



Guiding the Health Professions Student:

A Reference for Counselors

2017 Resource Booklet

Courtesy of:

**Whitaker Health Professions Advising Office
California State University, Long Beach**

Guiding the Health Professions Student: 2017 RESOURCE BOOKLET

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PRE-HEALTH ADVISING

Resources for Advising Pre-Health Care Students

Congratulations – you’re the new pre-health advisor! Now what?

Ruth O. Bingham and Beverley Childress

There is no degree for this job, no prescribed training, not even a “how-to” manual. People come to pre-health advising from many paths – instructional faculty, professional academic advisors, health practitioners, administrators, graduate assistants, or staff hired specifically for the job. Most pre-health advisors learn on-the-job from fellow advisors, building their expertise based on the experiences and perspectives they bring with them. Welcome!

There are as many different ways to do this job as there are people doing it. Some pre-health advisors are instructional faculty in the natural sciences, offering guidance to students who choose to come in for advice. Others are professional advisors who work in a large department that includes full-time advisors, clerical staff, and student assistants; they offer comprehensive pre-health advising, present workshops, conduct mandatory advising sessions, provide committee letters, track students, and compile statistics. New pre-health advisors need to understand how pre-health advising fits into the institution, the models and options available, and the basic components in building a program that will suit the institution, its population and resources.

The following is a brief overview designed to make learning the new job easier.

STEP 1: FINDING YOUR BEARINGS

Pre-health advising can be located almost anywhere within an institution: in a specific college or department, in a campus-wide office, in an academic unit or in a student affairs office. It can also be an independent advising program or integrated into the institution’s advising system.

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Wherever pre-health advising is housed, its location will impact its mission, values, and goals; funding; structure and administration of the program; what the pre-health advisor(s) can and cannot do about problems that affect students; and, most importantly, which students receive pre-health advising and whether some pre-health students slip through the cracks and receive none.

Diagramming the location of pre-health advising within the institution can help answer the following questions: How does pre-health advising fit into the institution? Does the institution use a centralized, decentralized, or shared system for pre-health advising? Do the pre-health advisors serve all pre-health students, or a specific college or population? What is the hierarchy for resolving problems? How is pre-health advising funded, and who controls the budget? Is pre-health advising located where it can do the most good for students?

Advisors often have to work with whatever structure and model they inherit; however, if the location or structure of pre-health advising is negatively impacting students and their success, advisors *can* facilitate change by working with their supervisors and other administrators.

STEP 2: THE HEALTH PROFESSIONS

There are literally hundreds of health fields. Students will ask about everything under the sun, including familiar fields, such as physician, nurse, or pharmacist, but also alternative medicine and fields such as radiologic technician, nurse anesthetist, medical educator, health administrator, nurse's aide, or dental hygienist. It is easy to become overwhelmed: how can anyone possibly learn about all of them?

The short answer is that advisors cannot know everything but can learn how to find answers by using reference books, online resources, and colleagues' expertise. In fact, knowing how to find answers is more useful than knowing the answers for two reasons: first, part of advising is teaching students how to find answers for themselves; second, the field of pre-health advising changes rapidly, so it is crucial to check current sources frequently for new information.

Pre-health advisors may find it helpful to learn about health fields in terms of the following basic categories. Each field will differ in details, but fields within a category will share similar educational paths, degrees of competitiveness, amounts of direct patient care, and levels of science/mathematics required. These categories do not represent a hierarchy, and it is imperative that they not be presented to students as such. It is also important to remember that there are significant exceptions in each category.

Diagnosing/Treating fields entail direct patient care from exceptionally well-educated practitioners. These fields are usually highly selective/competitive, require significant levels of science/mathematics, require or prefer a completed bachelor's degree, and require a post-baccalaureate degree.

- Examples: dentists, optometrists, physicians, podiatrists, and veterinarians.

