

# TABLE OF CONTENTS

Starting Out	1
Medical School Application Timeline	2
Medical School Requirements for Admissions	3
I. Course Requirements	
II. Medical College Admissions Test (MCAT)	
Harvard Courses That Satisfy Most Medical School	
Admissions Requirements	4
Considerations for Planning Your Program of Study	8
Course Load, Pass/Fail, and GPA	
Chemistry, Biology, Physics, and Math Placement	
Science General Education Courses	
Research	
Study Abroad	
Summer School	
Post-Baccalaureate Options	
Sample Course Sequences	10
Medical Career Resources for Harvard Students	14

## STARTING OUT

Dear Harvard Students,

Premedical Information for Harvard Students: Timelines, Courses, & Resources 2021-2022 provides an overview of the application timelines and courses required for admission to U.S. medical schools. We hope it will serve as a planning guide to help you integrate this coursework into your academic plan at Harvard. We have also included a list of Harvard resources that will help as you consider a career in medicine.

As a first-year Harvard student, or someone who has recently decided to pursue premedical coursework, you will hear many opinions about what being premed means and what medical school admission committees expect to see in an applicant. Do not believe all that you hear (or that you read online). Misconceptions and misinformation can provoke unnecessary anxiety. This booklet is designed to help dispel some common premed and medical school admissions myths.

While this publication describes the process for students applying to MD programs (allopathic medicine), many Harvard students choose to pursue other health professions, such as public health, dentistry, veterinary medicine, nursing, and osteopathic medicine. Please feel free to contact us to discuss the requirements for these and other health professions fields. We urge you to take advantage of the range of premedical and pre-health advising resources available at Harvard. Concentration advisers, House premedical tutors, Office of Career Services (OCS) career advisers, and practitioners in the field will offer a range of perspectives on how to enhance your experience at Harvard as you explore your future careers.

Please also know that you do not need to be sure that you want to go to medical school to seek out the advice of the pre-health team at OCS. We are also here to help you think about your other options and about how to explore whether a career in health care is right for you.

Oona Ceder and Emiko Morimoto

Premedical and Health Careers Advisers

Oona B. Vela En

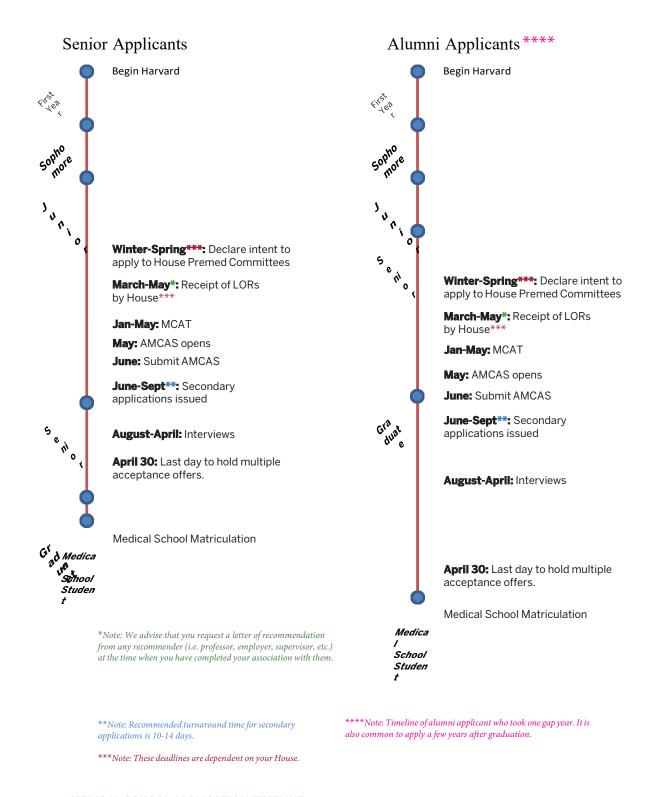
Office of Career Services

Faculty of Arts and Sciences

Harvard University

# MEDICAL SCHOOL APPLICATION TIMELINE

Around 75-80% of Harvard applicants to medical school in recent years have waited until their senior year and beyond to apply to medical school. This timeline allows students four years to fulfill their premedical requirements. Students can also take some or even all of their premedical requirements after they graduate from college. The national average age of entering medical school students is 24, and medical schools value the added experience and maturity brought by students who have taken one or moregap years.



