THE MEDICAL SCHOOL

To the President of the University of Minnesota:

SIR: Following is a report of the Medical School for the year 1913-14. The Medical School conducts the following educational activities: (a) The Medical School (proper), (b) the University Hospitals, (c) the School for Nurses, (d) the School for Embalmers, (e) the School for Public Health.

THE MEDICAL SCHOOL (PROPER)

The Faculty.—The year 1913-14 was the first conducted by the reorganized Faculty. I assumed the duties of the deanship on August 1, 1913.

The following appointments to the Faculty were made during the year: Robert A. Hall, B.A., M.A., Ph.D., Assistant Professor of Pharmacology; J. F. McClendon, Ph.D., Instructor in Physiology; Albert C. Potter, B.A., M.D., Instructor in Pathology and Bacteriology; Margaret Warwick, B.S., M.D., Instructor in Pathology and Bacteriology.

The following reappointments to the Faculty were made during the year: Thomas B. Hartzell, D.M.D., M.D., Research Professor in Mouth Infections; Soren P. Rees, B.S., M.D., Assistant Professor in Medicine; Arthur Sweeney, B.A., M.D., Lecturer in Medical Jurisprudence.

The following promotions were made: Richard E. Scammon, Ph.D., from Associate Professor to Professor in Anatomy; Emil S. Geist, M.D., from Instructor to Assistant Professor of Orthopedic Surgery; Frederic W. Schultz, B.A., M.D., from Instructor to Assistant Professor of Pediatrics; Carl C. Chatterton, M.D., from Assistant to Instructor in Orthopedic Surgery; Charles R. Drake, M.D., from Assistant to Instructor in Medicine; Ernest M. Hammes, M.D., from Assistant to Instructor in Mental and Nervous Diseases; Angus W. Morrison, B.A., M.D., from Assistant to Instructor in Mental and Nervous Diseases; Horace Newhart, M.D., from Assistant to Instructor in Diseases of the Eye, Ear, Nose and Throat; Harold Pederson, B.A., M.D., from Assistant to Instructor in Diseases of the Eye, Ear, Nose and Throat; Charles A. Reed, B.S., M.D., from Assistant to Instructor in Orthopedic Surgery.

The following resignations were accepted: E. A. Baumgartner, B.A., M.A., Instructor in Histology and Embryology; E. H. Parker, M.D., Instructor in Diseases of the Nose and Throat.

Through the death of Dr. J. Clark Stewart on June 25, 1914, the Faculty lost one of its most valued members. He had been associated with this School and the Medical Colleges preceding it since 1884. Acting in succession as Professor of Histology, of Bacteriology, of Pathology, of Surgical Pathology and of Principles of Surgery, and developing several of these departments from their foundations, he left his mark on

almost every branch of medical teaching. Moreover his concept of medical education was always in advance of the times. Consequently his influence in shaping the growth of the Medical School during the rapid changes of recent years was very important.

Registration statistics.—During the year 1913-14, 169 students were registered in the Medical School, distributed as follows: 66 in the third (freshman) year, 36 in the fourth (sophomore) year, 37 in the fifth (junior) year and 30 in the sixth (senior) year. The degree of Doctor of Medicine was conferred upon 30 students. Six students engaged in graduate work in departments of the Medical School. The Shevlin Fellowship was held by Sakyo Kanda, working in the Department of Physiology.

Curriculum.—The course of study has been revised so as to allow greater flexibility and freedom. The total number of credit hours required for graduation has been reduced, giving the students more time for outside study and individual development. The specific requirements of the departments have been further diminished in order that elective work may be introduced, with the end in view of stimulating interest and individuality. A plan of clinic clerkships has been developed under which each sixth-year student will spend two or three hours daily for half a year in the hospital in the first hand study of disease. This is a decided step in advance.

Clinical year.—The requirement of a fifth or clinical year will go into effect the coming year. This means that those students who complete their class studies in June, 1914 (with the exception of some who were already matriculated in the University when the regulation was adopted), will not receive their M.D. degrees until they have served one year as interns in approved hospitals, under such rules as the faculty may prescribe.

Graduate work-Teaching fellowships.-Two serious needs are recognized by medical educators everywhere. There is a need first for properly organized training in the medical specialties. The Medical School has arranged to offer courses to this end, open to graduates of high-grade medical schools who have had also one year of general intern service or equivalent experience. The courses will occupy three years, will be both theoretical and practical, will include research, and will lead to the degree of Doctor of Science in the specialty chosen. The degree of Master of Science similarly qualified will also be offered. These advanced degrees will be administered by the Graduate School of the University. The number of students will be limited to the facilities of the Medical School. At present graduate students can be received only in Surgery, Eye, Ear, Nose and Throat Diseases, General Medicine, Pediatrics, Nervous Diseases, Obstetrics and Gynecology, and possibly Orthopedia. Students entering these courses on the regular basis will pay the Medical School tuition fee.