Allied/Associated fields either are allied with or carry out prescribed treatments from diagnosing/treating professionals. These fields require well-educated practitioners and entail direct patient care, usually more hands-on work than in diagnosing/treating fields, and consequently require strong interpersonal skills. These fields are moderately to highly selective/competitive, require moderate to high levels of science/mathematics, and usually begin at the undergraduate level, but can extend to the doctoral level.

- Examples: nurses, dieticians, pharmacists, genetic counselors.

Rehabilitating fields also entail direct, hands-on patient care from well-educated practitioners. They are usually moderately selective/competitive, but can be highly selective/competitive if the number of applicants far exceeds the number of available seats. Some require a completed bachelor's degree; others begin at the undergraduate level. Most require moderate levels of science/mathematics and strong interpersonal skills.

- Examples: audiologists, occupational therapists, physical therapists, speech-language pathologists, recreational therapists.

Assisting/Adjunct fields support other health professionals and usually entail primarily either direct patient care or hands-on applications. These fields are minimally to moderately selective/competitive and usually require minimal levels of science/mathematics. Some can be completed with just a certificate; others require an associate's degree, a bachelor's degree, or even a bachelor's degree plus certificate.

- Examples: technologists, technicians, assistants, or aides.

Educational fields assist patients and people with their health and with the healthcare system. Selectivity depends upon the program and degree sought, ranging from associate's to bachelor's degrees, post-baccalaureate certificates, and graduate-level degrees. These fields require little to no science/mathematics, but some science/mathematics usually provides an advantage. Some require a background in education or counseling, and a strong foundation in the humanities or social sciences is helpful. Strong interpersonal skills are usually essential.

- Examples: dietary managers, biomedical writers, mental health workers, health educators, health science librarians.

Administrative fields assist or manage health organizations, not individual patients. Selectivity depends upon the program and degree sought. Degrees are offered at both undergraduate and graduate levels. Courses in science are advantageous but not usually required. Some degrees require a background in business, which includes mathematics, and most require a strong foundation in the social sciences.

- Examples: nursing home directors, geriatric care managers, health wellness coordinators, hospital public relations officers, quality assurance directors, medical secretaries, admitting officers.

Affiliated fields are independent but related to health care. These fields vary widely: some require direct patient care while others entail no patient care; some are science-based while others are based more in the social sciences; some are highly selective, others minimally selective. Most fields require a completed bachelor's degree plus a graduate-level degree, often a Ph.D.

- Examples: biomedical engineers, biostatisticians, social workers, epidemiologists, athletic trainers, environmental health scientists.

These categories provide a way of understanding the breadth of healthcare careers and can make it easier to advise students: as a first step, advisors can learn seven general pathways instead of scores of individual paths. More importantly, these categories can help advisors guide students in finding their best "fit" among healthcare careers – either in a related field within the same category, or in a different category altogether.

As examples, a pre-medical student may discover after a year or two that his or her strength does not lie in the sciences and changes to a better fit in an allied or educational field; a pre-nursing student who excels in science discovers while doing volunteer work that he or she does not enjoy nursing and switches to pharmacy; or a pre-medical student who excels in science and loves healthcare discovers he or she is uncomfortable working directly with patients and changes to an affiliated field such as biostatistics or epidemiology.

STEP 3: EIGHT ESSENTIAL STEPS

Although there are scores of different health fields, the basic steps in preparing to enter the fields' professional schools are often very similar. How well students manage these steps, with the assistance of their advisors, can significantly impact how competitive they will be when they apply.

Prerequisite courses must be completed in a timely manner in order for students to be eligible to graduate and/or apply to professional programs. These courses vary from school to school and program to program. Relevant issues include the acceptability of online, community college, and advanced placement courses; the need to take full-loads of the "science-major" courses with labs while earning above average grades; and whether requirements can be waived. To advise students well, advisors must be able to identify helpful resources, such as professional schools' Websites, teach their students to use available resources, and determine which courses at their institutions are equivalent to the schools' prerequisites.