## MEDICAL SCHOOL REQUIREMENTS FOR ADMISSION (AS OF JULY2021)

Requirements are not the same at all medical schools. Fulfilling the requirements below will allow you to apply to almost any U.S. medical school.

## I. Course Requirements

- One year of general or inorganic chemistry with lab
- One year of organic chemistry with lab
- One year of general physics with lab
- One year of biology with lab
- One year of English

It is recommended that you complete almost all of these courses before taking the MCAT and before applying to medical school.

## ADDITIONAL REQUIREMENTS:

- Currently around 60 medical schools require one or two semesters of mathematics (college math, calculus, and/or statistics).
- Currently more than 60 medical schools require one semester of biochemistry. We expect this number to keep increasing.
- Some medical schools require more than one year of biology.
- Around 20 medical schools require one semester of statistics.

IMPORTANT: Check the current edition of the *Medical School Admission Requirements* (MSAR), theofficial guide of the Association of American Medical Colleges, for information on particular course requirements for specific medical schools.

Be sure to check the premedical requirements for your state medical school. MSAR is updated annually and can be purchased online on the <u>Association of American Medical Colleges (AAMC) website</u>. Medical schools also list their specific requirements on their websites. For a list of all U.S. medical schools and links to their admissions policies pages, see the OCS resource <u>Information About Requirements</u>, <u>Admissions</u>, and <u>Financial Aid Policies for Medical School Matriculation Prepared by OCS</u>.

## II. Medical College Admissions Test (MCAT)

The Medical College Admissions Test (MCAT) currently assesses the medical school applicant's understanding of basic concepts in general biology, biochemistry, general chemistry, organic chemistry, non-calculus based physics, statistics, psychology, and sociology. The test consists of four multiple-choice sections:

- Biological and Biochemical Foundations of Living Systems
- Chemical and Physical Foundations of Biological Systems
- Psychological, Social, and Biological Foundations of Behavior
- Critical Analysis and Reasoning Skills

For the most up-to-date information about the test, please visit the official Medical College Admission Test (MCAT) website. Some highlights include:

- What's on the MCAT Exam?
- Online practice questions
- Khan Academy MCAT video collection
- Psychology and sociology textbook resources
- Test dates and registration

To prepare for the MCAT, some students may choose to take an introductory psychology course such as Psychology 1, or a sociology course such as Sociology 10 or any of the Sociology 20-series courses, in addition to the science requirements. Many students, however, have successfully completed the MCAT without specific course preparation in those areas. As Harvard courses are not designed specifically to prepare students for the MCAT, there may be some topics that are included on the MCAT but not covered in your courses. Depending on your background, you may find it necessary to learn certain concepts on your own or through a review class.

Review free AAMC MCAT materials at: <a href="https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam/prepare-mcat-exam/free-planning-and-study-resources/">https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam/prepare-mcat-exam/free-planning-and-study-resources/</a>

or <a href="https://students-residents.aamc.org/applying-medical-school/taking-meat-exam/prepare-meat-exam/">https://students-residents.aamc.org/applying-medical-school/taking-meat-exam/prepare-meat-exam/</a> and <a href="https://www.khanacademy.org/test-prep/meat">https://www.khanacademy.org/test-prep/meat</a>

# HARVARD COURSES THAT SATISFY MOST MEDICAL SCHOOL ADMISSIONS REQUIREMENTS (AS OF JULY 2021)

For almost all medical schools, Advanced Placement (AP) exams in biology, chemistry, and physics do not fulfill the premedical requirement in these areas. Most medical schools require that biology, chemistry, and physics be taken in college. See the section on "Mathematics" below for more information about using AP Calculus to satisfy medical school math requirements. Please note that Harvard College does not make the decision about which courses meet premedical course requirements. Each medical school is the final arbiter of which courses they will accept. Therefore, if you have any doubt about whether a course can be substituted for the courses listedbelow, you should check with the admissions offices of the medical schools to which you may apply.

