

A brief history

THE SCHOOL OF MEDICINE AND DENTISTRY



George Hoyt Whipple and
Abraham Flexner, 1954

ON THE COVER:

Clockwise, from top left: School of Medicine department chairs 1925; University President Rush Rhees laying the medical school's cornerstone; original bronze plaque now located in a corridor in the Miner Library; Strong Memorial Hospital entrance 1930; original lobby of Strong Memorial Hospital 1926 (now the Miner Library reading room); and George Whipple addresses medical staff 1926, in an auditorium later named after him.

In 1910, Abraham Flexner, under the auspices of the Carnegie Foundation for the Advancement of Teaching, published a report on medical schools that led to a revolution in how medicine was taught across the country.

By 1920, Flexner approached Dr. Benjamin Rush Rhees, then president of the University of Rochester, with the idea of establishing a medical school at the university that would utilize his revolutionary ideals in medical education. Flexner and Rhees then approached George Eastman, founder of Eastman Kodak, to help back the idea financially. Additional monies came from the General Education Board of the Rockefeller Foundation and the daughters of the late Henry Alvah Strong, former business partner to George Eastman, to build a university, medical school, and hospital on land located on the southern boundaries of the City of Rochester near the banks of the Genesee River.

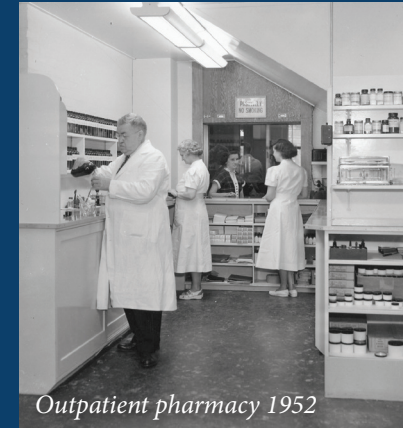
The first dean of the medical school, Nobel Laureate George Hoyt Whipple, M.D., came to Rochester in 1921, recruited from the University of California at San Francisco. Whipple helped shape the school from its inception, hiring faculty and staff and supervising the design and construction of buildings.

The medical school opened in 1925 and Strong Memorial Hospital opened its doors as a 250-bed community facility in 1926. The University of Rochester School of Medicine and Dentistry graduated its first class in 1929.

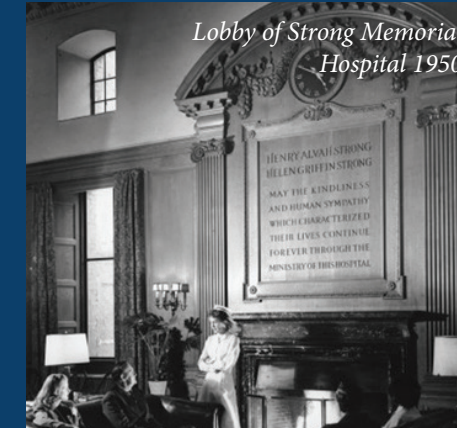
Whipple's vision, built on the philanthropy of George Eastman, was a school and a hospital under one roof that integrated basic science and clinical practice. Today, that concept of physically integrating patient care and academics under one roof is still going strong.

Students in the School are educated by the Double Helix Curriculum, integrating the basic science and clinical medicine strands of medical education and weaving them throughout the four-year curriculum.

