Medical center institutions

Yale School of Medicine

Yale Cancer Center

Yale Child Study Center

Yale Medical Group

Yale School of Public Health

Yale School of Nursing

Yale University Health Services

Yale-New Haven Hospital, Children's Hospital and Psychiatric Hospita

Yale New Haven Health System

Connecticut Mental Health Center

VA Connecticut Healthcare System

John B. Pierce Laboratory

Smilow Cancer Hospital (opening fall 2009)

This fact sheet was produced by the Office of Institutional Planning and Communications. To order copies, contact us at 300 George Street, Suite 773, New Haven, CT 06511 or (203) 785-5824, or by e-mail at facts.med@yale.edu. On the Web: facts.med.yale.edu. Data are as of 9/30/08 unless otherwise noted.

Photos: Terry Dagradi, Robert Lisak, Michael Marsland, Carissa Violante and Manuscripts & Archives, Yale Library

MEDICAL CENTER

An affiliation agreement between the medical school and Grace-New Haven Hospital in 1965 created Yale-New Haven Hospital, which expanded in 1993 with the opening of the Children's Hospital and again in 2000 with the acquisition of the Psychiatric Hospital. The 14-story Smilow Cancer Hospital will open in fall 2009. The medical campus has grown over the years to include or abut the institutions listed at left. Four miles away in West Haven, the affiliated VA Connecticut Healthcare System maintains active clinical, research, and education programs in conjunction with many medical school departments. Extensive maps and directions to medical center destinations are available online at info.med.vale.edu/maps.

- To find a Yale doctor, visit the Yale Medical Group online at *yalemedicalgroup.org*, or call (877) YALEMDS or (203) 785-4851.
- For information on medical school admissions, visit medicine.yale.edu/admissions, or call (203) 785-2643.
- For news about the school, visit medicine.yale.edu. Media inquiries should be directed to the Office of Public Affairs at (203) 432-1345.
- To find a person at Yale University, consult the online directory at *medicine.yale.edu/phonebook*, or call directory assistance at (203) 432-4771. To find a person at Yale-New Haven Hospital, call (203) 688-4242.
- To give to the School of Medicine, please visit *yale.edu/givemedicine* or call Jancy Houck at (203) 436-8560.

New Haven

Population (2007) 130,625
Distance from:
NYC 80 miles

Boston 137 miles

University profile

FACULTYYale 3,619

YSM 1,971

 STAFF

 Yale
 9,176

 YSM
 3,187

 STUDENTS

 Yale
 11,446

 YSM
 1,040

Yale \$2.31 billion YSM \$988.6 million

Community service

The majority of students volunteer for at least one of the school's many community service projects, including:

Hill Regional Career High School partnership

Anatomy Teaching Program

Hunger and Homelessness Auction

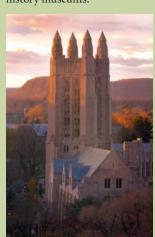
HAVEN (student-run free clinic)

Free care provided to New Haven residents in 2008: \$7.7 million

YALE UNIVERSITY AND NEW HAVEN

The School of Medicine is located immediately adjacent to the main campus of Yale University, one of the world's great institutions of higher learning. With a residential college system modeled after those of Cambridge and Oxford, the undergraduate school is complemented by the Graduate School of Arts and Sciences; and 12 professional schools, including Architecture, Art, Divinity, Drama, Engineering and Applied Science, Forestry and Environmental Studies, Law, Management, Music, Nursing, and Medicine, which includes the School of Public Health. In 2007, Yale acquired the 136-acre former Bayer Healthcare campus in West Haven, which contains 460,000 square feet of lab space.

Established in 1638, New Haven was the first planned municipality in America, organized geographically in nine squares, including a picturesque Green. Today, New Haven is a vibrant coastal city located on Long Island Sound between New York and Boston. Cultural opportunities abound, from dance, theater and music to the treasures of Yale's art and natural history museums.



The central Yale campus is a short walk from the medical school.