## GENERAL OR INORGANIC CHEMISTRY WITH LAB (ONE YEAR):

**Two** of the following courses. Both should contain labs.

- Life and Physical Sciences A or Life Sciences 1a or Life Sciences 50a\*
- Physical Sciences 1 or Physical Sciences 11 or Physical Sciences 10
- Engineering Sciences 181 (for Engineering concentrators)
- CHEM S-1AB (Harvard Summer School, fulfills the one year requirement)
- Advanced inorganic or physical chemistry.\*\*
   For example, Chemistry 40, Chemistry 60, or Chemistry 160.

Note: \*Life Sciences 50a will satisfy the requirement of one semester of general chemistry with lab

<sup>\*</sup> As a note, premedical course requirements cannot be taken online/remotely, unless courses are only offered by a specific institution in an online format for that term/semester (i.e. due to Covid-19 and ongoing changes due to Covid-19).

and one semester of biology with lab at most medical schools.

\*\*If you plan to take only higher level inorganic or physical chemistry courses, most medical schools will accept these courses in lieu of general chemistry. If neither of these courses has lab, you may have to take an additional inorganic or physical chemistry lab course, or demonstrate your lab competency through research.

#### **BIOLOGY WITH LAB (ONE YEAR):**

Two of the following courses. Both should contain labs. Most medical schools recommend that these courses cover the cellular and molecular aspects as well as the structure and function of living organisms. Narrowly focused biology courses cannot be used to meet the basic premedical biology requirements.

- Life Sciences 1b
- Life Sciences 2
- Life Sciences 50a\*
- Life Sciences 50b\*\*
- Molecular & Cellular Biology 60
- Molecular & Cellular Biology 68
- Organismic & Evolutionary Biology 10
- Organismic & Evolutionary Biology 58
- Stem Cell & Regenerative Biology 50
- Human Evolutionary Biology 1420
- Engineering Sciences 53
- BIOS S-1a (Harvard Summer School)
- BIOS S-1b (Harvard Summer School)

Note: \*Life Sciences 50a will satisfy the requirement of one semester of general chemistry with lab and one semester of biology with lab, and \*Life Sciences 50b will satisfy the requirement ofone semester of biology with lab and one semester of math at most medical schools.

## ORGANIC CHEMISTRY WITH LAB (ONE YEAR):

One of the following series:

- Chemistry 17 and Chemistry 27
- Chemistry 20 and Chemistry 30
- CHEM S-20ab (Harvard Summer School)
- CHEM S-17 (Harvard Summer School) and Chemistry 27\*

Note: Most medical schools that require biochemistry will accept a combination of Chemistry 17 and Chemistry 27 as fully meeting both the organic and biochemistry requirements. Students who take CHEM S-20ab or Chemistry 20 and Chemistry 30 may subsequently take Chemistry 27 without the lab component, with permission from the course instructor/preceptor, to satisfy one semester of biochemistry.

\*CHEM S-17 includes the laboratory component of the course. Chemistry 27 will subsequently be taken without the lab component.

#### **BIOCHEMISTRY (ONE SEMESTER):**

**One** of the following courses. Currently one semester of biochemistry is required by more than 60 medical schools, and we anticipate this number to continue to increase. The MCAT also places a considerable emphasis on biochemistry.

