



# Yale SCHOOL OF MEDICINE

FACTS AND FIGURES 2022-23  
[medicine.yale.edu/facts](https://medicine.yale.edu/facts)



# Overview and History

## Brief Chronology

**1701** Yale College founded

**1810** Medical Institution of Yale College chartered

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

**1839** MD student thesis requirement formalized

**1857** First African American student graduates

**1915** Department of Public Health established

**1916** First women students admitted

**1923** Yale School of Nursing established

**1924** Yale School of Medicine relocates to Sterling Hall of Medicine

**1941** The Yale Medical Library is dedicated

**1945** New Haven Hospital merges with Grace Hospital, becoming Grace-New Haven Community Hospital

**1965** Yale School of Medicine and Grace-New Haven Community Hospital revise their affiliation, creating Yale New Haven Hospital

**1970** Physician Associate Program founded

**1974** Yale Cancer Center established

**1991** Boyer Center for Molecular Medicine completed

**1993** Yale New Haven Children's Hospital opens

**2003** The Anlyan Center for Medical Research & Education at Yale is completed

**2007** Amistad Street Building opens

**2007** Yale West Campus acquired

**2009** Smilow Cancer Hospital at Yale New Haven opens

**2010–11** Yale School of Medicine celebrates its bicentennial

**2012** YNHH acquires the Hospital of Saint Raphael

**2018** Physician Assistant online program launches

Yale School of Medicine (YSM) is one of the world's leading centers for biomedical research, advanced clinical care, and medical education. It ranks seventh among medical schools receiving funds from the National Institutes of Health (NIH) and tenth in NIH dollars per faculty member. More than 1,700 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, it was chartered by the Connecticut General Assembly in 1810 as 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 9,492 medical degrees since 1814. There are 5,671 living alumni with MD degrees, 5,603 with MPH degrees, 1,529 alumni of the Physician Associate Program with the PA-C certificate or MMSc degree, and 139 alumni of the Physician Assistant Online Program.



# Education

## Students by Degree

### Program

MD Program <sup>1</sup>	
MD	360
MD/PhD	158
MD/MHS	18
MD/MBA	14
MD /MPH	2
MD/JD	0
MMSc (PA-C)	
Physician Associate Program	115
Physician Assistant Online Program	164
MPH	695
PhD	431
<b>Total</b>	<b>1,957</b>

### MD Program Details

#### CLASS OF 2026 PROFILE

Applicants	5,176
Class size	104
Female students	53
Male students	51
Declined to specify <sup>2</sup>	N/A
Acceptance rate	5.7%
URiM <sup>3</sup>	24%
Median cumulative GPA	3.9
MCAT median	521
MCAT median of sections	130
Faculty-to-student ratio	4.2 to 1

### Finances

2022–23 tuition	\$67,484
2022 median debt for those with debt	\$79,750

### Medical Library

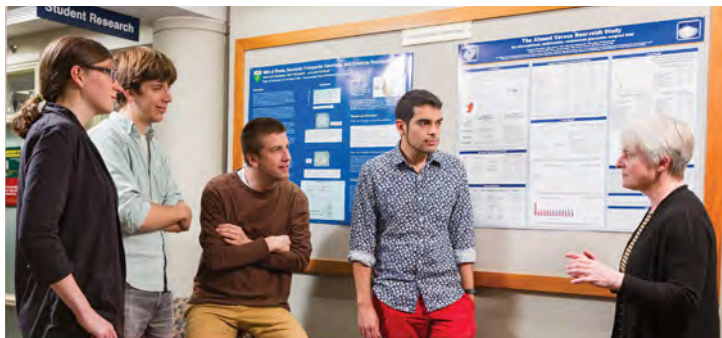
Volumes	368,000+
Journals	23,000+
Online books, biomedical	50,000+

The School of Medicine educates future leaders in medicine, public health, and biomedical science. The MD Program follows a unique educational philosophy, the Yale System of Medical Education, established in the 1920s. 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. Since 1839, medical students have written a thesis based on original research, reflecting that the scientific process of investigation, attentive observation, interpretation of data, and critical evaluation of literature are fundamental to the practice of medicine.

