greatly increased our diagnostic service to outside hospitals in pathology, etc.

Thus it is quite possible that the small increase has been an actual decrease. At least most of the faculty feel that they are much too busy, and have far less time for creative work than formerly, and are more tied down by routine academic and hospital work.

Thus, instead of being over-staffed, I believe that it will be evident that in comparison to pre-war conditions prevailing in the W.C.U.U. there has been a considerable decrease in staff, as compared to work to be done, even when the Cheeloo staff is included.

Since the above article on cooperation was prepared, the University, through its College of Medicine and Dentistry, has entered into a scheme of cooperation with the Municipality of Chengtu, for the operation of a hospital for psychopathic patients. The following is the agreement made between the Municipality and the University:

1. Personnel.

    1. The Superintendent shall be appointed by the Municipal Council on the nomination of the W.C.U.U.

    2. The Treasurer shall be appointed by the Municipal Council direct.

    3. The medical staff shall be recommended by the W.C.U.U. to the Superintendent, who shall forward their names to the Municipal Council for appointment. Other officers or staff members shall be chosen by the Superintendent and recommended to the Municipal Council for appointment. Resident physicians and internes shall be appointed by the Superintendent and reported to the Municipal Council for information and reference.

    Note: For the year 1943 the Hospital shall have one Superintendent, one Medical Director, one Resident Doctor, one interne. Later more doctors may be added.

2. Division of Expenses of the Hospital.

    1. The West China Union University shall be responsible for the salary of the Superintendent and doctors.

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Statement in Regard to Cooperation -7-
in Medical Education, Chengtu

2. The Municipal Council shall be responsible for the living allowances of the Superintendent and doctors. The scale of allowance shall be in accordance with the Government regulations.

3. All other expenses shall be undertaken by the Municipal Council.

4. Laboratory fees, except for free patients, shall be paid to the W.C.U.U.
Note: This article shall be rescinded when the Hospital has opened a laboratory for its own use.

5. All other receipts shall be paid to the Municipal Council.

3. The W.C.U.U. during the period of cooperation may use the Hospital for practice by the students in Psychiatry courses, and shall put up a board outside the hospital gate with the name: "West China University Medical School. By Special Agreement, Mental Diseases Practice Hospital.)

4. If either party wishes to terminate the contract, six months' notice of such action shall be given to the other party.

5. This contract becomes effective as soon as it is signed by both parties.

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V. School of Nursing

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From West China Union University
Received May 5, 1943

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SCHOOL OF NURSING

In 1914 the Men's Hospital, and in 1915 the Women's Hospital of the former Canadian Methodist Mission opened Schools of Nursing in Chengtu. These were registered with the Nurses' Association of China in 1920 and 1919 respectively.

In 1938, with the organization of the United Hospital of the Associated Universities in Chengtu, the above two schools were united to form the School of Nursing of the United Hospital.

The entrance requirements are graduation from a registered Junior Middle School, and the passing of an entrance examination. The course is 3½ years in length, the first half year being a probation period. Only women students are accepted.

This school, it should be noted, is not a university school, but a mission one, being run by the Canadian Mission. However, its connections with the university are very close, and it is recognized as an affiliated institution along with the School of Midwifery of the American Methodist Mission. Also, missionary nurses of other missions, notably the Baptists, have worked in this school. With the opening of the University Hospital a portion of the school has moved to the new hospital, and some student classes are conducted in the College Building. Also, for many years the staff of the College have assisted in the teaching of the nurses.

The greater part of the budget of the school is provided by the United Hospital, that is it is largely supported by patients' fees. Some grants are received each year from the Ministry of Education, however.

The first step towards the provision for a School of Nursing in the University Hospital, was distinct from the mission hospitals in the city, was taken in 1936. At that time the Baptist Mission agreed to a request of the University that the Baptist Middle School Dormitory be made available for a nurses' dormitory and nursing school, but on condition that the university build in exchange another dormitory on the middle school site.

In January 1941 the College voted (Minute J-134) to request the Women's College to undertake responsibility for organizing, equipping and staffing the School of Nursing in the University Hospital.

The Board of the Woman's College replied (their minute No. 704) that they would welcome the establishment of a degree course in nursing in the university, but that (their minute No. 705) they were unable to assume responsibility for a School of Nursing in the Hospital.

In April 1941 the College faculty (Minute J-153) requested the University to approach the various women's boards cooperating in the university with a view to their accepting the school of nursing in the university hospital as a special responsibility, and especially the Canadian W.M.S. to support this work instead of rebuilding their hospital for Women and Children, burned the previous June.

The College faculty also recommended to the University that it sanction the opening of a School of Nursing in the University Hospital or the transfering of the present school from the city hospitals to the University Hospital.

The General Faculty (Minute No. 615) agreed to the above request, and recommended it to the Board of Directors. They also adopted the College minute J-153. (Min. 614).

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The Board of Directors on May 10th, 1941 passed the following Minute: D.174. School of Nursing. "Resolved to refer to the Executive Committee the recommendation of the General Faculty (minute 615) drawing attention to the fact that there is not room in Chengtu for two nursing schools."