- Most medical schools that require biochemistry will accept a combination of Chemistry 17 and Chemistry 27 as fully meeting both the organic and biochemistry requirements.
- Molecular & Cellular Biology 63
- Molecular & Cellular Biology 65
- BCMP 234
- BIOS S-10 (Harvard Summer School)
- Advanced courses such as Chemistry 170 or Chemistry 171. Please consult with OCS advisers.

## PHYSICS WITH LAB (ONE YEAR):

One of the following series:

- Physical Sciences 2 and Physical Sciences 3
- Physical Sciences 12a and Physical Sciences 12b (Note: PS 12a is a prerequisite course for PS 12b)
- Physics 15a or Physics 16 and Physics 15b
- Applied Physics 50a and Applied Physics 50b
- PHYS S-1a and PHYS S-1b (Harvard Summer School)

#### **MATHEMATICS:**

**Two** math courses which can be satisfied with a combination of an AP calculus score of 4 or 5, a college calculus course, and/or statistics. *However, depending on your background you may need to take more than one semester of calculus in order to be fully prepared for your concentration or for future coursework.* Note that several physics courses, including Physical Sciences 2 and 3, recommend Math 1b or equivalent. Almost 20schools specifically require a statistics course, and we expect this number to increase.

- Math Ma and Math Mb
  Math 1a or Math 1b
  Math 19a
  Math 18
  Math 21a or 21b
  Applied Math 21a or 21b
  Life Sciences 50b\*\*
  or
- Any more advanced Math or Applied Math course

#### **PLUS**

Any statistics course (e.g., Statistics Department courses or Psychology 1900 (Note-Psychology 1 or equivalent is a prerequisite for this course), Math 19b, Sociology 156, Applied Math 101, or Engineering Sciences 150)

**Note:** \*\*We expect that Life Sciences 50b will satisfy the requirement of one semester of biology with lab and one semester of math at most medical schools. If you have a 4 or 5 on the AP Calculus AB test, you have met the requirement for one of the two semesters of math required by many medical schools. If you have a 4 or 5 on the AP Calculus BC test, you have met the requirement for both of the two semesters of math required by many medical schools. Note, however, that some medical schools do not accept calculus (or statistics) APs toward satisfaction of their math (or statistics) requirement unless the AP score is recorded on the applicant's official undergraduate transcript. Only Harvard students who have activated advanced standing will have AP tests and scores recorded on their official transcripts.

#### **ENGLISH (ONE YEAR):**

One semester of the English requirement is met with Expos. (Students who take Expos 10 and Expos 20 have met the full requirement of two semesters of English.) For many medical schools, the second semester can be met with English or Literature courses, many Humanities courses, or with some General Education courses.

We cannot confirm that a specific Gen Ed course would be approved by every medical school, since schools make their own determination about what courses they will accept toward fulfillment of this requirement. Therefore, please use your best judgment when considering Gen Ed courses and whether they can be expected to meet the English requirement. To be accepted by most medical schools, Gen Ed courses should:

- 1) deal primarily with literature (English literature or literature originally written in another language but read in English translation). Courses that focus on music, painting, or architecture, for example, would not be acceptable for satisfaction of the English requirement at many medical schools. A course whose primary assignments are multimedia or group projects will not meet this requirement for most medical schools;
- 2) be writing intensive. As for the number of papers, many Gen Ed courses assign enough papers to be considered writing intensive by medical schools;
- 3) be taught by a faculty member in the English or Comparative Literature departments, or a foreign Literatures and Languages department (such as East Asian Languages and Civilizations, Germanic Languages and Literatures, Near Eastern Languages and Civilizations, the Classics, etc.).

## CONSIDERATIONS FOR PLANNING YOUR PROGRAM OF STUDY

#### Course load, Pass/Fail, and GPA

There is no need to rush and overload with science courses in your first year. We recommend that firstyear students take at most two science courses (including math) each semester. The first few semesters at Harvard involve getting used to a new setting, a new set of social and extracurricular activities, and new ways of learning and studying. College-level science courses, especially those with lab, can be unexpectedly time-consuming and demanding, particularly for students who have not had strong science preparation in high school. Consult your First-Year Adviser, and the advising staff in Life and Physical Sciences, Engineering Sciences, and Math for course load and placement advice.

