DOCTOR OF MEDICINE (MD)

Visit program website. (https://meded.ucsf.edu/md-program/)

Degree Offered: MD
Program Leadership:
John Davis, PhD, MD, Associate Dean for Medical Education, Interim Vice Dean for Education - Undergraduate Medical Education
Admissions Inquiries:
Hallen Chung, Director of Admissions

Program Description

At UCSF, the purpose of medical education is to educate learners who will improve the health of our communities and alleviate suffering due to illness and disease in our patients. The UCSF School of Medicine Bridges Curriculum educates MD graduates to excel in the competencies needed by 21st-century physicians. Our students work collaboratively with interprofessional teams to provide compassionate patient care while broadening their knowledge, advancing science, and seeking new ways to improve health care delivery in their communities and nationwide.

The MD program objectives (https://meded.ucsf.edu/md-program/current-students/curriculum/md-program-objectives/) are defined by seven core MD competencies (https://meded.ucsf.edu/md-program/current-students/curriculum/md-competency-milestones/): patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, systems-based practice, and interprofessional collaboration.

The Bridges Curriculum is a three-phase, fully integrated curriculum delivered over four years:

- Foundations 1 (https://meded.ucsf.edu/foundations-1/): Students gain foundational knowledge in basic and clinical sciences while building the habits of mind of an inquiring physician, contributing to the health of patients and improving the delivery of health care.
- Foundations 2 (https://meded.ucsf.edu/foundations-2/): During their immersion in team-based clinical settings, students advance their patient care and systems improvement skills, while revisiting core concepts in foundational science as they relate to patient care decisions.
- Career Launch (https://meded.ucsf.edu/career-launch/): During this individualized phase of the curriculum, students choose clinical experiences and a scholarly project aligned with their career goals.

Learn more about the Bridges Curriculum (https://meded.ucsf.edu/md-program/current-students/curriculum/bridges-curriculum-overview/)

Admission Requirements

Premedical students should pursue a four-year undergraduate curriculum and obtain a baccalaureate degree before entering medical school. Prerequisite courses include: a year of biology with laboratory, a year of chemistry including at least one semester of organic chemistry, at least semester of physics, and one course in biochemistry. While these courses constitute the basic foundation for all applicants, most successful applicants will have gone beyond these prerequisites and will have demonstrated the ability to perform at a high level academically. Applicants should take the Medical College Admission Test (MCAT) prior to entry at the medical school. UCSF considers the unique qualifications of each individual applicant. Consistent with this philosophy, UCSF accepts students with a wide range of undergraduate pursuits and accomplishments. Student selection is based on an appraisal of those intellectual and personal characteristics that the admissions committee regards as desirable for prospective medical students and physicians. Both cognitive and non-cognitive factors play an important part in the selection process. For more information, please visit meded.ucsf.edu/admissions-md-program (https://meded.ucsf.edu/admissions-md-program/).

Learning Outcomes

The MD program objectives are the graduation milestones for the UCSF School of Medicine. Upon graduation from the UCSF MD Program, students are required to have demonstrated competence in the competencies listed below. For each competency, a set of milestones defines the expected progress throughout medical school toward achieving competence.

Patient Care

Graduates will be able to:

- Gather complete and focused histories from patients, families, and electronic health records in an organized manner, appropriate to the clinical situation and the individual, interpersonal, and structural factors that impact health
- Conduct complete and focused physical exams, using technology-enhanced physical diagnosis tools where appropriate, interpreting abnormalities and maintaining patient comfort
- Present encounters efficiently, including relevant gathered information, assessment, and plan
- Document patient encounters accurately, efficiently, and promptly including independent authorship for reporting of information, assessment, and plan
- Perform common procedures safely and correctly, including participating in obtaining informed consent, following universal precautions and sterile technique, and attending to patient comfort
- Manage patients as part of a team, including prioritizing patient care tasks efficiently to provide high-quality care that addresses their medical and social needs

Medical Knowledge

Graduates will be able to:

- For the UCSF 49, establish and maintain knowledge necessary for the preventive care, diagnosis, treatment, and management of medical problems
- Through an inquiry-oriented and analytic approach to learning and patient care, develop and implement approaches for generating and applying new knowledge, including an individual course of study that emphasizes inquiry, discovery, and dissemination
- For the UCSF 49, select, justify, and interpret diagnostic tests and imaging
- For the UCSF 49, diagnose and explain clinical problems
- Use electronic decision support tools to inform clinical reasoning and decision making
- For the UCSF 49, select and apply basic preventive, curative, and/or palliative therapeutic strategies