Endowment

(6/30/08)

Yale \$22.7 billion YSM \$1.9 billion

2008 capital projects (in millions)

NEW CONSTRUCTION

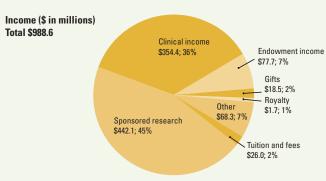
Yale \$146.60 YSM \$13.81

Yale \$287.22 YSM \$75.85

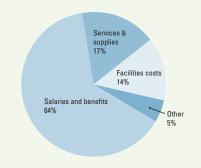
FINANCES

The School of Medicine had operating income of \$988.6 million in 2008. A total of \$511.6 million was awarded in sponsored research agreements, of which \$442.1 million was received and spent during the fiscal year. The school ranked fifth among medical schools receiving research funding from the NIH in 2008 and first in NIH grants per faculty member. Salaries and benefits for faculty, fellows and staff totaled 64 percent of expenditures.

Operating summary for the year ending June 30, 2008



Expenditures







Brief chronology

1701 Yale College founded

1810 Medical Institution of Yale College chartered

1833 The State Hospital, precursor to the New Haven Hospital, opens

1839 M.D. student thesis requirement formalized

1857 First African American student graduates

1916 First female students admitted

1923 School of Nursing established

1924 Sterling Hall of Medicine completed

1945 The New Haven Hospital merges with Grace Hospital. becoming Grace-New **Haven Community** Hospital

1965 Medical schoo and hospital revise their affiliation. creating Yale-New Haven Hospital

1974 Yale Cancer Center established

1991 Boyer Center for Molecular Medicine completed

1993 Yale-New Haven Children's Hospital opens

2003 Anlyan Center completed

2007 Amistad Street building opens

2007 West Campus acquired

OVERVIEW AND HISTORY

The Yale School of Medicine is one of the world's leading centers for biomedical research, advanced clinical care, and medical education. It ranks fifth among medical schools receiving funds from the National Institutes of Health (NIH). More than 800 Yale physicians provide care to patients from across the region and around the world. The Yale system of medical education, with its emphasis on critical thinking and independent student research, has produced leaders in every field of academic medicine.

The sixth-oldest medical school in the United States, the school was established by the Connecticut General Assembly in 1810, when it chartered the Medical Institution of Yale College, located first on Grove Street, then at 150 York Street. Since 1924, it has occupied Sterling Hall of Medicine at 333 Cedar Street and surrounding buildings. It has awarded 8,123 medical degrees, since 1814. There are 5,052 living alumni with MD degrees, 3,851 with MPH degrees and 910 alumni of the Physician Associate Program with the PA-c or MMSc degree.

COVER: Sterling Hall of Medicine, completed in 1924, is the focal point of the medical campus, which occupies 2.5 million square feet of laboratory, classroom, clinical and

BELOW: Sterling Hall as it appeared in an architect's study for the building. The medical school, founded in 1810, is approaching its Bicentennial year.





Students by degree

program	
MD	365
MD/PhD	88
MD/MHS	36
MD/JD	1
MD/MBA	7
MD/MPH	4
MMSc (PA-C)	70
MPH	169
PhD	300
Total	1,040

MD program details

lass of 2012 profile		
Applicants	4,139	
Class size	100	
Acceptance		
rate	5.9 %	
Average GPA	3.8	
MCAT mean		
of sections	11.82	
Male-to-female		
ratio	49 to 51	
Faculty-to-student		
ratio	2.9 to 1	

Tuition. 2008-2009 \$42,350

Average debt, 2008 graduates w/debt \$124,135

Medical Library Volumes 462,000 Journals

EDUCATION

The School of Medicine educates future leaders in medicine, public health, and biomedical science enrolled in its MD and other degree programs (listed at left). The MD program follows a unique educational philosophy established in the 1920s by Dean Milton C. Winternitz, MD, known as the Yale system of medical education. No course grades or class rankings are given in the first two years, examinations are limited, and students are expected to engage in independent investigation. Yale medical students have been required to write a thesis based on original research since 1839.