Just as it is important not to overload on courses and activities, premed students should also avoid dropping below the regular course rate of four courses per semester. To be competitive for medical school admission, applicants should demonstrate an ability to handle a science-intensive curriculum and a love of learning through in-depth study of a particular area or areas of interest. However, if you anticipate a challenging semester ahead, it is perfectly acceptable to take one of your elective courses pass/fail (Required premedical courses must be taken for a letter grade to be accepted by medical schools. The exception is if a course is required to be graded SEM/UEM, Pass/Fail, or Sat/Unsat, as was the case during Spring 2020 due to Covid-19).

While you do want to achieve an overall strong performance in the sciences, there is no specific GPA (or MCAT score) that guarantees acceptance to medical school. Your grades are only one of the factors in the admissions process. Your personal qualities, experiences, and motivation are also critical factors. Medical school admissions committees look favorably on students who have tested their interest in medicine through

community service, healthcare-related internships, extracurricular activities, or research. Each medical school develops its own criteria and priorities for admission, reflecting the goals of the respective school. For some medical schools, potential for service to an underserved community is very important; for others, a determining factor may be research experience. To assess your personal qualities, experiences, and motivation for becoming a doctor, the admissions committeeswill carefully review the statements and essays in your application, letters of evaluation, your coursework (including trends in academic performance and level of course difficulty), and personal interviews.

Do not be disheartened or discouraged from pursuing medicine if your first science grades do not meet your expectations. Medical school admissions committees look favorably on an upward trend in your academic record. That being said, if you have received a C or lower grade in a science course, it is a good idea to make an appointment with an OCS premedical/pre-health adviser, your academic adviser, and/or an adviser at the Academic Resource Center to review your course load, your extracurricular activities, and study strategiesas you continue your studies.

For information on GPAs and admission to medical school, check the OCS publication *Medical School Admissions Data*, which is available online (please email the OCS premedical/pre-health advisers at premed@fas.harvard.edu to request access).

## Chemistry, Biology, Physics, and Math Placement

Please contact the advisers and course teaching staff in the appropriate department.

#### Science General Education Courses

Science General Education courses cannot be used to satisfy the science premedical requirements. However, if the content of the General Education course is primarily biology, chemistry, math, or physics, this course will count towards your science GPA as calculated for your medical school application.

## Research

Basic science research is not a requirement for medical school admission, and in fact, many Harvard students continue on to medical school without working in a lab. Successful medical school applicants have usually demonstrated the ability to pursue an area of study in depth. This could be many things including basic or social science research, clinical research, or a thesis in English literature. The experience of formulating an original research question and critically analyzing data does not necessarily have to occur in a research lab.

If you are excited about pursuing basic science research at Harvard, there are many wonderful resources available to you, both at the college campus in Cambridge and at the Harvard Medical School campus in Boston and affiliated hospitals. For science concentrators in particular, the experience of working in a lab can significantly enhance your college experience. Students who are seriously considering a combined MD-PhD or an academic medical career should take advantage of these opportunities early to develop your interests.

#### Study Abroad

Premedical courses should not be taken during study abroad. Most medical schools will not accept premedical requirements taken at a foreign institution. However, students are encouraged to enroll in other courses abroad and to pursue international research and internship opportunities.

#### **Summer School**

Harvard Summer School courses can be taken for credit toward your degree and toward your medical school requirements. However, you can also take a premedical course elsewhere during the summer at an academically competitive **four-year U.S. college**, as long as the course is not required for your concentration.