Practice-Based Learning and Improvement

Graduates will be able to:

- Locate, appraise, and apply evidence from scientific studies related to patients' health needs
- Critically reflect on one's own performance to identify strengths and challenges; reflect on and address the impact that personal biases, identity, and privilege have on interactions and decision-making; set learning and improvement goals; and engage in learning activities that address one's gaps in knowledge, skills, and/or attitudes
- Employ strategies for seeking, receiving, acting upon, and delivering feedback, and contribute to a culture of openness to and appreciation of feedback

Interpersonal and Communication Skills

Graduates will be able to:

- Communicate effectively in interpersonal and electronic communications with patients, families, peers, and other team members of diverse backgrounds, languages, cultures, and communities using strategies to build alliances, promote inclusion and equity, and ensure patient, peer, or other team members' understanding
- Demonstrate sensitivity, honesty, and compassion in difficult conversations with patients and families
- Share and elicit information and negotiate management plans using shared decision making with patients and their families
- Anticipate, interpret, and respond to one's own and others' emotions to manage interpersonal interactions effectively

Professionalism

Graduates will be able to:

- Form relationships with patients, families, and colleagues that demonstrate sensitivity and responsiveness to how others define their culture, race/ethnicity, age, socioeconomic status, gender, gender identity, sexual orientation, religion, spirituality, disabilities, and other aspects of diversity and identity
- Demonstrate respect, compassion, honesty, and integrity when interacting with patients, families, colleagues, and teams
- Balance the needs of patients and health care team with one's own needs
- Recognize the need for additional help or supervision and seek it accordingly
- Demonstrate accountability and reliability, including initiative, responsiveness, and follow-through, in interactions with patients, families, and colleagues in interpersonal and electronic communications, including electronic health records
- Practice with a commitment to ethical principles, social justice, and societal needs, including maintaining patient confidentiality, responding to medical errors and healthcare disparities, respecting patient autonomy, maintaining appropriate boundaries, and using electronic communications, including social media, appropriately
- Adhere to institutional, regulatory, and professional standards and administrative expectations; personal, patient, and public safety; adhere to principles of ethical research; and manage conflicts of interest
- Demonstrate healthy coping mechanisms to respond to stress, including using resources to promote wellness and maintain professional behavior
- Demonstrate ongoing commitment to one's own professional identity formation as a physician accountable to patients, society, and the profession

Systems-Based Practice

Graduates will be able to:

- Collaborate to coordinate patient care within and across health care systems, including patient hand-offs
- Participate in a systematic approach to promote patient safety
- Participate in continuous improvement in a clinical setting, utilizing a systematic and team-oriented approach to improve the quality and value of care for patients and populations
- Apply understanding of current and historical factors affecting health equity, including structural inequalities in access to and quality of health care, to improve the health of patients and communities

Interprofessional Collaboration

Graduates will be able to:

- Use the knowledge of one's own role in different teams and settings and the roles of other health professionals to assess and address the health care needs of patients and populations
- Communicate with other health professionals in a responsive and responsible manner that supports a collaborative approach to the maintenance of health and the treatment of disease in patients and populations
- Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust

Dual Degree/Special Programs

Students in special programs may have additional requirements. Learn more (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/).

- MD/Masters in Advanced Studies (MD/MAS) (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#MD/MAS)
- MD with Distinction (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#MD-with-Distinction)
- Medical Scientist Training Program (MSTP) (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#MSTP)
- UC Berkeley - UCSF Joint Medical Program (MD, MS) (https://catalog.ucsf.edu/programs/ucsf-ucb-jmp/)
- MD, Masters of Public Health (MS) Program (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#MD/MPH)
- Program in Medical Education for the Urban Underserved (PRIME-US) (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#PRIME)
- San Joaquin Valley Program in Medical Education (SJV PRIME) (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#SJV-PRIME)
- MD, PhD in History of Health Sciences (https://meded.ucsf.edu/md-program/prospective-students/admissions-md-program/degrees-and-programs/education-programs/#history-of-health-sciences)

- Oral and Maxillofacial Surgery Residency (https://catalog.ucsf.edu/residency-fellowship/oral-maxillofacial-surgery-residency/)