Each year, approximately 12 students 1,040 enroll in the school's MD/PHD Program, one of the original Medical Scientist Training Programs established and funded by the NIH. Within the medical school, the School of Public Health operates as a fully accredited degree-granting institution. Graduate students in the Combined Program in the Biological and Biomedical Sciences earn a PHD degree through the Faculty of Arts and Sciences.

> ABOVE LEFT: First-year students hone their powers of observation in a visual tutorial at the Yale Center for British Art, an innovative Yale class emulated at 20 other medical schools. Participants develop greater diagnostic skills by exercising their ability to detect small details.

* Students on extended study are included in the figures

Research activity

1.967 awards[†] totaling \$511.6 million

Awards \$341.3 million Rank among medical schools Rank, grants per faculty member Centers and **Programs** Basic science departments Active patents U.S. World

Yale-founded biotech companies

Laboratory space (sf) Medical School 625.000

Faculty profile

536 Research Lecturer/Instructor 327 Subtotal 1.971 Visiting Emeritus/Retired Voluntary/Adjunct 1,596 1,874 Subtotal 3.845 Total

Teaching (ladder) 1.108

Memberships‡ National Academy

Postdocs

of Sciences	60
Institute of Medicine	40
NIH study section members	51
HHMI investigators	16

RESEARCH

Research at the medical school covers a broad spectrum, from fundamental studies in the life sciences, including cell biology, genetics, immunobiology, microbial pathogenesis, neuroscience, physiology, biophysics, and biochemistry, to clinical studies aimed at improving the diagnosis and treatment of human diseases. Funding for research has increased substantially over the past decade, rising from \$287.9 million in 1999 to \$511.6 million in 2008.

State-of-the-art core resources at the School of Medicine provide access to the newest technologies in areas including:

- Genomics and proteomics, with more than 100 instrument systems for DNA and protein analyses, microarray studies, SNP genotyping, and mass spectrometry
- Cell and molecular imaging, ranging from confocal, electron and cryoelectron microscopy, to X-ray crystallography
- MR and PET imaging
- · Construction and analysis of animal models of disease



Advanced instrumentation for identifying and measuring molecular compounds, such as the ultra-performance liquid chromatography device above, helps Yale scientists pursue fundamental research that can lead to new therapies.

Clinical overview

Clinical departments 16 Clinical specialties and subspecialties 129 Yale Medical Group Office visits

> Patient encounters 1,124,936

292,363

Physicians Full-time Part-time Midlevel practitioners (PA. APRN) Medical residents 656 Clinical fellows

Affiliated hospitals Yale-New Haven Hospital Patient

> discharges 52,144 Newborns Emergency 128,77 visits

Adult beds Pediatric beds 95 92 Bassinets Psychiatric beds 87 Total beds

PATIENT CARE

Income \$354.4 million § More than 800 Yale physicians provide primary and specialty care for patients under the auspices of the Yale Medical Group, one of the largest academic multispecialty practices in the nation. Yale doctors provide advanced care in more than 100 specialties and subspecialties, including organ transplantation, minimally invasive surgery, and state-of-the-art cancer care. Yale's historical contributions to medicine include the first X-ray performed in the United States, the first successful use of penicillin in America, the first use of cancer chemotherapy, and the introduction of fetal heart monitoring. natural childbirth, and newborn roomingin. Yale doctors designed the first artificial heart pump and the first insulin infusion pump for diabetes, and it was here that the means of transmission of the polio virus was established, paving the way for the Salk vaccine. Lyme disease was identified by two Yale physicians in 1975.



Yale physicians are experts in more than 100 specialties and subspecialties, including geriatric medicine. The Yale Medical Group, with more than 800 doctors, is one of the largest multispecialty group practices in the United States.

 $^{^\}dagger$ Research award data are for Yale's fiscal year ending 6/30/08. NIH ranking is for the federal fiscal year ending 9/30/08; per faculty rank averaged over 2007 and 2008. [‡] Data as of 12/31/08. Includes the Faculty of Arts and Sciences and the graduate and professional schools.

[§] Clinical revenue and office visit data are for the year ending 6/30/08.