(You do not need to get Harvard credit for a course to use it for medical school admissions.) Do not take more than the equivalent of one year of your premedical course requirements during the summer, as it may appear as if you are avoiding Harvard science courses or avoiding taking science courses during the term. Additionally, it is usually not advisable to split sequential courses between institutions. (Note that CHEM S-20ab: Organic Chemistry does **not** satisfy the requirement of one semester of biochemistry at any medical schools.)

## Post-Baccalaureate Options

Many Harvard students do not complete or even begin taking premedical courses while enrolled as undergraduates. Post-baccalaureate programs or independent coursework allow college graduates to take some or all of the required premedical courses. Harvard students who choose to complete their requirements after graduation can still take advantage of Harvard premedical/pre-health advising and resources at OCS and in their House or the Dudley Community for up to five years after graduation. Please visit the OCS website for more information on post- baccalaureate options and programs.

# SAMPLE COURSE SEQUENCES THAT MEET MOST MEDICAL SCHOOL REQUIREMENTS

If you are planning on concentrating in a science, most premedical requirements will be included in your course of study. However, you can also choose any nonscience concentration and still have time to complete these required courses. Many Harvard students started premedical coursework later in college or even after graduation. We have created the following sample schedules to illustrate how you can assemble the needed courses for medical school—regardless of your concentration or when you embark on your premed path. Students considering concentrating in the life and physical sciences should consult with the Assistant Director of Undergraduate Studies in the concentrations you are considering.

Please note that these are examples only. There are many possible course sequences, and your individual circumstances will determine your plan of study.

## Four-Year Plan (applying to medical school after senior year):

	fall	spring
first year	Life Sciences 1a or LPS A Math 1a	Life Sciences 1b Math 1b
sophomore	Life Sciences 2	Physical Sciences 1 or 11 Stat 102
junior	Chemistry 17	Chemistry 27
senior	Physical Sciences 2 or Applied Physics (AP) 50a	Physical Sciences 3 or Applied Physics (AP) 50b

# Four-Year Plan (applying to medical school after senior year):

	fall	spring
first year	[AP Calculus]	Life Sciences 1b Stat 104
sophomore	Life Sciences 1a or LPS A Math 1b	Physical Sciences 1 or 11
junior	Chemistry 17	Chemistry 27
senior	Physical Sciences 2 or AP 50a OEB 10	Physical Sciences 3 or AP 50b

# Three-Year Plan (applying to medical school after junior year):

	fall	spring
first year	Life Sciences 1a or LPS A Math 1b	Physical Sciences 1 or 11 Stat 102
sophomore	Chemistry 17 OEB 10	Chemistry 27 Life Sciences 1b
junior	Physical Sciences 2 or AP 50a	Physical Sciences 3 or AP 50b

## Three-Year Plan (applying to medical school after junior year):

	fall	spring
first year	Life Sciences 1a or LPS A Math 19a	Physical Sciences 1 or 11
sophomore	MCB 60	Chemistry 20 Life Sciences 1b
junior	Physics 15a Chemistry 30	Physics 15b Stat 102 MCB 65

# Three-Year Plan (applying to medical school after junior year):

	fall	spring
first year	Life Sciences 1a or LPS A Math 21a	Life Sciences 1b Physical Sciences 1 or 11
sophomore	Physical Sciences 2 or AP 50a	Physical Sciences 3 or AP 50b
	MCB 60	Chemistry 20
junior	Chemistry 30	Stat 110 or Chemistry 27

# Three-Year Plan with Summer School:

	fall	spring	summer
first year	Life Sciences 1a or LPS A	Life Sciences 1b Math 1b	
	Life Sciences 2	Physical Sciences 1 or 11	CHEM S-20ab (Orgo)
junior	Physical Sciences 2 or AP 50a MCB 63	Physical Sciences 3 or AP 50b	

# Three-Year Plan with Summer School and Study Abroad:

	fall	spring	summer
first year	Life Sciences 1a or LPS A  [AP Calculus]	Physical Sciences 1 or 11 Stat 102	
sophomore	Chemistry 17	Chemistry 27 Life Sciences 1b	Physics S-1a and Physics S-1b
junior	MCB 60	ABROAD	