Additional Information

Foundations 1 Leadership

meded.ucsf.edu/md-program/current-students/curriculum/bridges-faculty#Foundations-1-Leadership (https://meded.ucsf.edu/md-program/current-students/curriculum/bridges-faculty/#Foundations-1-Leadership)

Foundations 2/Career Launch Leadership

meded.ucsf.edu/md-program/current-students/curriculum/bridges-faculty#Foundations-2Career-Launch-Leadership (https://meded.ucsf.edu/md-program/current-students/curriculum/bridges-faculty/#Foundations-2Career-Launch-Leadership)

Career Outcomes

meded.ucsf.edu/md-program/current-students/student-services/advising-career-development (https://meded.ucsf.edu/md-program/current-students/student-services/advising-career-development/)

Graduation Requirements

Course and Clinical Requirements: Bridges Curriculum

Foundations 1

Principles

- There is one set of requirements for Foundations 1 (F1). All students will have the same required coursework and same minimum unit requirement during F1 to develop foundational science knowledge and skills.
- There is a single entry point for F, which is IDS 121A. The elements that comprise each course in F1 proceed in a longitudinal and developmental fashion, and students must complete them in order. Students receive a single grade for each course. In order to complete F1 and move on to the next phase of the curriculum, students must pass all eight F1 courses.
- The F1 curriculum is a full-time (minimum 40 hours per week) endeavor.

Foundations 1 Requirements by Course

Course	Title	Units
Year 1		
INTERDEPT 121A	Foundations 1 (Ground School; Clinical Microsystems Clerkship; Core Inquiry Curriculum; Physician Identity (PI) Week 1)	9
INTERDEPT 121B	Foundations 1 (Airways, Blood, and Circulation; Health and the Individual; Clinical Microsystems Clerkship; Core Inquiry Curriculum; PI Week 2)	20
INTERDEPT 123A	Inquiry Immersion 1 (Inquiry Immersion)	3
INTERDEPT 121C	Foundations 1 (Renal, Endocrine, GI, and Nutrition; Health and Society; Clinical Microsystems Clerkship, Core Inquiry Curriculum)	18
INTERDEPT 121D	Foundations 1 (Pathogens and Host Defense; Clinical Microsystems Clerkship; Core Inquiry Curriculum; PI Week 3)	12
	Units	**62**
Year 2		
INTERDEPT 122A	Foundations 1 (Life Stages; Clinical Microsystems Clerkship; Core Inquiry Curriculum)	11
INTERDEPT 122B	Foundations 1 (Brain, Mind, and Behavior; Clinical Microsystems Clerkship; Core Inquiry Curriculum; ARCH Week 4)	12
INTERDEPT 122C	Foundations 1 (Diagnostic Reasoning; Clinical Microsystems Clerkship; Core Inquiry Curriculum)	4
	Units	**27**
	Total Units	**89**

Foundations 2

Principles

- There is one set of requirements for Foundations 2 (F2). All students will have the same required coursework and same minimum unit requirement in F2 to advance their clinical and foundational science knowledge and skills.
- The primary entry point into F2 is at the beginning of block 1. A second entry point at the beginning of block 3 has been created to support students in special programs on a case-by-case basis. Students are also permitted to enter F2 at the start of block 5 with approval based on their educational needs. Students will not be allowed to enter clerkships at any other time points during F2 without explicit approval from the Associate Dean of Curriculum.
- All students will have one day/week away from assigned block clerkships and CIExes; the longitudinal FCM clerkship and FCM Seminar/ADT and FS seminar will be scheduled during those days. All block clerkship students will have flexibility to schedule CIExes and vacation during otherwise unassigned time occurring in their Surgery/Anesthesia Thematic Clinical Block (TCB) and Pediatrics/OBGYN TCB. CIExes will be scheduled in 2-week blocks. Vacation will be scheduled in 2-week blocks.
- Credit-bearing activity for block rotations (ARCH/PI Weeks and block clerkships, CIExes) is a full-time (minimum 40 hours per week) endeavor. Credit for weekly activities (longitudinal FCM, FCM Seminar/ADT/FS-in-F2 Day) is awarded by achieving expectations for required number of sessions with a minimum requirement of 22 sessions exclusive of scheduled vacation and University holidays.
- Full enrollment in a quarter is 12 units.
- All students must take Step 1 of the US Medical Licensing Examination (USMLE) by the completion of the USMLE Step 1 Licensing Exam block and before beginning Career Launch unless they have an exceptional curriculum approval in place.Learn more about the School's policy on USMLE Board Exams During Medical School (https://meded.ucsf.edu/policies-procedures/usmle-board-exams-during-medical-school/). *The UCSF School of Medicine requires students to pass two USMLE exams (Step 1 and Step 2 CK) in order to graduate.*