In December 1941, (M.D. Minute J-231,4) again requested the Canadian W.M.S. to apply to the school of nursing the proceeds from insurance, etc., of the burned hospital.

On June 4, 1942 (M.D. Minute J-286, 3) the College requested the School of Nursing to move to the new hospital in time for the opening, if possible.

On Sept. 14, 1942, Miss A. Harrison wrote that the W.M.S. were willing to donate approximately $120,000 (National Currency), received from insurance and sale of material from the burned hospital, to the new school of nursing as their share of what they still believed should be a joint project, and not one specially supported by the W.M.S. In its minute no. J-343 the College acknowledged this letter, and recorded its thanks. This money has been turned into Canadian currency, to be kept in Canada until after the war.

To recapitulate: The present situation is:

We have in the United Hospital a School of Nursing registered with the Government, with Junior Middle School graduation as entrance requirement. This work is already being carried on partly in the University Hospital, and partly in Sze Shen Tsi Hospital. (1 class in the former, and two in the latter).

We have no proper accommodation for nurses in the University Hospital. They are now housed in hospital wards that should be used for patients. This reduction in ward space seriously reduces the hospital's efficiency and also income.

We have a promise from the Baptist Mission that as soon as we can build them another dormitory we may have the present Baptist Middle School dormitory. This is located on a convenient site, adjacent to the Hospital.

Towards the above we have a promise from the Canadian W.M.S. of N.C.$120,000 or its equivalent, after the war, but coupled with a statement that any school must be a joint project and not just a Canadian W.M.S. supported affair.

We have a statement from the Woman's College Board that they would welcome a degree course in nursing. This would be a $5\frac{1}{2}$ year or 6 year course. It implies the addition of at least a few degree course graduate nurses to our Hospital and University staff.

Finally, there has been some suggestion from the N.C.C. through Dr. Cressy, that such a degree course would be very welcome and is much needed to train principals and teaching staff for schools of nursing in mission hospitals all over the country. Formerly Yenching University, Ginling College, and possibly one or two other institutions provided such courses in cooperation with the P.U.M.C. Now none are being given anywhere in China, and the Schools of Nursing are feeling the serious handicap of having as their principals and teachers nurses whose academic training stopped with Junior Middle School graduation.

Dr. L. G. Kilborn

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VI. The University Leper Hospital

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REPORT OF THE UNIVERSITY LEPER HOSPITAL

TO JULY 1st 1943

The Leper Hospital of the College of Medicine and Dentistry of the West China Union University has completed two years of service since its completion. Before that time there were some patients treated but not in any organized way. Since the opening of the hospital thirty eight patients have been registered. Of this number all but three have been residents, those three being clinic patients who came weekly for their injections.

A leper hospital is unlike any other hospital in that the patients are not bedridden, but up and about and able to carry on activities physical and mental. Part of their treatment should consist of work for brain and body, regular exercise and regular schooling according to the degree of their education.

A leper hospital is unlike any other hospital in another way, in that the patients are chronically ill and require a long time to receive treatment. The average time for treatment in Western countries is six and three quarter years. This helps to explain why there is not a much larger number of registrations in any leper hospital. Compared with other similar institutions our hospital has had a higher number of registrations, and the work is rapidly increasing.

The hospitalization programme of the institution consists of organized class work, organized physical activities, such as cleaning the bedrooms, halls, dining rooms and staff quarters, class rooms and chapel; weeding the lawns, and assisting in the vegetable gardens.

A special form of physical activity has been found in the organization of a cooperative society among the staff and patients. The patients have bought shares in the cooperatives, and the money is now invested in pigeons, chickens, geese, and goats. Up to date, all the gains from the work have been turned back into the cooperatives and the capital greatly increased. We have two improved kids, from one goat, the result of artificial impregnation under the direction of the University department of Agriculture. These will be disposed of as soon as they are sufficiently grown. The birds are sold as they develop and the receipts reinvested in more stock, so the work goes on, the patients have occupation and this assists in their cure.

Our orchard of 250 trees is now two years old, but last summer the excessive rains flooded the grounds and drowned out some fifty four trees. Some of the apple trees bore fruit this year but thieves broke down the fence and stole the fruit. However, the trees are young and the fruit not very good, we look for better fruit next season.

Were it not for the fact that we grow our own vegetables we would find it impossible to carry on under the present economic strain. All the vegetables eaten in the Hospital are grown on the place. We also pickle some; this helps when vegetables are scarce. The sale of some also helps defray the cost of a permanent farmer.

It has been exceedingly difficult to secure the necessary medical supplies, all of which must come from India. While the drugs we especially need are not necessary for war work, it does not make any difference in the securing of them.

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However, just as we had used the last ounce of our chaulmoogra oil, we secured a shipment from India which will be sufficient to carry us for several months.

