

ANNOUNCEMENT

OF THE

JOHNS HOPKINS MEDICAL SCHOOL.

ESTABLISHED BY THE JOHNS HOPKINS UNIVERSITY  
IN CONNECTION WITH THE JOHNS HOPKINS HOSPITAL.

1893.

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THE JOHNS HOPKINS PRESS,  
BALTIMORE,

1893.

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GEORGE W. CORNER,

CHARLES F. MAYER.

## FACULTY.

The names are arranged in the several groups in the order in which the members of the staff assumed their duties.

### PRESIDENT.

DANIEL C. GILMAN, LL. D.

A. B., Yale College, 1862, and A. M., 1855; LL. D., Harvard University, 1876, St. John's College, 1876, Columbia College, 1887, Yale University, 1889, and University of North Carolina, 1889; Professor in Yale College, 1863-72; President of the University of California, 1872-75.

### PROFESSORS.

WILLIAM H. WELCH, M. D.

*Professor of Pathology and Dean.*

A. B., Yale College, 1870; M. D., College of Physicians and Surgeons (N. Y.), 1875; late Professor of Pathological Anatomy and General Pathology in the Bellevue Hospital Medical College, N. Y.; *Pathologist to the Johns Hopkins Hospital.*

IRA REMSEN, M. D., PH. D.

*Professor of Chemistry.*

A. B., College of the City of New York, 1865; M. D., College of Physicians and Surgeons, N. Y., 1867; Ph. D., University of Göttingen, 1870; Professor of Chemistry in Williams College, 1872-76, and previously Assistant in Chemistry in the University of Tübingen; *Editor of the American Chemical Journal.*

WILLIAM OSLER, M. D., F. R. C. P.

*Professor of the Principles and Practice of Medicine.*

M. D., McGill University, 1872; Fellow of the Royal College of Physicians, London; Professor of the Institutes of Medicine, McGill University, Montreal, 1874-1884; Professor of Clinical Medicine, University of Pennsylvania, 1884-89; *Physician in Chief to the Johns Hopkins Hospital.*

HENRY M. HURD, M. D.

*Professor of Psychiatry.*

A. B., University of Michigan, 1863, and A. M., 1870; M. D., University of Michigan, 1866; Superintendent of the Eastern Michigan Asylum, 1878-89; *Superintendent of the Johns Hopkins Hospital.*

WILLIAM S. HALSTED, M. D.

*Professor of Surgery.*

A. B., Yale College, 1874; M. D., College of Physicians and Surgeons (New York), 1877; late Attending Surgeon to the Presbyterian and Bellevue Hospitals, New York; *Surgeon in Chief to the Johns Hopkins Hospital.*

HOWARD A. KELLY, M. D.

*Professor of Gynecology and Obstetrics.*

A. B., University of Pennsylvania, 1877, and M. D., 1882; Associate Professor of Obstetrics, University of Pennsylvania, 1888-89; *Gynecologist and Obstetrician to the Johns Hopkins Hospital.*

*Faculty.*

FRANKLIN P. MALL, M. D.

*Professor of Anatomy.*

M. D., University of Michigan, 1883; Fellow of the Johns Hopkins University, 1886-88, and Assistant in Pathology, 1888-89; Adjunct Professor of Anatomy, Clark University, 1889-92; Professor of Anatomy, University of Chicago, 1892-93.

JOHN J. ABEL, M. D.

*Professor of Pharmacology.*

Ph. B., University of Michigan, 1883; Graduate Student, Johns Hopkins University, 1883-84; M. D., University of Strasburg, 1888; Professor of Materia Medica and Therapeutics, University of Michigan, 1891-93.

WILLIAM H. HOWELL, PH. D., M. D.

*Professor of Physiology.*

A. B., Johns Hopkins University, 1881, Fellow, 1882-84, Ph. D., 1884, Assistant in Biology, 1884-85, Associate, 1885-88, and Associate Professor, 1888-89; Lecturer, University of Michigan, 1889-90, M. D., 1890, and Professor of Physiology and Histology, 1890-92; Associate Professor of Physiology, Harvard University, 1892-93.