The second need in medical education is for thoroly trained young physicians to act as full-time assistants in the clinical departments. The Medical School proposes to meet both the needs which have been described by appointing teaching fellows in the clinical departments. These

men will be carefully selected graduate medical students and candidates for the advanced degree. They will receive small salaries for service as teachers and assistants and will devote their full time to hospital, dispensary, and laboratory work during eleven months of each year. We shall start the session of 1914-15 with five or six such fellowships and hope to see the number increased within the next two or three years to thirty.

Provision is also made for graduate scholarships in medicine the holders of which will receive free tuition and will give certain service in the clinical departments. The Regents have so far authorized five such scholarships.

Through its provision for graduate students, graduate scholars, and teaching fellows in medicine, the Medical School believes that it has taken a step of the greatest importance for the future of medical teaching and the medical profession.

Hospitals.—Concerning the University Hospital consult page 100 of this report.

As the result of a year's experience a new and better arrangement has been entered into between the Medical School and the Minneapolis City Hospital. One half of the cases are assigned to Staff A, the members of which are nominated by the Medical School. A similar arrangement has been made with the City and County Hospital, St. Paul, covering most of the services of that institution.

Relations with other divisions of the University.—During the last year a marked spirit of coöperation has been developing between the Medical School and other Colleges of the University. The departments of Anatomy and Physiology have been made regular departments of the College of Science, Literature, and the Arts. Appropriate courses in these sciences may now be elected by any student as part of a liberal education. General Bacteriology is open to academic college students and is required of certain students in the College of Agriculture. Physiology is required of Home Economics students. The Medical School has always done a large amount of teaching for the College of Dentistry. The relations newly established show that the same kind of service can be extended to other divisions of the University.

On the other hand the new curriculum of the Medical School, through its elective privileges, will permit medical students to take appropriate instruction outside the Medical School proper. Certain courses in advanced chemistry, physics, animal biology and psychology have been found appropriate for the purpose.

Necds.—The imperative need of the Medical School is an increase of its hospital facilities. Undergraduate teaching of the the best kind can not be undertaken without ample and varied services in all the medical specialties. For acceptable graduate teaching such services are even more imperative. At present we have undergraduate provision only for the main branches. The specialties are almost unrepresented in our hospital. The privileges accorded at the municipal hospitals of the Twin Cities are valuable but these hospitals are not primarily teaching institutions. Their staffs are composed of loyal, enthusiastic teachers; but these men

are primarily active practitioners. The time they give to the hospitals and to teaching is contributed from busy professional lives. The institutions are too far away. The municipal hospitals can always be employed as supplementary agencies but they can never take the place of the University Hospital. This institution should be doubled in capacity. There can be no hesitation in this matter if the Medical School is to take front rank. Nor should the expense be charged narrowly to medical education, for no other part of the University budget goes back so directly to the people of the state. Hundreds of patients, who without proper treatment might have become charity charges, every year go from our hospital to the productive ranks of the population. Many self-respecting but unfortunate people are saved from an overwhelming burden which might easily have crushed their independence of spirit and added to the parasitic and dependent element of our population. I cordially endorse all that the Superintendent of Hospitals has to say concerning desirable extension.

THE UNIVERSITY HOSPITAL

The report of the Superintendent is herewith submitted as follows: The admissions to the different services, births, and deaths were as follows:

Medical, including neurology and pediatrics	550
Surgical, including opthalmology and oto-laryngology	691
Obstetrical	
Births	258
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Total1,	786
Deaths	97

The daily average number of patients was 124 and there were 292 clinics held.

The average cost per diem per patient was \$1.65, which is \$0.36 less than the per capita cost the preceding year. This decrease is due in part to the fact that no clinical salaries were charged against the hospital the past year, whereas a charge of \$8,000.00 was made the previous year. In greater part the decrease is due to a larger daily average number of patients (124 as compared with 108) and to the more economical purchase of supplies. The number of new patients and total attendance at the Out-Patient Department were as follows:

Tatient Department were an arrange	
1913-1914	An increase of
New patients	2,024
Total attendance 47,347	6,890
The daily average attendance was 155.21.	
The attendance by divisions was as follows:	
	Total

Division	New Patients	Attendance
Medicine	2,561	8,111 6.87 1
Surgery	1,837	0,671

Skin	1,235	4,394
Nose and Throat	1,490	4,355
Eye and Refraction	2,244	6.796
Ear	653	3.173
Gynecology	674	4,862
Obstetrics	391	800
Neurology	255	1,853
Pediatrics	1.515	3,347
Genito-Urinary	463	2,221
Orthopedics	237	564

The following figures are of interest as showing the growth of the Out-Patient Department during the past ten years:

]	Number of	Tota!
Year	1	new patients	attendance
1903-1904		. 2,270	8.891
1904-1905	•••••	. 2,478	9,323
1905-1906		2,656	10,141
1906-1907		2,714	9,978
1907-1908		2,871	19,531
1908-1909		3,410	11,897
1909-1910		. 4,206	15,110
1910-1911		6,636	24,223
1911-1912		9,229	33,190
1912-1913		11,501	40,457
1913-1914		13,525	47,347

The Out-Patient Department Building at 1806-1810 Washington Ave. South has been outgrown. Approximately six times as many patients were registered in the year 1913-1914 as were cared for in 1903-1904. The crowded conditions are such as to render the proper care of all patients difficult. New quarters for the Out-Patient Department should be provided during the next biennial period, and the location of the Department should be changed to the Medical School Campus.