Health-related experiences are essential in helping students confirm their desire to pursue a particular health profession. Most schools expect students to document their experiences in a variety of fields and in multiple settings. Advisors can establish shadowing programs but should expect students to make their own contacts and schedule their own shadowing visits.

- **Personal growth and development** are integral to the educational process for those pursuing careers in the health professions. Professional programs assess the personal attributes of applicants as well as their academic skills. Advisors should encourage their students to engage in volunteer and leadership activities that will help them learn about themselves and others. Pre-health students must learn to assess honestly their strengths, weaknesses, and suitability for a career of service.

- **Researching schools** should begin as early as possible. Advisors will need to have current and accurate resources available so students can learn about a variety of schools/programs. Students usually need assistance with narrowing their choices, making reasonable decisions, and choosing an appropriate program.

- **Entrance exams** are often a significant challenge for many students. Required exams vary from school to school and program to program, and students may need a variety of learning strategies to perform well. Advisors can create a chart for the major health professions that identifies the required exams, when they should be taken, and effective preparation techniques.

- **The application process** can sometimes be lengthy and complicated. To assist their students, advisors can create a Website with dates and deadlines, a "to do" checklist, links to relevant sources of information, and links to the various professional schools.

- **Preparing for interviews** improves students' chances of being accepted into professional schools but also prepares students for life. Advisors can inform students about Websites that provide interviewing tips and feedback about the interview process at particular schools, set up mock interviews with representatives from the local professional schools, and enlist their institution's career development office to videotape and critique applicants.

- **Financial aid planning** to pay the high costs of matriculating at a professional school is essential, but frequently overlooked by both applicants and advisors. Perhaps the application process itself is so stressful that applicants are just relieved when accepted and do not worry about this final step. However, the predominance of loans as opposed to grants or scholarships that do not have to be repaid makes this step important. Advisors can offer resources on financial assistance (Websites and print materials, for example) that students can review for guidance. Financial aid directors can also provide help for students who are completing the myriad financial aid forms.

STEP 4: ESSENTIAL COMPONENTS OF A PRE-HEALTH ADVISING PROGRAM

Many of the challenges in pre-health advising come from aspects of the job that lie outside face-to-face advising with students. Part of the job is understanding those aspects and how they impact advising and, ultimately, the students. There is no normative pre-health program; each institution develops a unique structure that works for it.

When the structure is not working, however, or when it needs to be improved, assessing the following components may suggest a solution or at least a direction to explore. Understanding these components and how they are functioning can help advisors communicate a program's strengths and weaknesses to administrators. These components can also guide advisors in creating a plan of action.

- Funding/Resources
- Staffing
- Training
- Space
- Information Delivery
- Advising
- Tracking
- Assessment

STEP 5: ADVOCATING FOR YOUR PROGRAM

Pre-health programs thrive only when committed advisors advocate for them on a regular basis. Advisors must find ways to inform administrators about their programs, whether through annual written reports, inviting administrators to visit, or regular meetings. Administrators usually understand the link between funding and accountability, which means that advisors need to maintain statistics on the students' and the program's successes, challenges, and needs.

STEP 6: PROFESSIONAL DEVELOPMENT

Participating in professional development activities requires both time and money, but advisors cannot advise well without the current information, innovative ideas, professional experiences, and collaborations that hone advising skills. A poorly prepared advisor is worse than no advisor at all. To remain abreast of this rapidly-changing field, pre-health advisors should participate actively in professional associations such as the National Academic Advising Association (NACADA) and the National Association of Advisors for the Health Professions (NAAHP). Both associations provide online and printed materials, conferences, and Webcasts on relevant trends and topics. A wealth of literature about pre-health advising is readily available, and in-state professional schools often sponsor training sessions and open houses. An additional and significant benefit of professional development is the many opportunities to form relationships with other advising colleagues.