## ASSOCIATES.

GEORGE H. F. NUTTALL, M. D., PH. D.\*

*Associate in Bacteriology and Hygiene.*

M. D., University of California, 1884; Graduate Student in the Johns Hopkins University, 1885-86, 1890-91, and Assistant, 1891-92; Ph. D., University of Göttingen, 1890.

SIMON FLEXNER, M. D.

*Associate in Pathology.*

M. D., University of Louisville, 1889; Graduate Student in the Johns Hopkins University, 1890-91, and Fellow, 1891-92.

JOHN M. T. FINNEY, M. D.

*Associate in Surgery.*

A. B., Princeton College, 1884; M. D., Harvard University, 1883; Associate in Surgery, Johns Hopkins Hospital.

HUNTER ROBB, M. D.

*Associate in Gynecology.*

M. D., University of Pennsylvania, 1884; Associate in Gynecology, Johns Hopkins Hospital.

J. WHITRIDGE WILLIAMS, M. D.\*

*Associate in Obstetrics.*

A. B., Johns Hopkins University, 1886; M. D., University of Maryland, 1888; Assistant in Gynecology, Johns Hopkins Hospital.

B. MEADE BOLTON, M. D.

*Acting Associate in Bacteriology and Hygiene.*

M. D., University of Virginia, 1879; Graduate Student in the Johns Hopkins University, 1886-87, and Assistant in Pathology, 1887-88; Professor of Physiology and Hygiene, South Carolina University, 1888-89; Director of the Department of Bacteriology, Hoagland Laboratory, Brooklyn, 1889-92.

\**Absent on leave.*

## ENDOWMENT.

The Johns Hopkins Medical School will be opened for the instruction of properly qualified students October 2, 1893. Instruction will continue through the academic year closing about the middle of June. There will be a Christmas recess and a Spring recess as announced in the Register of the University. Men and women will be admitted on the same terms. The Medical School will be a department of and under the direction of the Johns Hopkins University, and will derive great advantages from its close affiliation with the Johns Hopkins Hospital. In addition to the resources of these two foundations, the school has an endowment of its own.

The founder of the Johns Hopkins University, in devoting his large fortune to the establishment of the university and the hospital, had in view the organization of a school of medicine. In his letter addressed to the Trustees of the hospital, dated March 10th, 1873, these significant words occur:

“It will be your especial duty to secure, for the service of the hospital, surgeons and physicians of the highest character and greatest skill.

. . . In all your arrangements in relation to this hospital, you will bear constantly in mind that it is my wish and purpose that the institution shall ultimately form a part of the Medical School of that university for which I have made ample provision by my will."

Delays that could not be foreseen prevented the immediate fulfillment of this purpose of the donor.

Gifts amounting to \$111,731.68, most of which were offered to this university in October, 1890, by a committee of women, and an additional gift of \$306,977, offered to the university in December, 1892, by Miss Mary Elizabeth Garrett, as contributions toward the endowment of the medical school, on condition that women shall be received upon the same terms as men,—now enable the trustees to proceed with the organization of the school.

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## TERMS OF ADMISSION.

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The school now established is planned for the professional education of those students who have been especially fitted to receive its instructions by a course of preliminary training in the liberal arts, and especially in those branches of science, like physics, chemistry and biology, which underlie the medical sciences.

As candidates for the degree of Doctor of Medicine the school will receive:

1. Those who have satisfactorily completed the Chemical-Biological course which leads to the A. B. degree in this university.

2. Graduates of approved colleges or scientific schools who can furnish evidence: (*a*) That they have a good reading knowledge of French and German; (*b*) That they have such knowledge of physics, chemistry, and biology as is imparted by the regular minor courses, given in these subjects in this university.

The phrase "a minor course" as employed in this university means a course that requires a year for its completion. In physics, five class-room exercises and three hours a week in the laboratory; in chemistry and biology five class-room exercises and five hours a week in the laboratory in each subject are required.