Many medical students take a tuition-free fifth year to pursue additional study. Some conduct in-depth research or explore clinical electives and subinternships. A significant number are awarded fifth-year research fellowships and earn the MHS degree.

Each year, approximately 20 students enroll in the school's MD-PhD Program, one of the original Medical Scientist Training Programs established and funded by the NIH. Graduate students in the combined program in the Biomedical and Biological Sciences earn a PhD degree through the Faculty of Arts and Sciences. The School of Medicine also offers joint degree programs with other professional schools including Public Health, Law, Management, Engineering, and Divinity.

YSM's Physician Associate (PA) Program, one of the oldest PA programs in the country, and its Physician Assistant Online Program train students to become compassionate, high-quality, patient-centered PAs. The online program enables students to become PAs without relocating from their home communities.



<sup>1</sup> Of 552 enrolled students, 57 students are currently on extended study pursuing a joint degree, completing a fully funded year of research, or a combination of research and clinical rotations.

<sup>2</sup> All members of the Class of 2026 self-identified as female or male.

<sup>3</sup> Students who identify as underrepresented in medicine

# Basic and Translational Research

## Academic Departments

Basic science	10
Clinical	18
Public Health	6
<b>Total</b>	<b>34</b>

## Programs & Centers

<b>Active Patents</b>	<b>6</b>
U.S.	371
World (54 countries)	811
<b>Total</b>	<b>1,182</b>

## Yale-Founded Biotech Companies

<b>Faculty</b>	
Teaching (ladder)	2,260
Research	756
Lecturer/Instructor	371
Visiting	68
Emeritus/Retired	186
Voluntary/Adjunct	1,717
<b>Total</b>	<b>5,358</b>

## Postgraduate Fellows & Associates

<b>Memberships &amp; Awards<sup>4</sup></b>	
Association of American Physicians	41
Breakthrough Prize	3
Fields Medal	1
HHMI investigators	7
Kavli Prize	2
Lasker Awards	4
MacArthur Genius Grant	6
National Academy of Engineering	8
National Academy of Medicine	57
National Academy of Sciences	65
Nobel Prize	3
Wolf Prize	2

## Faculty with Endowed Professorships

<b>Research Activity</b>	
Number of awards	3,022
Dollar total	\$836.2 million

<b>NIH</b>	
Awards	\$549.9 million
Rank, total grant dollars among medical schools <sup>5</sup>	7th
Rank, grants per faculty member <sup>6</sup>	10th
Centers and program grants	25

## Laboratory Space (net assignable sq. ft.)

Medical School	716,890
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Important research collaborations bring together scientists on the medical campus, Science Hill, and the West Campus. Funding for research at YSM has increased from \$808.5 million in 2021 to \$836.2 million in 2022.

Research at the medical school covers a broad spectrum, from fundamental studies in the life sciences—including cell biology, genetics, immunobiology, microbial pathogenesis, neuroscience, pharmacology, physiology, biophysics, and biochemistry—to translational and clinical studies aimed at improving the diagnosis and treatment of human diseases.

The school's core research resources are built around the newest technologies:

- State-of-the-art tools for genomics and proteomics, including whole-genome sequencing and mass spectrometry
- High-resolution imaging and image analysis at every scale, including cryoelectron microscopy, cryoelectron tomography, and the only focused ion beam-scanning electron microscope in the region
- High-throughput screening, including RNAi and chemical screens
- Construction and analysis of animal models of disease

In 2020, YSM established the Office for Health Equity Research to address health disparities and inequities in underserved populations by coordinating and facilitating health equity research and partnerships at the school, across Yale University, and beyond.

In 2022, the school advanced its strategic priority in data science by creating a department for Biomedical Informatics and Data Science as a hub for biomedical collaboration. Soon after, in 2023, a new biorepository service was formed to store, retrieve, and share biological samples such as blood, solid tissues, DNA, RNA, and proteins, for current and future research studies.



<sup>4</sup> Includes faculty across Yale University.

<sup>5</sup> NIH ranking is for the federal fiscal year ending 9/30/22.

<sup>6</sup> Per faculty rank averaged over 2021 and 2022.