The religious side of the work has been looked after by the staff of the Theological College. We are indebted to Dean Wallace Wang for supplying students to conduct the regular religious work in our chapel, and we are glad to say that it has been enjoyed by the patients, two of whom are Christians.

During the year we have studied the incidence of leprosy in West China, and while our studies so far have been quite superficial they have led us to believe that there is much more leprosy in this part of China than we have heretofore believed. Our information would also lead us to believe that Tibet has a much higher incidence than anyone has heretofore thought.

We have also done some study with regard to the therapeutics of the disease and at the moment are cooperating with the Department of Pharmacology in the use of soyabean oil as a curative agent in leprosy. The College of Medicine and Dentistry has sent an appeal to New York to the Leonard Wood Memorial Leprosy Association for funds to conduct a survey and research department in our College.

Wallace Crawford, M.D.D.P.H.
Superintendent

9/2/43

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VII. Financial Statements

Expenditures for the Academic Year 1941-1942
Medical Property Account for Year Ending June 30, 1942

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COLLEGE OF MEDICINE AND DENTISTRY, WEST CHINA UNION UNIVERSITY

EXPENDITURES FOR THE ACADEMIC YEAR 1941-1942

FOR INSTRUCTION (Omitting Salaries of Western Personnel)

	N.C.	N.C.	U.S.	U.S.
Office of the Dean of Medicine				
Salaries of Chinese staff	$ 6,072.00		$ 324.53	
Office expense and supplies	1,628.54		87.04	
Printing	366.70		19.60	
		$ 8,067.24		$ 431.17
Office of the Dean of Dentistry				
Salaries of Chinese Staff	$ 6,000.00		320.68	
Office expense and supplies	649.10		34.69	
		6,649.10		355.37
Salaries of Chinese Instructors		296,774.12		15,861.79
Department of Supplies and Equipment				
Hospital gowns, transportation	19,140.52		1,022.48	
dental equipment	2,000.00		106.89	
Electricity	14,868.69		794.69	
Anatomy	17,918.08		957.67	
Biochemistry	1,800.00		96.20	
Hygiene and public health	4,807.00		256.92	
Public health -- Wenkiang station	1,801.74		96.30	
Internal medicine	16,323.00		872.42	
Obstetrics and Gynecology	200.00		10.69	
Ophthalmology	200.00		10.69	
Otolaryngology	10,690.75		571.39	
Prosthodontology	8,388.45		448.34	
Odontology	18,597.45		993.98	
Pathology	20,540.04		1,097.81	
Oral Pathology and paradontology	15,656.63		836.27	
Physiology and pharmacology	3,431.30		183.45	
Surgery	3,752.81		200.58	
Animal House operation		160,116.46		8,556.77
		N.C.$471,606.92		U.S. $25,205.10

FOR ADMINISTRATION AND MAINTENANCE

Share of administrative expense of West China Union University	$ 41,784.37		
Share of operation and maintenance expense of WCUU	34,568.79		
		N.C.$ 76,353.16	U.S. $ 4,075.52

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WEST CHINA UNION UNIVERSITY

MEDICAL PROPERTY ACCOUNT FOR THE YEAR ENDING JUNE 30, 1942

HOSPITAL CENTRAL PLANT

Receipts		Expenditures	
Balance, July 1, 1941.....	NC$ 34,739.10	Central Building.....	NC$173,075.86
Sale of firewood	3,069.20	O.P.D.....	2,970.60
Interne Dormitory	4,350.00	Dental Clinic	2,448.10
N.Y.Treasurer(US$5,500)...	89,370.00	Office expense and part of architect's salary.....	3,468.39
" " for dental clinic (US$3,000).....	56,140.35	Balance on hand July 1, 1942	5,705.70
	NC$187,668.65		NC$187,668.65

HOSPITAL EQUIPMENT

Receipts		Expenditures	
Balance, July 1, 1941.....	28,455.65	Equipment per Dr. Brown (US$1,000).....	18,710.00
		Hospital furnishings.....	54,018.24
Overspent, July 1, 1942...	50,522.59	" " (old C.F.balance)	6,250.00
	NC$ 78,978.24		NC$ 78,978.24

DENTAL WING -- (Destroyed by Fire)

Receipts		Expenditures	
Balance, July 1, 1941.....	36,862.15	Building and equipment.....	9,493.65
		Balance on hand July 1, 1942	27,368.50
	NC$ 36,862.15		NC$ 36,862.15

CENTRAL BLOCK -- MEDICAL AND DENTAL WING

Receipts		Expenditures	
Balance, July 1, 1941.....NC$	3,809.40	Material and construction...NC$	66,578.03
Nat'l Central Univ.....	10,000.00		
C.W.Service Gift (Canadian $1,635.63).....	30,496.32		
China Foundation	40,000.00	Balance on hand, July 1, 1942	17,727.69
NC$	84,305.72	NC$	84,305.72

ANIMAL HOUSE

Receipts		Expenditures	
Balance, July 1, 1941.....	35.00	Expenditures on construction	2,004.25
From general funds	1,969.25		
NC$	2,004.25	NC$	2,004.25

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