3. Those who give evidence by examination that they possess the general education implied by a degree in arts or in science from an approved college or scientific school and the knowledge of French, German, physics, chemistry, and biology above indicated.

Applicants for admission will receive blanks to be filled out relating to their previous courses of study.

Hearers, not candidates for a degree, will be received at the discretion of the Faculty.

For the present, no student will be admitted to advanced standing.

Candidates who have not received diplomas of the required character will be examined for admission at the beginning of the session.

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## GENERAL PLAN OF INSTRUCTION.

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The course of instruction will continue through four years. Anatomy, including normal histology and embryology, physiology and physiological chemistry will be the principal studies of the first year. The study of anatomy will be continued in the second year, and, in addition, pharmacology, general pathology and pathological anatomy, bacteriology, and the general principles of medicine and surgery will be taken up. During the last two years clinical instruction will be given in medicine, surgery, obstetrics and gynecology, and the various special branches of practical medicine and surgery, such as ophthalmology, dermatology, laryngology, neurology, paediatrics. Instruction in hygiene, psychiatry, legal medicine and medical history will be provided during the course.

Abundant clinical material is afforded by the Johns Hopkins Hospital and Dispensary. The Clinical Amphitheatre and the Clinical Laboratories are in the Hospital buildings. A four story building on the grounds of the Hospital, intended for a Pathological Laboratory, affords accommodation also for the departments of anatomy and physiological chemistry. Physiology will be taught in the Biological Laboratory of the University.

In the main building of the Hospital is a good medical library with full sets of medical periodicals. This, as well as the libraries and reading room of the University, will be available without charge for the use of medical students.

Practical work in the dissecting room, in the laboratory, and at the bedside, demonstrations, clinics and recitations will form the most prominent features of the methods of instruction. Conferences or seminary methods will also be employed.

### FIRST YEAR COURSES.

Inasmuch as for the coming year students, who are candidates for the degree of Doctor of Medicine, will be admitted only to the medical course of the first year, the statement for the curriculum of this first year is the only one which is announced in detail at present. Similar statements regarding the courses for the second and following years will be made hereafter.

#### A. ANATOMY.

The instruction in Anatomy will be under the charge of Dr. FRANKLIN P. MALL, Professor of Anatomy, with the aid of the demonstrator and assistant demonstrators of Anatomy.

The course in anatomy will consist of vertebrate embryology, histology and histogenesis, and human anatomy. It is the intention to cover most of the field in one academic year.

The course in embryology and histology will be continuous during the year, although either course may be taken by itself.

During the first half-year histology will be taught by lectures, demonstrations, and laboratory work. In the spring, vertebrate embryology will be taught. The aim of the latter course will be to throw as much light as possible upon the structure and development of tissues and organs, and human anatomy in general.

Parallel with the above course that on human anatomy will be given.

Beginning in the autumn with lectures, recitations, and demonstrations in osteology, the study of human anatomy will be continued with practical work in the dissecting-room as soon as cool weather sets in. The aim will be to teach as much as possible of human anatomy by work in the dissecting-room and by demonstrations, leaving only certain general and special topics for the lecture-room. Surgical anatomy, as well as a share of topographical anatomy, will be given during the second year in connection with the department of surgery.

#### B. PHYSIOLOGY.

Instruction in Physiology will be given by Dr. WILLIAM H. HOWELL, Professor of Physiology, by means of lectures, experimental work in the laboratory, demonstrations, recitations and conferences. The lectures will be given three times a week throughout the year, and will be fully illustrated by experiments and demonstrations given in the lecture-room. Weekly recitations will be held upon the subject-matter covered by the lectures, and in the latter half of the year weekly conferences will also form part of the class work.

The laboratory courses will be arranged so as to occupy two afternoons a week for about twelve weeks. This work will include the study of the properties of muscle and nerve, the physiology of blood and digestion, circulation, respiration, and special senses. It is intended to give the student an idea of the methods used in experimental physiology, and to furnish also that basis of actual acquaintance with facts which is so necessary for intelligent reading.