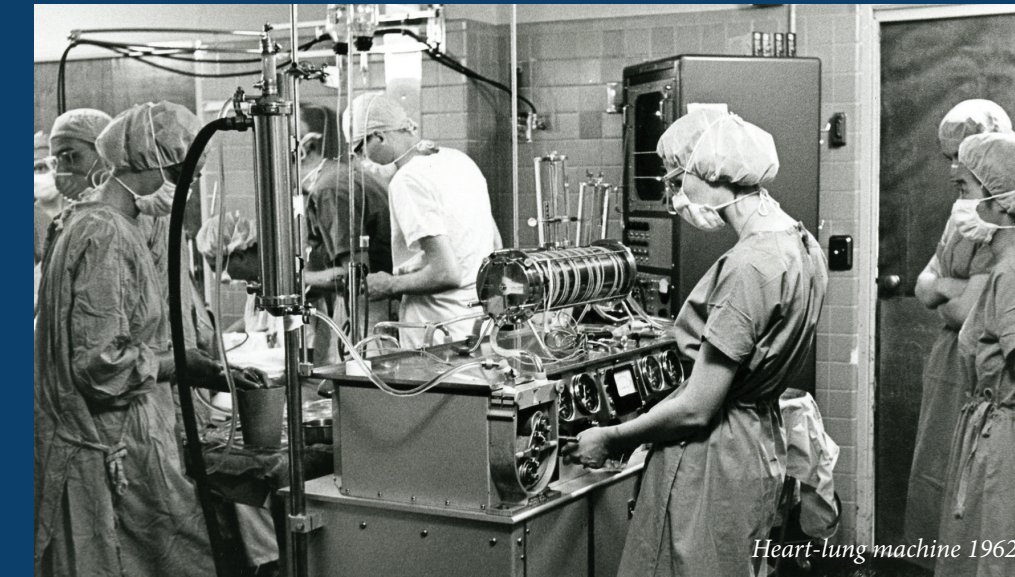
The School of Medicine and Dentistry transformed the future of medicine in Rochester and nationwide when it created the biopsychosocial model of education. Developed by Drs. George Engel and John Romano, this method systematically considers biological, psychological, and social factors and their complex interactions in understanding health, illness, and health care delivery.



Outpatient pharmacy 1952



Lobby of Strong Memorial
Hospital 1950



Heart-lung machine 1962



Strong Memorial Hospital Emergency Dept. 1969



Medical library circa 1945



During the first year, beginning in 1925, the required courses will be in the following subjects: anatomy (including histology), biochemistry and physiology. At least once each week there will be a conference at which members of the clinical staff will discuss cases or conditions illustrating the applications of the subjects under study at the time in the pre-clinical laboratories.

Expenses

The tuition fee is \$300 per annum, payable in equal installments at the beginning of each semester. A deposit of \$25 will be required on acceptance of the candidate, which will apply on the first semester's fee but will be forfeited if the candidate does not enter and continue with the class for which he has enrolled.

Students will provide their own books, dissecting instruments, laboratory gowns and other equipment at a minimum cost of about \$30 per year. These articles can be purchased in Rochester, and information as to the required books and equipment will be given at the beginning of the respective courses of instruction.

Each student must provide his own microscope, which will be constantly in use throughout the course and will be needed at once at the beginning of instruction. The microscope must be a compound instrument of the modern type, with 2 oculars (approximately X5 and X10) and with 3 objectives of about 16 mm., 4 mm., and 2 mm. oil immersion, and an Abbe condenser, all in good condition and yielding clear images. Arrangements can be made through the treasurer's office to purchase such an instrument on a partial payment plan.

Expenses for the School from the first student handbook

Entrance Requirements

The minimum requirements for admission to the School of Medicine and Dentistry will be as follows:

1. Three full years of study in an approved university or college.
2. One year (6 semester hours) of college English. This course must be largely devoted to training in written and spoken English.
3. Three years of college chemistry, including
 - (a) Inorganic chemistry (8 semester hours).
 - (b) Qualitative and quantitative analysis (8 semester hours).
 - (c) Organic chemistry (6 semester hours).N. B. A course in physical chemistry is desirable though not essential.
4. One year of college biology (8 semester hours).
5. One year of college physics (8 semester hours).
6. A reading knowledge of German or French.