Foundations 2 Requirements in Weeks

Activity	Number of Weeks/ Sessions	Number of Units
8 Core Clerkships:	MED 110 = 8 weeks	12
• 7 Clerkships block format	SURG 110 = 8 weeks	12
• 1 Clerkship longitudinally	PEDS 110 = 6 weeks	9
	OBGYN 110 = 6 weeks	9
	NEURO 110 = 4 weeks	6
	PSYCH 110 = 4 weeks	6
	ANES 110 = 2 weeks	3
	FCM 110 = 22 full-day sessions[1] and FCM Seminar on FS-in-F2 Day	2 units (winter, spring, summer qtr.) 3 units (fall qtr.)

FCM Seminar/ADT/FS-in-F2 Day (1 full day every-other week)	22 sessions[1]	1.5/qtr.
ARCH/PI Weeks	2 weeks	3
Clinical Immersion Experiences (CIExes)	6 weeks	9
Flex Time (may be used as vacation or for additional CIEx)	2 weeks	
Vacation	2 weeks	
Total	50 weeks	

[1] Students do not attend FCM 110 seminar or FS-in-F2 during scheduled vacation or on University holidays.

Career Launch

Principles

- There are 2 sets of requirements; one set is applicable to students who have NOT done scholarly work sufficient to satisfy the Inquiry Deep Explore requirement since matriculating at medical school and the other set is applicable to those who HAVE done this scholarly work since matriculating at medical school. Examples of scholarly work sufficient to satisfy the Inquiry Deep Explore requirement include the MSTP biomedical or medical anthropology PhD; the JMP Master of Science; an MPH at UCB or another institution.
- All students will have the same required coursework and same minimum unit requirement in Career Launch to advance their clinical skills.
- All students will have flexibility in the form of unscheduled time to accomplish other goals such as residency interviews and vacation, etc.
- Students have the option of enrolling during “Unscheduled” time to engage in credit-bearing activities such as intramural or extramural clinical rotations, research, teaching, or other 4th-year electives.
- Students with an excess of unscheduled time (>10wks) have a possibility of taking a Winter Quarter off, provided that all graduation requirements can be met easily within the other quarters of Career Launch.
- Students will schedule activities in 2- or 4-week blocks. Each credit-bearing activity is a full-time (minimum 40 hours per week) endeavor. That is, students can take only one course at a time, with the exception of the longitudinal SPAN and some MD/MAS program graduate courses.
- Full enrollment in a quarter is 12 units.
- Students are required to take and pass the Clinical Performance Exam (CPX) (https://meded.ucsf.edu/clinical-performance-exam-cpx/) prior to graduation.
- Students are encouraged to take Step 2 CK of the US Medical Licensing Examination (USMLE) as soon as possible after completing Foundations 2 and advised to take it by Aug 15 of the year they are applying for residency. Learn more about the School’s policy on USMLE Board Exams During Medical School (https://meded.ucsf.edu/policies-procedures/usmle-board-exams-during-medical-school/). *The UCSF School of Medicine requires students to pass two USMLE exams (Step 1 and Step 2 CK) in order to graduate.*

Career Launch Requirements in Weeks

Activity	No Prior Scholarly Work	Prior Scholarly Work
Introduction to Career Launch	4 weeks	4 weeks
Designing and Conducting Research	4 weeks	0
Clinical Requirements/ Rotations	24 weeks	24 weeks
Inquiry Deep Explore[1]	20 weeks	0
ARCH/PI Weeks	2 weeks	1-2 weeks[2]
Coda	3 weeks	3 weeks
Unscheduled	8 weeks	32-33 weeks[2]
TOTAL	61 weeks	61 weeks
SPAN	12 1/2 day sessions	12 1/2 day sessions

[1] Minimum of 12 weeks within Inquiry Deep Explore must be for scholarly Inquiry Deep Explore project work. The additional 8 weeks can be used for clinical work, scholarly Inquiry Deep Explore project work, or other credit-bearing work such as teaching.