In the conferences special topics will be assigned to a certain number of students to form the subjects of conference papers to be read before the class. The preparation of these papers will involve the reading of the more important recent literature, and whenever possible the student will be given opportunities to do special laboratory work in connection with his paper.

In addition to the foregoing exercises, which comprise the required work, students will be given opportunities to participate in the more advanced courses carried on in the laboratory, and intended primarily as graduate work. These courses are as follows: A biological journal club meets weekly to discuss the recent literature in the various fields of biological research, including animal physiology. A physiological seminary meets weekly during the first half of the year to read and discuss some one or more of the older contributions to physiology, which are of interest because of their bearing upon the historical development of the science. In the latter half of the year the same hour will be given up to a series of advanced lectures upon special topics in physiology, in which the subjects presented will be treated exhaustively from the standpoint of the most recent contributions. An advanced course of laboratory work will be arranged,—intended to teach the methods of physiological demonstration and research. This course will be under the control of the professor of physiology, and will not be limited as to time or amount of work, with the exception that assistance from the professor must be arranged for by definite engagements. This course is designed for those who expect to become teachers or investigators in physiology, pathology or pharmacology, and the number permitted to take it will necessarily be limited. For purposes of research the laboratory is well equipped. Those who are prepared to do special investigation will be given every opportunity for work, including shop facilities for the construction of new apparatus.

### C. PHYSIOLOGICAL CHEMISTRY.

The instruction in Physiological Chemistry will be for the present under the charge of Dr. JOHN J. ABEL, Professor of Pharmacology, with the aid of an assistant.

Instruction in this branch will be given by illustrated lectures, conferences of a less formal character and recitations, and laboratory work.

In the lectures the substances that have been isolated from the fluids and tissues of the body will be considered chiefly with regard to their connection with physiological processes. The physical and chemical properties of these substances and their chemical relationships will also receive due attention whenever they promise to throw light on animal metabolism, for it is thought that a treatment of the subject which emphasizes the chemical properties of the constituents of the body will best prepare the student to meet important questions that will arise later in his study of Pathology and Practical Medicine.

The laboratory instruction will cover the following ground:

1. The isolation of the more important constituents of the various tissues and fluids of the body, of its secretions and excretions in health and in disease, and the study of such of the physical and chemical properties of

these constituents as are of most importance from the physiological point of view.

2. The synthetic formation of some of these constituents, such as urea, uric acid, hippuric acid, cholin and leucin.

3. Selected qualitative and quantitative methods employed in the study of the various tissues, the urine, blood, bile, biliary and renal calculi, milk, pus and faeces.

The separation of poisons from the tissues and fluids of the body and their identification will be taken up in the second year in connection with toxicology. A special course in clinical chemistry adapted to the needs of the hospital student will also be offered later in the course.

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## CHARGES FOR TUITION.

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The charge for tuition will be two hundred dollars per annum, payable at the Treasurer's office, in semi-annual instalments, October 1 and February 1. There will be no extra charges for instruction in any department or for laboratory courses except for materials consumed. A deposit of ten dollars as caution money will be required from each student at the time of his enrolment. The caution money is repaid to the student when he leaves, if there are no charges against him. Special charges are made for breakage and for damage to apparatus.

Inquiries may be addressed to the Registrar of the Johns Hopkins University.

*June, 1893.*

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## SPECIAL COURSES FOR PHYSICIANS.

A statement of the courses open to physicians in the year 1893-94 is issued as a separate pamphlet, and can be obtained upon application to the Registrar of the Johns Hopkins University.

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## APPENDIX.

## THE TERMS OF MISS GARRETT'S GIFT

AS COMMUNICATED BY HER TO THE BOARD OF TRUSTEES,  
FEBRUARY 20, 1893.