# Clinical Investigation

**The National Clinician Scholars Program at Yale** was established in 2016 to prepare future clinician leaders to improve health and health care. Graduates of the two-year interprofessional fellowship earn a master of health sciences (MHS) degree.

**Yale School of Public Health** offers training and conducts research in biostatistics, chronic disease epidemiology, environmental health sciences, epidemiology of microbial diseases, and health policy and administration.

**The Investigative Medicine Program** awards a PhD degree to holders of MD degrees who pursue training in either laboratory-based or clinically based human investigation.

## By the Numbers

RWJ Scholars since 1974	187
NCSP Scholars since 2016	50
PhDs awarded by Investigative Medicine Program since 2003	59
YCCI Scholars trained since 2006	181

Clinical investigation at Yale bridges the gap between the basic and translational sciences and the practice of medicine. Research is focused on the factors that affect health and illness in populations, the evaluation of therapeutic interventions, and the assessment of health outcomes based on analysis of large data sets. The School of Medicine sponsors a wide range of clinical trials, with more than 2,063 active trials in 2022, and over 18,000 “Help Us Discover” unique volunteers enrolled (see [yalestudies.org](http://yalestudies.org)), and 33,159 active subjects. The school offers superb training for clinical investigators in a number of settings, including the Yale Center for Clinical Investigation (YCCI), the National Clinician Scholars Program at Yale (the evolution of the Robert Wood Johnson Foundation Clinical Scholars Program), the Yale School of Public Health, and the Investigative Medicine Program, along with discipline-specific training initiatives in selected departments.

YCCI facilitates the training of clinical and translational scientists and provides infrastructure for innovative and collaborative research directed at improving patient care. It funds up to 20 YCCI Scholars yearly and supports investigators in the areas of biostatistics, bioinformatics, study design, core technologies, regulatory review, patient recruitment, and community-based research.



# Patient Care

## Patient Care Overview

Income \$1.30 billion

## Yale Medicine

Patient encounters 2.8 million

## Physicians

Full-time 1,580

Part-time 182

Allied Providers 840

Clinical fellows 437

Medical residents 919

## Yale New Haven Hospital<sup>7</sup>

Patient discharges 81,750

Emergency visits<sup>8</sup> 142,659

Outpatient encounters

(including ED) 1.99 million

Total licensed beds 1,541

More than 1,700 Yale physicians provide primary and specialty care for patients through Yale Medicine. The practice delivers advanced care in more than 100 specialties and subspecialties, and has centers of excellence in such fields as cancer, cardiac care, minimally invasive surgery, and organ transplantation. Yale physicians have made many historical contributions, including the first use of cancer chemotherapy, the first artificial heart pump, and the first insulin infusion pump for diabetes. In 2022, YSM played a crucial role in the trials for teplizumab, the first FDA-approved drug with the ability to change the course of type 1 diabetes, or any autoimmune disease.

Today Yale physicians use such groundbreaking advances as DNA sequencing technology to diagnose suspected genetic diseases. Yale Medicine is a major referral center for Connecticut and New England, and treats patients from throughout the world.



<sup>7</sup> Yale New Haven Hospital data as of 9/30/22; includes the Children's Hospital, Psychiatric Hospital, Smilow Cancer Hospital, and the former Hospital of Saint Raphael, which was acquired by YNHH on 9/12/12. Licensed beds include bassinets.

<sup>8</sup> Number of patients treated and released from the ED. This does not include those ED visitors who were admitted.

# Clinical Affiliations

## Medical Center Institutions

Yale School of Medicine  
Yale Medicine  
Yale School of Public Health  
Yale School of Nursing  
Yale New Haven Health,  
which consists of:

- Yale New Haven Hospital, including the Saint Raphael Campus
- Yale New Haven Children's Hospital
- Yale New Haven Psychiatric Hospital
- Smilow Cancer Hospital at Yale New Haven
  
- Bridgeport Hospital
- Greenwich Hospital
- Lawrence + Memorial Hospital
- Northeast Medical Group
- Westerly Hospital

Yale Health  
Connecticut Mental Health Center  
Connecticut Mental Health Center  
John B. Pierce Laboratory