STEP 7: PRE-HEALTH ADVISING RESOURCES

National Academic Advising Association (NACADA):

Regional organizations: 11 regions, including international membership

Website: www.nacada.ksu.edu

Journal: [The NACADA Journal](#)

[HealthProfessions Advising Interest Group](#)

Clearinghouse [Pre-Health Care Resources](#)

National Association of Advisors for the Health Professions (NAAHP):

Regional organizations: CAAHP, NEAAHP, SAAHP, WAAHP

Website: www.naahp.org

Journal: *The Advisor*

Health Professions listserv: hlthprof@list.msu.edu

Text: *Health Professions Admission Guide: Strategy for Success*, edited by Carol Baffi-Dugan, 7th edition.

Text: *Premedical Advisor's Reference Manual*, edited by Carol Baffi-Dugan, 9th edition.

General Health Professions References:

Health Professions Career and Education Directory, American Medical Association.

Occupational Outlook Handbook (OOH), <http://www.bls.gov/oco>

2009 Magee's Medical School Manual: A Practical Guide to Getting Into Medical School,

<http://premed.uark.edu/admission/interview.html> (Only accessible if you have an iCloud account.)

Top 100 Health-Care Careers, Dr. Saul & Edith Wischnitzer, 2nd edition.

Professional Associations:

Alpha Epsilon Delta National Health Preprofessional Honor Society ([AED](#))

Dentistry: American Dental Association ([ADA](#))

American Dental Education Association ([ADEA](#))

Medicine: American Medical Association ([AMA](#))

Association of American Medical Colleges ([AAMC](#))

Medicine, Chiropractic: American Chiropractic Association ([ACA](#))

Council on Chiropractic Education ([CCE](#))

Medicine, Naturopathic: Council on Naturopathic Medical Education ([CNME](#))

Medicine, Osteopathic: Association of American Colleges of Osteopathic Medicine ([AACOM](#))

Nursing: American Nursing Association ([ANA](#))

National League for Nursing ([NLN](#))

Occupational Therapy: American Occupational Therapy Association ([AOTA](#))

Optometry: Association of Schools and Colleges of Optometry ([ASCO](#))

Pharmacy: American Association of Colleges of Pharmacy ([AACP](#))

Physical Therapy: American Physical Therapy Association ([APTA](#))

Physician Assistant: American Academy of Physician Assistants ([AAPA](#))

Physician Assistant Education Association ([PAEA](#))

Podiatry: Association of American Colleges of Podiatric Medicine ([AACPM](#))

Public Health: American Public Health Association ([APHA](#))

Veterinary: American Veterinary Medical Association ([AVMA](#))

Association of American Veterinary Medical Colleges ([AAVMC](#))

Schools and Colleges, Admission Requirements:

Dentistry: [Official Guide to Dental Schools](#) (OGDS) by ADEA

Medicine: *Medical School Admission Requirements* ([MSAR](#)) by AAMC

Nursing: American Association of Colleges of Nursing, www.aacn.nche.edu

Optometry: *Schools and Colleges of Optometry Admission Requirements* ([SCOAR](#)) by ASCO

Osteopathy: [Osteopathic Medical Colleges Information Booklet](#) by AACOM

Pharmacy: *Pharmacy School Admission Requirements* by [AACP](#)

Podiatry: *Association of American Colleges of Podiatric Medicine Information Booklet* by [AACPM](#)

Public Health: Association of Schools of Public Health, www.asph.org

Veterinary Medicine: [Veterinary Medical School Admission Requirements](#) (VMSAR)

Application Services:

Dentistry: AADSAS <https://portal.aadsasweb.org/>

Medicine: AMCAS <https://www.aamc.org/students/applying/>

Osteopathy: AACOMAS <https://aacomas.aacom.org>

Pharmacy: PharmCAS www.pharmcas.org

Physician Assistant: CASPA <https://portal.caspaonline.org>

Podiatry: AACPMAS www.e-aacpmas.org

Public Health: SOPHAS www.sophas.org

Veterinary: VMCAS www.aavmc.org

Websites:

Dentistry: www.ada.org, www.adea.org
Medicine: www.ama-assn.org, www.aamc.org
Medicine, Chiro: www.amerchiro.org, www.cce-usa.org
Medicine, Naturo: www.cnme.org
Medicine, Osteo: www.aacom.org, <https://aacomas.aacom.org>
Nursing: <http://nursingworld.org>, www.nln.org
Occupational Therapy: www.aota.org
Optometry: www.opted.org
Pharmacy: www.pharmacas.org, www.aacp.org
Physical Therapy: www.apta.org
Physician Assistant: www.aapa.org, www.paeaonline.org
Veterinary Medicine: www.avma.org, www.aavmc.org

Tests:

Dentistry (DAT): <http://www.ada.org/101.aspx>
Graduate Record Exam (GRE): www.gre.org
Medicine (MCAT): www.aamc.org/students/mcat
Optometry (OAT): <http://www.opted.org/i4a/pages/index.cfm?pageid=3444>
Pharmacy (PCAT): www.pcatweb.info

Bingham, R. & Childress, B. (2008). Congratulations-you're the new pre-health advisor! Now what? Retrieved from the *NACADA Clearinghouse of the Academic Advising Resources Web*
Site: <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Pre-Health-Advising.aspx>

TOP 10 ADVISOR RESOURCES

1. EXPLORE HEALTH CAREERS

Explore Health Careers - www.explorehealthcareers.org is a free, multi-disciplinary, interactive health careers website designed to explain the array of health professions and provide easy access to students seeking information about health careers. This website is a joint initiative involving national foundations, professional associations, health career advisors, educational institutions, and college students.

2. HEALTH CARE CAREER DIRECTORY

Health Care Career Directory (*ISBN 978-1-60359-005-1*) - published by the American Medical Association. This resource contains the most current and comprehensive information on more than 8,000 health profession educational programs at 2,800 institutions encompassing 77 different health care careers. All program data are contained in a chart format, allowing users to compare various programs and find the one that is the best fit.

Profession descriptions include:

- history of profession
- general duties of the profession
- employment demand outlook
- educational program descriptions
- information on licensure, certification and registration

3. AMERICAN MEDICAL ASSOCIATION

American Medical Association - www.ama-assn.org - Education & Careers section. Click "Careers in Health Care, then Health Care Career Directory for a list of information about 82 careers health care.

4. NATIONAL ASSOCIATION FOR ADVISORS FOR THE HEALTH PROFESSIONS (NAAHP)

National Association of Advisors for the Health Professions (NAAHP) - www.naahp.org The National Association of Advisors for the Health Professions serves as a resource for the professional development of health professions advisors. It is a representative voice with health professions schools and their professional associations, undergraduate institutions, and other health professions organizations.

5. ASSOCIATIONS SUPPORTING STUDENTS OF DIVERSITY

- www.snma.org Student National Medical Association
- www.lmsa.net Latino Medical Student Association
- www.aaip.org Association of American Indian Physicians
- www.amwa-doc.org American Medical Women's Association
- www.apamsa.org Asian Pacific American Medical Student Association
- www.anamstudents.org Assoc. of Native American Medical Students
- www.amsa.org/AMSA/Homepage/About/Committees/GenderandSexuality.aspx LGBT committee in AMSA
- www.amsa.org/AMSA/Homepage/About/Committees/REACH.aspx Minority Health committee in AMSA
- www.nnlams.com National Network of Latin American Medical Students
- www.nammenational.org National Association of Minority Medical Educators
- www.premedofcolor.org For premed students of color
- www.thesaidonline.org Society for American Indian Dentists

You can also search for other associations at the following sites:

- www.minorityhealth.hhs.gov Office of Minority Health (Federal site)
- www.healthfinder.gov Health and Human Services searchable database of organizations nationwide
- www.minorityhealth.org/members.php Association of Minority Health Professions Schools (by their Foundation)

6. SUMMER MEDICAL AND DENTAL EDUCATION PROGRAM

Summer Health Professions Education Program (SHPEP) – www.SHPEP.org is a FREE (full tuition, housing, and meals) six-week summer academic enrichment program that offers freshmen and sophomore college students intensive and personalized medical and dental school preparation.