Miss Mary Elizabeth Garrett, in order to make up the sum of \$500,000, which the Board of Trustees required should be secured as an endowment before the Medical School of the University was opened, has contributed to that fund the sum of \$306,977 upon the following terms, which have been agreed to by the University :

1. That women shall enjoy all the advantages of the Medical School of the Johns Hopkins University on the same terms as men, and shall be admitted on the same terms as men to all prizes, dignities or honors that are awarded by competition, examination or regarded as rewards of merit.

2. That not more than \$50,000 of the original endowment of \$500,000 shall be expended on a building or buildings; and that in memory of the contributions of the Committees of the Women's Medical School Fund, this building, if there be but one, or the chief building, if there be more than one, shall be known as the Women's Fund Memorial Building.

3. That the Medical School of the University shall be exclusively a graduate school as hereinafter explained, that is to say: That the Medical School of the Johns Hopkins University shall form an integral part of the Johns Hopkins University, and like other departments of the University, shall be under the management and control of the Trustees of the said University; that it shall provide a four years'

course, leading to the degree of Doctor of Medicine; that there shall be admitted to the School those students only who by examination or by other tests equally satisfactory to the Faculty of the Medical School (no distinction being made in these tests or examinations between men and women), have proved that they have completed the studies included in the Preliminary Medical Course (Group Three, Chemical-Biological Course) as laid down in the University Register (but this condition is not meant to restrict the Trustees from receiving as hearers, but not as candidates for the degree of Doctor of Medicine, those who have received the degree of Doctor of Medicine, or its equivalent in some school of good repute); and that the degree of Doctor of Medicine of the Johns Hopkins University shall be given to no Doctors of Medicine who have not proved by examination or by other tests equally satisfactory to the Faculty of the Medical School that they have completed the studies included in the Preliminary Course, besides completing the course of instruction of the Medical School of the Johns Hopkins University.

The foregoing provisions shall not be construed as restricting the liberty of the University to make such changes in the requirements for the admission to the Medical School of the Johns Hopkins University or to accept such equivalents for the studies required for admission to this school as shall not lower the standard of admission specified in this clause: provided that the requirements in modern languages other than English shall not be diminished, and provided also that the requirements in non-medical scientific studies shall include at least as much knowledge of natural science as is imparted in the three minor courses in science now laid down in its university register, the subjects and arrangements of these scientific studies being subject to such modifications as may from time to time seem wise to its Board and to the Faculty of the Medical School, but being at all times the same for all candidates for admission. (For such requirements always see University Register.)



4. That the terms of this gift and the Resolutions of October 28th, 1890, by which the Trustees accepted the gift of the Women's Medical School Fund, shall be printed each year in whatever annual calendars may be issued announcing the courses of the Medical School.—See appended Resolutions.

5. That there shall be created a committee of six women to whom the women studying in the Medical School may apply for advice concerning lodging and other practical matters, and that all questions concerning the personal character of women applying for admission to the School, and all non-academic questions of discipline affecting the women studying in the Medical School shall be referred to this committee, and by them be in writing reported for action to the authorities of the University; that the members of this committee shall be members for life; that the committee, when once formed, shall be self-nominating, its nominations of new members to fill such vacancies as may occur being subject always to the approval of the Board of Trustees of the University.

6. That in the event of any violation of any or all of the aforesaid stipulations, the said sum of \$306,977 shall revert to her, or such person or persons, institution or institutions, as she by testament or otherwise may hereafter appoint.

It will be observed that by the tenor of the foregoing terms no university course will be in any way modified by any conditions attached to her gift. Those conditions relate exclusively to preparation for the Medical School, and have received, in the shape in which they are now presented, the unanimous approval of the Medical Faculty of the University.

The terms of admission to the Medical School of the University as formulated and interpreted by the Medical Faculty of the University, February 4, 1893, and here subjoined, are therefore in entire accordance with the terms of her gift.

(Signed)

MARY E. GARRETT.

REQUIREMENTS FOR ADMISSION TO THE MEDICAL SCHOOL  
OF THE JOHNS HOPKINS UNIVERSITY, UNANIMOUSLY  
APPROVED BY THE MEDICAL FACULTY,  
FEBRUARY 4, 1893.