In April, 1914, at the request of the Superintendent of the Minneapolis City Hospital and upon the authority of the University administration, the building at 206 State Street Southeast was opened upon a per diem cost basis for the purpose of caring for City Hospital patients convalescent from contagious diseases in order to assist the City Hospital in meeting the unusual demands made upon it by large epidemics of scarlet fever and diphtheria. Between April 3 and May 16, 1914, 576 days of hospital care were given 46 patients for which \$1,036.00 were collected and credited to Elliot Hospital support. The building at 303 Washington Avenue Southeast was opened several times during the period for the purpose of isolating University Hospital patients developing contagious disease after admission, and to care for University students and employes suffering from contagious disease. The University

Hospital has never been able to meet properly reasonable demands for the care of cases of contagious disease developing among its patients, or numbers of the University student body afflicted with contagious disease, owing to lack of proper facilities. Such demands can be met only by the provision of space in a modern building, built and equipped for the purpose.

I find it necessary again to refer to the unsatisfactory housing facilities afforded the School for Nurses. The number of nurses in training has steadily increased and will of necessity increase still further upon the completion of the service building, now in process of construction, since its occupation will release space in the Elliot Memorial Building which will permit an increase in the capacity of the hospital of forty beds, thus requiring ten more nurses. The buildings at 417-419 Delaware Street, 312 Church Street, and 327 Church Street, are now occupied to their full capacity by nurses, and January 1 next another building to house twenty nurses will be required. I therefore renew my recommendation of two years ago that a suitable building be provided to house the Training School for Nurses.

For the greater part of the time admissions to the Hospital during the past two years have been delayed by the existence of waiting lists in different services. These delays frequently occasion ill-feeling toward the Hospital on the part of applicants for admission, but have been unavoidable since the capacity of the hospital is insufficient to permit the acceptance of applications for admission promptly. In order properly to provide for the admission of the patients entitled to care at the University Hospital and to meet teaching requirements of the Medical School its capacity should be at least doubled.

Respectfully submitted,

L. B. BALDWIN, Superintendent

THE SCHOOL FOR NURSES

The report of the Superintendent is submitted as follows:

Senior student nurses7Junior student nurses14Accredited nurses entered9Accredited nurses withdrawn3Student nurses matriculated13Student nurses withdrawn3Student nurses graduated6

Certificates to accredited students.....

During the latter part of the year all classes and lectures have been held in the afternoon, thus eliminating evening lectures. One new course of value has been added during the past year. We call it "Invalid Occupation," and it is intended to teach nurses the importance of keeping convalescent patients, children especially, pleasantly occupied and entertained. This course is elective in the senior year.

Applications both for the full course, and for a year of additional training, are increasing each year. The need for a Nurses' Home is urgent for two reasons—first, in order that we may relieve our crowded, unsanitary housing conditions, and second, that we may be provided with proper teaching equipment.

One further need which we hope to supply in the near future, is a teaching assistant who will have charge of the practical nursing work in the wards.

Respectfully submitted,
LOUISE M. POWELL, R.N., Superintendent

THE SCHOOL FOR EMBALMERS

This is a short course which was organized in 1913-14 at the request of the Minnesota Funeral Directors Association, which generously agreed to finance the instruction during a trial period. The School is conducted by a committee appointed by the Medical School and representing, in addition, the School of Chemistry and the State Board of Health. Thirty-five students attended the first session, which occupied six weeks beginning January 5, 1914. The passing of the examination of the School for Embalmers is accepted by the State Board of Health for the licensed embalmer's certificate.

THE SCHOOL OF PUBLIC HEALTH

The need for the organization of public-health teaching and investigation in the University has been apparent for a long time. There has been difference of opinion as to how this work should be articulated with the existing University units. It is apparent that many activities both in various divisions of the University and also in the State Board of Health must be coordinated if effective work in public health is to be maintained. As a result of numerous conferences during the past year it has been agreed that, pending the time when Public Health shall be organized as an independent unit with a staff and budget of its own, this work shall be in charge of an Executive Committee consisting of the President, the Dean of the Medical School, the Executive Officer of the State Board of Health, the ranking instructor in Public Health in the Department of Pathology, Bacteriology, and Public Health, and the ranking instructor in Sanitary Engineering in the College of Engineering. This committee reports to the Administrative Board of the Medical School. The legislative budget of the Medical School contains a request for funds for public-health work; and the Executive Committee is now engaged in formulating a course of study for health officers and other details of organization. It is hoped to have the School of Public Health fully constituted by the beginning of the next school year.

Respectfully submitted,

E. P. Lyon, Dean