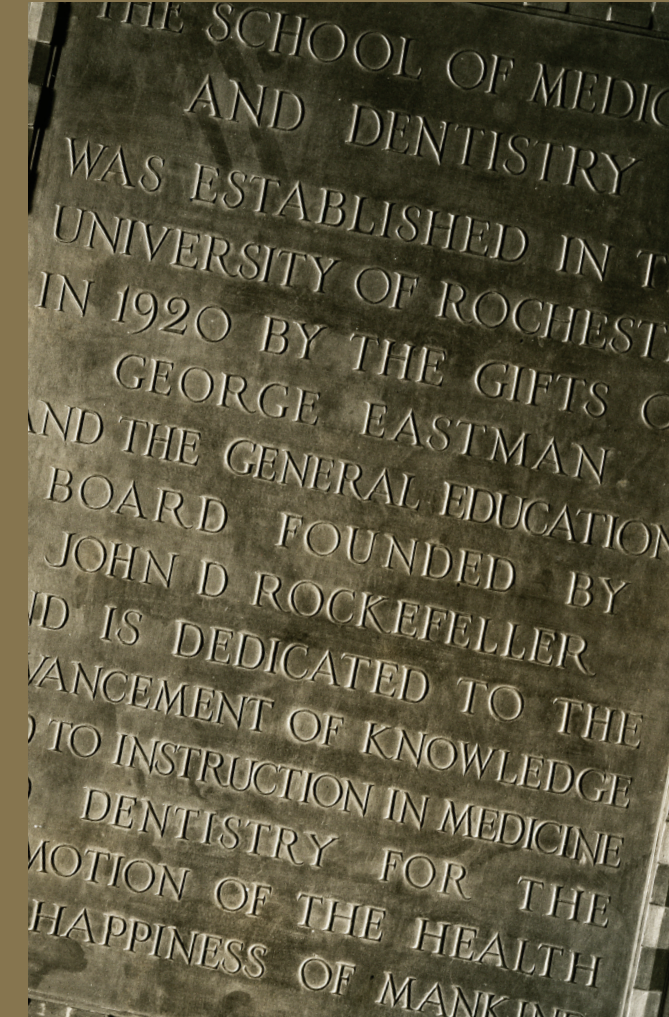
It is understood that the requirements listed above indicate the *minimum* academic training necessary for admission. In general candidates who have had a more extensive training will be given preference.

In the science courses approximately one-half of the credit should be for laboratory work.

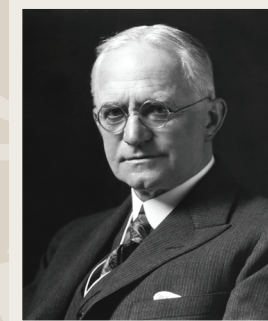
A knowledge of Latin such as is acquired in two years of a high school course is highly desirable.

The medical sciences have now become so diversified, and the opportunities for contribution to medical knowledge are so varied, that an extensive acquaintance with almost any field of scholarship may be turned to good account in the study of medicine. For this reason the Committee on Admissions will be favorably influenced by evidence of unusual attainment in any branch of learning which a can-

Admission requirements from the School's first bulletin 1925



1920



George Eastman gives \$4 million to match a \$5 million grant by John D. Rockefeller, Jr., making possible the School of Medicine and Dentistry. A plan to develop the School in connection with the University of Rochester is announced.

1925

The first class of 20 men and 2 women enters the School on September 17 and begins a 20-week course in anatomy.

Warren M. Sperry (biochemistry) receives the first Ph.D. Degree.

1934

George Whipple is awarded the Nobel Prize for his research that led to the alleviation of pernicious anemia.

1927

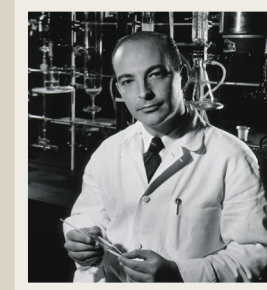
M. Elizabeth Marsh (Physiology-includes Vital Economics) is the first woman to receive a Ph.D. Degree.

1946



The building of Strong Memorial Hospital's Wing R, one of the first psychiatric facilities in the nation to function as an integral part of a university hospital.

1959



Arthur Kornberg, a 1941 graduate of the School, was awarded the Nobel Prize in Medicine, for his groundbreaking test-tube synthesis of DNA.

1955

Donald G. Anderson is appointed dean.

1969



Ground is broken for the new Strong Memorial Hospital.