A course of four years' instruction will be provided leading to the degree of Doctor of Medicine.

To this course there will be admitted as candidates for the degree:

1. Those who have satisfactorily completed the Chemical-Biological Course which leads to the A. B. degree in this University.

2. Graduates of approved Colleges or Scientific Schools who can furnish evidence: (a) That they have a good reading knowledge of French and German; (b) That they have such knowledge of Physics, Chemistry and Biology as is imparted by the regular Minor Courses, given in these subjects in this University.

3. Those who give evidence by examination that they possess the general education implied by a degree in arts or in science from an approved College or Scientific School, and the knowledge of French, German, Physics, Chemistry and Biology, already indicated.

By approved Colleges and Scientific Schools are meant those whose standard for graduation shall be considered by this University as essentially equivalent to its standard for graduation in the undergraduate department.

It is to be understood that at least one year's study in the Chemical and Biological Sciences in their immediate relations to medicine shall be required from students after their entrance to the medical school.

MINUTE ADOPTED BY THE BOARD OF TRUSTEES, OCTOBER  
28, 1890, IN ACCEPTING THE WOMEN'S MEDICAL  
SCHOOL FUND.

The President and Board of Trustees of the Johns Hopkins University have received from Mrs. Nancy Morris Davis, chairman of one of the committees formed for the purpose of raising a fund to procure the most advanced medical education for women, the gratifying intelligence that \$100,000 has been raised for the use of their intended Medical School, and is at their disposal, if they will, by resolution, agree to the terms upon which the money was contributed by its donors.

These terms are that this Board, if it accepts the funds thus raised, shall agree, by resolution, that, when its Medical School shall be opened, women whose training has been equivalent to the preliminary medical course prescribed for men, shall be admitted to such school upon the same terms as may be prescribed for men.

The offer to this University of the particular fund is the free voluntary act of women residing in this State and in other States, made without the suggestion or solicitation of this Board, and we accept it under and subject to the terms which are made a part of the gift, with the understanding and declaration, however, that such preliminary training in all its parts shall be obtained in some other institution of learning devoted, in whole or in part, to the education of women, or by private tuition.

The fund so contributed shall be invested and known as "The Women's Medical School Fund," and that fund, and all interest to accrue thereon, and all additions made thereto for the same purpose, shall remain invested for the purposes of increase only until, with its aid as a foundation, a general fund has been accumulated amounting to not less than \$500,000, and sufficient for the establishment and maintenance of a Medical School worthy of the reputation of this University and fully sufficient as a means of complete medical instruction. Then, and not until then, will a Medical School be opened by

this University; and then, and not until then, will the gift now offered be used by this University; and then, and not until then, will the terms attached thereto be operative.

The utility of a training school for women nurses has been demonstrated by the experience and practice of the Johns Hopkins Hospital, and by the necessities of home life among our people.

This Board is satisfied that in hospital practice among women, in penal institutions in which women are prisoners, in charitable institutions in which women are cared for, and in private life, when women are to be attended, there is a need and place for learned and capable women physicians; and that it is the business and duty of this Board, when it is supplied with the necessary means for opening its proposed Medical School, to make provision for the training and full qualification of such women for the abundant work which awaits them in these wide fields of usefulness.

Nothing contained in this minute shall be construed as abridging, in any manner, the right of the Board of Trustees of the Johns Hopkins University to make such rules and regulations as they may deem necessary for the government of its School of Medicine, when it is organized; and in making such rules and regulations, the terms of this minute shall always be respected and observed.

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WOMEN'S COMMITTEE OF THE MEDICAL SCHOOL, APPOINTED  
BY MISS GARRETT, DECEMBER 22, 1892.

Their duties are stated in paragraph 5 of the letter printed above.

MRS. HENRY M. HURD,  
MRS. IRA REMSEN,  
MRS. WILLIAM OSLER,  
MISS M. CAREY THOMAS,  
MISS MARY M. GWINN,  
MISS MARY E. GARRETT.

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