# Four-Year Plan with Study Abroad:

	fall	spring
first year	Life Sciences 1a or LPS A Math 1b	Life Sciences 1b Physical Sciences 1 or 11
sophomore	Chemistry 17	Chemistry 27
junior	ABROAD	Physical Sciences 12a
senior	Physical Sciences 12b Life Sciences 2	Stat 102

# Premed Beginning Sophomore Year with Summer School:

	fall	spring	summer
sophomore	Life Sciences 1a or LPS A Math 21a or	Life Sciences 1b Statistics	
	Applied Math 21a		
junior	Physical Sciences 10	Physics 12a	CHEM S-17
senior	Physics 12b Life Sciences 2	Chemistry 27 (without lab)	

# Premed Beginning Junior Year:

	fall	spring
junior	Life Sciences 1a or LPS A Math 1a	Physical Sciences 1 or 11 Math 1b
senior	Chemistry 17	Chemistry 27

# $\label{premed} \textbf{Premed Beginning after Graduation (Post-Baccalaureate):}$

	fall	spring	summer
post-bac	General Chemistry Physics	General Chemistry Physics	Biology
post-bac	Organic Chemistry Biochemistry	Organic Chemistry Statistics	

# MEDICAL CAREER RESOURCES FOR HARVARD STUDENTS

Take the initiative to seek out the resources you need to get factual and realistic answers to your questions. Remember that fulfilling your premedical requirements should not dominate your college experience. Take the time to step off the "premed path" and take advantage of all Harvard has to offer you.

#### ACADEMIC AND PRE-PROFESSIONAL ADVISING

**First-Year and Sophomore Advising:** Resident proctors, first-year advisers, peer advising fellows, the Advising Programs Office, sophomore advisers, concentration advisers, and the First-Year Experience Office are all here to help you to make your first two years a very positive experience.

Premedical and Health Professions Advising: The premedical/pre-health careers advisers at the Office of Career Services offer drop-in hours, start-of-term office hours, and individual advising. Workshops coversuch topics as The Medical School Application Process, Creating Your Personal Statement, Selecting Medical Schools, Planning Your Gap Years, Financing Your Medical Education, and the Medical School Interview. Pre-Health 101 is a workshop which will be your first introduction to premedical/pre-health advising and planning at Harvard, and the Gaining Traction in Pre-Health series will help you explore clinical experience, summer planning, research opportunities, and more in greater detail. First-year students and students newto premed are asked to book "Navigating Premed & Pre-Health" advising appointments and to complete the associated form. If you would like more information, please check the Premed & Health Careers onlinecalendar.

**Pre-Health Peer Liaisons (PPL)**: The PPL are specialty PAFs who assist the OCS premedical/pre-health advisers with workshops and pre-health programming.

Name	Email	Concentration	Year
Annika Bassey	abassey@college.harvard.edu	Neuroscience	Senior
Tony Bennett	anthony_bennett@college. harvard.edu	Human Evolutionary Biology	Senior
PJ Clark	pjclark@college.harvard.edu	Neuroscience	Junior
Darlene Fung	darlenefung@college.harvard.edu	Molecular & Cellular Biology	Junior
Anagha Kumar	anaghakumar@college.harvard.edu	History and Science	Senior
Nasser Marrakchi	nassermarrakchi@college.harvard.edu	Molecular & Cellular Biology	Senior
Tanisha Martheswaran	tmartheswaran@college.harvard.edu	Human Developmental & Regenerative Biology	Senior
Abby Obeng- Marnu	aobengmarnu@college.harvard.edu	Neuroscience	Junior
Aaron Shirley	aaronshirley@college.harvard.edu	History and Science/Sociology	Junior
Zoya Surani	zoyasurani@college.harvard.edu	Neuroscience	Senior

House Premedical Tutors: Premedical advising also takes place within the Houses and the Dudley Community. Harvard's House-basedpremedical advising system is unlike that at any other college. Each House has a committee of premedical tutors, who are generally Harvard Medical School students, residents, and/or alumni, or graduates of other

U.S. medical schools currently in residency training in the Boston area. Students should become familiar with their committee. As medical practitioners, the premedical tutors are invaluable resources for learning about your potential career. The House/Dudley Community Premedical Committee is also responsible for the Harvard Collegecommittee letter of evaluation sent to the medical schools when you apply.