1970s



Richard Burton leads a team of orthopedists that developed a breakthrough surgery for patients with a common type of arthritis of the thumb. The operation, known internationally as the "Burton procedure," is recognized as the gold standard therapy for this condition.

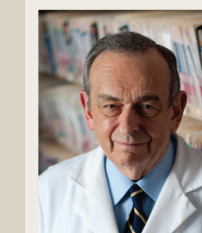
1990

Marshall A. Lichtman is appointed dean.

1980s

Ira Shoulson directs the clinical trial that establishes Deprenyl as a treatment for Parkinson's disease.

1990s



Arthur Moss conducts groundbreaking research proving implantable defibrillators prevented sudden death in high-risk patients. His studies have saved hundreds of thousands of lives around the world.

2001



The first heart transplant at the Medical Center is performed by H. Todd Massey.

2002

David S. Guzik is appointed dean.

2006

NIH awards its largest grant ever to the University selecting the School as one of 12 institutions to lead the emerging field of clinical and translational research.

Wilmot Cancer Center launches a Cancer Stem Cell Research Program, one of only three formal programs in the U.S. at the time.

2010

Mark B. Taubman is appointed dean.

2013

The University is named a Center for AIDS Research by NIH, a designation that infuses \$7.5 million into HIV/AIDS work across the University and places it amongst the best in the nation for research to improve the prevention and treatment of the disease.

1910



George Hoyt Whipple is recruited as the first dean. He spends the next few years organizing the School.

1920

Strong Memorial Hospital opens its doors to patients on January 4.

1926

1921

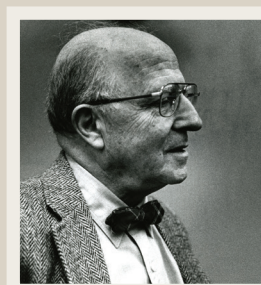
1930



The first graduating class of the School.

1929

1940



George Engel

The School transforms medical education to train physicians in treating the "whole" patient through the "biopsychosocial" model created by George Engel and John Romano.

1940s

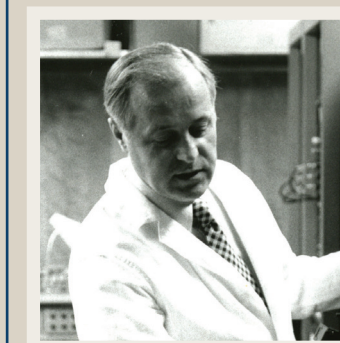


John Romano

James Lowell Orbison is appointed dean.

1966

1960



Raymond Gramiak publishes the first study using ultrasound with an injected contrast agent to map the anatomy of the beating heart leading directly to the birth of modern endocardiography.

1968

1970

Frank E. Young is appointed dean.

1979

Medical Center researchers were first to administer lung surfactant to premature infants, dramatically improving their survival rates. Surfactants are now used around the world.

1983

1980

Robert J. Joynt is appointed dean.

1985

1990

Lowell A. Goldsmith is appointed dean.

1996



David H. Smith



Porter Anderson

The FDA approves the Haemophilus influenza type b (Hib) vaccine. The pioneering work in the development of the vaccine—which has virtually wiped out a leading cause of meningitis in preschoolers—was done by David H. Smith and Porter W. Anderson.

1990

2000

Edward M. Hundert is appointed dean.

2000

The Medical Center is the first in the nation to implant an investigational medical device that lowers blood pressure by activating the body's natural blood pressure regulation systems.

2005

One of the greatest breakthroughs in cancer prevention had its origins at the Medical Center. The human papillomavirus (HPV) vaccine became available when it was approved by the FDA to prevent cervical cancer. It was created in part by virologists William Bonnez, Richard Reichman, and Robert Rose.

2006

2010



The Health Sciences Center for Computational Innovation opens and is home to IBM's next generation supercomputer—the Blue Gene/Q—making it one of the 5 most powerful university-based supercomputing sites in the nation. The facility is dedicated to using cutting-edge computational power to solve health care's most complex problems.

2012

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