7. STUDENTDOCTOR.NET – INTERVIEW FEEDBACK SECTION

StudentDoctor.Net - Interview Feedback Section - www.studentdoctor.net/interview-feedback is an interview feedback forum for students to write and share their experience and read about others' experiences at health professions interviews. Feedback provided for a variety of health professional programs, such as medical school, dental, optometry, pharmacy, podiatry, and veterinary medicine. Caution that this student driven website may not always provide accurate information, but can be helpful for students who are anxious about the interview experience.

8. ASPIRING DOCS

Aspiring Docs - www.aspiringdocs.org is part of an Association of American Medical Colleges (AAMC) campaign to raise awareness about the need for more diversity in medicine and to connect students to key resources, including podcasts, online community, and other helpful links.

9. OFFICIAL GUIDES

Official Guides are annual profession specific publications that highlight preparation, application process, selection procedures, and individual school profiles.

- Allopathic Medical School Admission Requirements (MSAR) - www.aamc.org
- American Association of Colleges of Osteopathic Medicine College Information Book - www.aacom.org
- Physician Assistant Education Association - www.paeaonline.org, click on "Member Programs" for a directory of Physician Assistant Training programs
- American Dental Education Association Official Guide to Dental Schools - www.adea.org
- Pharmacy School Admission Requirements (PSAR) - www.aacp.org
- Schools and Colleges of Optometry - Admission Requirements - www.opted.org, click on "About Optometric Education" then "Student and Advisor Information" then, "Admission Requirements Handbook"
- Veterinary Medical School Admission Requirements (VMSAR) - www.aavmc.org/vmcas/vmcas.htm
- American Physical Therapy Association guide to accredited programs - www.apta.org, click "Education Programs," "Student Resources," then "PT/PTA programs"
- American Association of Colleges of Podiatric Medicine – www.aacpm.org, click on "Applying to Colleges"

10. LOCAL HEALTH PROFESSIONS PROGRAMS

Local Health Professions Programs - Go directly to the source! The local health professions programs are happy to speak with counselors and advisors regarding their admissions requirements, articulation, and programs. Many host "Information Days" or an "Open House" that spotlight programs and often provide the opportunity to take a tour, meet current students, and connect with admissions personnel and faculty.

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

Academic Considerations for Admission to Health Profession Training Programs

Different programs require different skill sets, and pre-requisite courses are designed to help you develop the skills you'll need. Each program is a little different from the others, and there are even schools within the same profession that want you to have different background preparation. Math is the best example – some medical schools require no math courses (although most applicants need some math background to take their science courses), and some may require up to two semesters of calculus and statistics. So, there's no easy way to know exactly what courses to take, but the following is a basic guideline for a few of the programs.

Requirement	CSULB Course	Med	Dental	Opt	Pharm	Phys Asst	Phys Therapy	Podiatry	Vet Med
Chem I w/lab	CHEM 111A	✓	✓	✓	✓	✓	✓	✓	✓
Chem II w/lab	CHEM 111B	✓	✓	✓	✓	✓	✓	✓	✓
Organic I w/lab	CHEM 220A + 223A	✓	✓	✓	✓	some		✓	✓
Organic II w/lab	CHEM 220B + 223B	✓	✓	✓	✓	some		✓	✓
Biology w/lab	BIOL 211	✓	✓	✓	✓	✓	✓	✓	✓
Biology w/lab	BIOL 212	✓	✓	✓	✓	✓	✓	✓	✓
Biology w/lab	BIOL 213	✓	✓	✓	✓	✓	✓	✓	✓
Physics I w/lab	PHYS 100A OR 151	✓	✓	✓	✓	✓	✓	✓	✓
Physics II w/lab	PHYS 100B OR 152	✓	✓	✓	✓	✓	✓	✓	✓
Calculus	MATH 119A OR 122	some					few		some
Statistics	BIOL 260 OR STAT 108	some	some				✓		some
Biochem	CHEM 441A OR 448	some	few						many
Microbio	BIOL 211 OR 200		few	some	some	some	some		some
Anatomy & Physiology w/lab	A: BIOL 207 OR 342 lab and 342L Physio: BIOL 208		few	some	some	some	✓		some
English	ENGL 100, 102, 300	most	many	some	some	some		✓	some
Others		PSY/SOC for MCAT Advanced Biology	Advanced Biology	PSY., other humanities or social sciences	ECO, Public Speaking	PSY (intro and abnormal)	PSY, social sciences	Advanced Biology	Varies widely