## Contact

**FIND A YALE DOCTOR**  
yalemedicine.org  
(877) YALEMDS  
(877) 925-3637

**YSM ADMISSIONS**  
medicine.yale.edu/admissions  
(203) 785-2696

**YSM NEWS**  
medicine.yale.edu

**MEDIA INQUIRIES**  
communications.yale.edu/  
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(203) 432-1345

**YALE DIRECTORY**  
directory.yale.edu  
(203) 432-4771

**YNHH DIRECTORY**  
(203) 688-4242

**MAKE A GIFT**  
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## Facts and Figures

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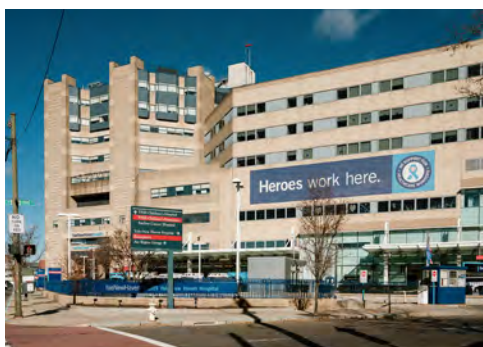
Photos: Anthony DeCarlo,  
Robert A. Lisak, Michael Marsland,

An affiliation agreement between Yale School of Medicine (YSM) and Grace-New Haven Community Hospital in 1965 created Yale New Haven Hospital (YNHH), which expanded in 1993 with the opening of the Children's Hospital. In 1999, a second affiliation agreement further established the relationship between the YSM and Yale New Haven Health System (YNHHS).

Since then, the health system has grown significantly. In 2000, YNHH expanded again with the acquisition of the Psychiatric Hospital. In 2009, the 14-story Smilow Cancer Hospital opened, and in 2012 YNHH acquired the Hospital of Saint Raphael, adding 533 beds and making it one of the largest hospitals in the United States. Over the years, the medical community has expanded to include the institutions listed at left. Today an initiative is underway to further align these institutions to enable even greater discovery and clinical care, improve operational efficiency, and provide additional support and opportunities to physicians and students.

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 [medicine.yale.edu/maps](http://medicine.yale.edu/maps).



# Yale University and New Haven

## New Haven Profile

2020 Population 134,023

### DISTANCE FROM:

NYC 80 miles

Boston 137 miles

## University Profile

Yale totals include YSM

### FACULTY

Yale 5,251

YSM 3,455

### STAFF

Yale 10,891

YSM 4,005

### STUDENTS

Yale 14,776

YSM<sup>9</sup> 1,957

## Community Service

Most students volunteer and the COVID-19 pandemic did not diminish that undertaking. Students continued creatively providing support remotely or in a socially distanced manner when necessary.

The many community service projects and organizations for which students customarily volunteer include:

- Columbus House
- Downtown Evening Soup Kitchen
- HAVEN (student-run free clinic)
- Health Professionals Recruitment and Exposure Program
- Hill Regional Career High School Anatomy Teaching Program
- Hunger and Homelessness Auction
- Neighborhood Health Project
- Refugee Patient Navigator Program
- Youth Science Enrichment Program
- Integrated Refugee & Immigrant Services (IRIS)

Yale School of Medicine is located on 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, Global Affairs, Law, Management, Music, Nursing, and Medicine, which includes the School of Public Health. In 2007, Yale acquired the 136-acre West Campus in West Haven.

Established in 1638, New Haven was the first planned municipality in America, organized geographically in nine squares, including a picturesque town 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.



<sup>9</sup> Further breakdown can be found on the Education page.



# International Activities

**Yale Institute for Global Health** is a university-wide effort led by the Schools of Medicine, Nursing, and Public Health that serves as the focal point for research, education, and engagement with global partners to improve the health of individuals and populations worldwide.

**Yale Office of International Affairs** offers support to faculty in establishing and maintaining collaborations abroad, drawing on existing relationships on six continents. It maintains an online faculty research database.

**Norwegian University of Science and Technology** is a partnership that provides support for the exchange of students, fellows, and faculty in such areas as cancer, immunology, neuroscience, and public health.