[2] Students who start Career Launch late will convert the first scheduled ARCH week to unscheduled time.

Career Launch Clinical Requirements/Rotation Categories

Advanced Core Skills: Meeting UCSF Milestones and entering ACGME specialty zero milestones (if applicable) while student is functioning as a primary caretaker in an intern role. *12 weeks total*

- Advanced Medicine (Med 140.01/FCM 140.40) 4-week rotation; *required of all students*
- Acute/Urgent Care. *4-week rotation*
- Advanced Specialty & Sub-Specialty. *4 weeks total*

Elective Skills: *12 weeks total*

Career Exploration

Notes:

- Students who complete non-clinical work may apply a maximum of 6 units (4 weeks) worth of credit to their 12 weeks Elective Skills graduation requirement. Additional credits earned will be reflected on the transcript, but will not count towards meeting graduation requirements.
- MSTP Students who take 2 MED 160.04s will meet a single CIEx Foundations 2 requirement *OR* one 2-week Electives Skills Career Launch requirement. MSTP Students who take a 3rd MED 160.04 and MED 170.36 will meet a second CIEx Foundations 2 requirement *OR* one 4-week Elective Skills Career Launch requirement.
- Medicine acting internship (MED 140.01) must be taken at a site other than where the student took the Medicine Core Clerkship (MED 110). Occasionally a student may be assigned to the same site twice for their Medicine rotations due to availability issues; this is an unusual event that will be managed on a case-by-case basis.
- Graduation requirements specific to each graduating class are posted in iROCKET (http://irocket.ucsf.edu/).

For more details, please consult the full text of Section III of the Regulations of the Faculty of the School of Medicine, UCSF at senate.ucsf.edu/0-bylaws/somb.html#somreg (http://senate.ucsf.edu/0-bylaws/somb.html#somreg).

Competency Requirements: Pre-Bridges Students

Upon graduation, students are required to have demonstrated competence in all of the MD Program Objectives. (https://meded.ucsf.edu/md-program/current-students/curriculum/md-program-objectives/) For each competency, a set of milestones defines the expected progress throughout medical school toward achieving competence.

Core Courses

Code	Title	Units
INTERDEPT 121A	Foundations 1	9
INTERDEPT 121B	Foundations 1	20
INTERDEPT 121C	Foundations 1	18
INTERDEPT 121D	Foundations 1	12
INTERDEPT 122A	Foundations 1	11
INTERDEPT 122B	Foundations 1	12
INTERDEPT 122C	Foundations 1	4
INTERDEPT 123A	Inquiry Immersion 1	3
ANE PERIOP 110	Anesthesia Core Clerkship	3
FAM CM MED 110	FCM Core Clerkship	0.5-2.5
INTERDEPT 113A	Foundational Sciences in Foundations 2 (Winter)	1.5
INTERDEPT 113B	Foundational Sciences in Foundations 2 (Spring)	1.5
INTERDEPT 113C	Foundational Sciences in Foundations 2 (Summer)	1.5
INTERDEPT 113D	Foundational Sciences in Foundations 2 (Fall)	1.5
INTERDEPT 117A	Physician Identity (PI) Week 5	1.5
INTERDEPT 117B	ARCH Week 6	1.5
MEDICINE 110	Medicine Core Clerkship	12
NEUROLOGY 110	Neurology Core Clerkship	6
OB GYN R S 110	Ob/Gyn Core Clerkship	9
PEDIATRICS 110	Pediatric Core Clerkship	9
PSYCHIATRY 110	Psychiatry Core Clerkship	6
SURGERY 110	Surgery Core Clerkship	12
FAM CM MED 140.40	Advanced Inpatient Clerkship	6
INTERDEPT 117C	ARCH Week 7	1.5
INTERDEPT 117D	ARCH Week 8	1.5
INTERDEPT 118	Deep Explore	1-16
INTERDEPT 119	Introduction to Career Launch	3
INTERDEPT 120	Designing and Conducting Research	2
INTERDEPT 125	Specialty Practice Ambulatory Sub-interNship (SPAN)	3
MEDICINE 140.01	Acting Internship in Medicine	6
MEDICINE 140.01	Acting Internship in Medicine	6
MEDICINE 140.01	Acting Internship in Medicine	6
INTERDEPT 115	Coda	3