**Research:** For questions and advice about research in the life sciences, contact Anna Babakhanyan, Life Sciences Research Adviser: ababakhanyan@fas.harvard.edu, or Greg Llacer, Director of the Office for Undergraduate Research and Fellowships: gregory\_llacer@harvard.edu. For more information see lifesciences. fas.harvard.edu and https://uraf.harvard.edu.

Life and Physical Sciences Advisers: For questions about life and physical sciences concentrations and courses, please contact one of the advisers listed below and be sure to check lifescience.fas.harvard.edu regularly for information, including updated FAQs.

Concentration	Name	Email Address
Integrative Biology	Andrew Berry	berry@oeb.harvard.edu
Chemistry	Gregg Tucci	tucci@fas.harvard.edu
HEB	Carole Hooven	hooven@fas.harvard.edu
CPB and MCB	Dominic Mao	dominicmao@fas.harvard.edu
CPB and MCB	Monique Brewster	mbrewst@fas.harvard.edu
Neuroscience	Ryan Draft	draft@fas.harvard.edu
Neuroscience	Laura Magnotti	magnotti@fas.harvard.edu
Physics	David Morin	morin@physics.harvard.edu
HDRB	Amie Holmes	amie_holmes@fas.harvard.edu
Biomedical Engineering	Linsey Moyer	lmoyer@seas.harvard.edu
Psychology	Katie Powers	kpowers@fas.harvard.edu

#### CAREER EXPLORATION AND OPPORTUNITIES

Crimson Careers: This job and internship database maintained by OCS contains listings of opportunities, updated daily: harvard-csm.symplicity.com/students. For other OCS job resources, please visit ocs.fas. harvard.edu/job-internship-search.

Premedical and Pre-Health Email Updates: Edit your choices on the "This Week @ OCS" newsletter and select "Premed/Pre-Health" to receive announcements and information about upcoming workshops and medical school visits.

OCS Health and Medical Careers Website: You will find information on healthcare-related internship opportunities, links, workshop schedules, past workshop PowerPoint slides and recordings, year-by-year timelines, links to relevant and annotated healthcare-related sites on the internet, and much more at ocs.fas.harvard.edu/medical-health.

The Office of Career Services Website: The general OCS website, www.ocs.fas.harvard.edu, has links toinformation on fellowships and funding, international opportunities, a calendar of events, and other careerresources.

The Office of Career Services Resource Collection: The Health and Medicine shelves in the OCS Reading Room contain a range of relevant publications on careers in medicine and other health professions, including MCAT prep books.

HAA Alumni Database: This searchable database maintained by the Harvard Alumni Association contains an online listing of Harvard/Radcliffe College and other Harvard alumni/ae who have volunteered to be contacted by students considering medicine or other health professions.

HAA Alumni in Healthcare Shared Interest Group: Current students are encouraged to join this sharedinterest group (SIG) to connect with Harvard alumni working or interested in all areas of healthcare. Visit <a href="https://www.facebook.com/harvardalumnihealthcare/">https://www.facebook.com/harvardalumnihealthcare/</a>

Association of American Medical Colleges (AAMC): The website <a href="www.aamc.org">www.aamc.org</a> provides comprehensiveinformation on medical careers and the medical school admissions process. This is a useful site for information on requirements, financial aid for medical school, and post-baccalaureate programs; you can also find information about how to purchase access to Medical School Admission Requirements (MSAR) online.