## By the Numbers 2022–23

INTERNATIONAL STUDENTS AT YALE	
MD	7.5%
MPH	30%
PhD (Sciences)	32%
YALE STUDENTS/ TRAINEES ABROAD	
MD (international sites)	9
MD (domestic sites)	1
MPH <sup>10</sup>	N/A
Downs Fellows	10
Yale/Stanford	
J&J Scholars	5
VISITING MD STUDENTS AT YALE	
From other nations	59

The School of Medicine is an active partner in fulfilling Yale's international goals, which include preparing students for international leadership and service, attracting the most talented students and scholars to Yale from around the world, and positioning Yale as a global university of consequence. Faculty members conduct research abroad, teach, and design courses in global health. Their work runs the gamut from molecular studies at the nanoscale, to the analysis of social networks in disease transmission and prevention, to the improvement of health care systems.

## PROGRAMS AT YALE INCLUDE:

- **Office of Global Health** Facilitates the placement of Yale medical students in global clinical electives at sites in Argentina, Chile, China, Colombia, Dominican Republic, Ghana, India, Jamaica, South Africa, Uganda, and the U.S. (rural sites in Appalachia and on the Navajo Nation in Arizona as well as in free clinics in New Haven and San Francisco). The office also administers the Visiting International Student Electives Program.
- **Downs International Health Student Travel Fellowship** Supports students who undertake health-related research, primarily in low- and middle-income countries.
- **Yale/Stanford–Johnson & Johnson Global Health Scholars** Sponsors rotations abroad for Yale house staff and physicians from other institutions, who travel to six sites in Africa and Asia.



<sup>10</sup> Due to COVID travel restrictions, some students worked remotely with agencies abroad, some did U.S.-based internships, while others worked abroad in their home countries (unable to return due to COVID travel restrictions).

# Finance

## Endowment

Yale	\$41.1 billion
YSM	\$3.77 billion

## 2022 Operating Income

Yale	\$4.8 billion
YSM	\$2.4 billion

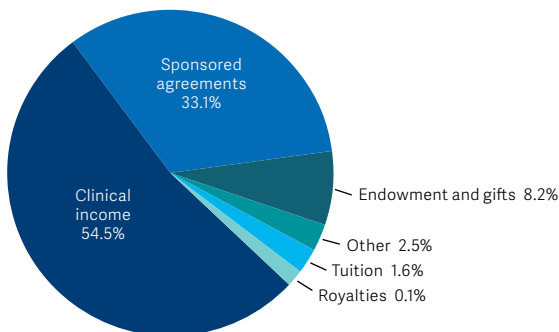
## 2022 Capital Projects

<b>NEW CONSTRUCTION/ACQUISITIONS</b>	
Yale	\$29.6 million
YSM	\$0
<b>RENOVATIONS/ALTERATIONS</b>	
Yale	\$348 million
YSM	\$72.8 million

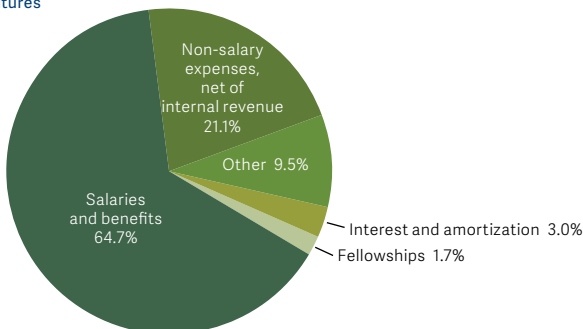
The School of Medicine had operating income of \$2.4 billion in FY22. A total of \$787.53 million in sponsored research funding was received and spent during the fiscal year.<sup>11</sup> Clinical income totaled \$1.30 billion. Among medical schools receiving research funding from the NIH, YSM ranked seventh and 10th in NIH grants per faculty member in FY22. Salaries and benefits totaled 64.7% of expenditures. Income included endowment and gifts totaling \$195.7 million, royalties equaled \$0.72 million, and tuition was \$38.6 million.

## Operating summary for the year ending June 30, 2022

### Income



### Expenditures



<sup>11</sup> Research income does not equal award amounts because research dollars are not always spent in the same period in which they are awarded.