All requirements must be taken for a grade, not P/D/F. While this handout is representative of the general requirements, specific schools may have specific requirements. While these are the most common requirements for admission to a health professions training program, individual schools and professions may have additional requirements. For example, Texas schools require another full year of Biology courses. Many California schools will only accept AP on a case by case basis, and prefer that students not use AP to fulfill their pre-requisites.

NAAHP HEALTH PROFESSIONS CENTRALIZED APPLICATION SERVICES AT-A-GLANCE

	AUDIOLOGY	DENTISTRY	HEALTH ADMINISTRATION	MEDICINE – ALLOPATHIC	MEDICINE – OSTEOPATHIC	MEDICINE, DENTISTRY & VET – TEXAS
Professional Association	AAA American Association of Audiology	ADEA American Dental Education Association	AUPHA Association of University Programs in Health Admin.	AAMC Association of American Medical Colleges	AACOM American Assoc. of Colleges of Osteopathic Medicine	
Centralized Application Service (CAS)	CSDCAS Communication Sciences & Disorders Centralized Application Service	AADSAS Associated American Dental Schools Application Service	HAMPCAS Health Admin, Management & Policy Centralized Application Service	AMCAS American Medical College Application Service	AACOMAS American Assoc. of Colleges of Osteopathic Medicine Application Service	TMDAS Texas Medical and Dental Schools Application Service
CAS URL	csdcas.liasoncas.com	portal.aadsasweb.org	hampcas.liasoncas.com	www.aamc.org/amcas	aacomas.liasoncas.com	www.tmdsas.com
# CAS Participating Schools	30	65	45 of 132 graduate level programs	145 US and 7 Canadian medical schools	All DO programs except UNTHSC-TCOM, which is part of TMDAS (see below)	10 medical, 3 dental and 1 veterinary school
Opening Date	August	June	September	Opens: May / Submit: June	May	May
Deadlines	Nov - Apr for Fall start	Latest are February	Varies widely	August through December	December through April	September
Letters of Recommendation	Three to five individual online evaluations submitted through CSDCAS.	Four individual evaluations or one committee letter submitted electronically through AADSAS.	Individual online evaluations submitted through HAMPCAS. Check for school-specific requirements regarding references.	Individual letters and/or committee letter submitted electronically through AMCAS.	Individual letters and/or committee letter submitted electronically through AACOMAS or directly to schools (check school specific requirements).	Medical & Dental: Individual letters and/or committee letter to TMDAS. Vet: TAMU form to TMDAS. Letters can be sent electronically or by mail.
Standardized Test Scores	GRE Scores are submitted electronically to CSDCAS directly from ETS	Official DAT scores are downloaded by dental schools through a DAT website. When registering for the DAT, applicants should indicate all the schools where they want their official DAT scores sent.	GREs are self-reported into application, then sent directly to schools.	MCAT Scores are automatically sent to AMCAS for distribution to applied participating schools once the applicant scores are available.	Applicants must release scores to AACOMAS electronically through use MCAT score reporting system. Students must provide their AAMC ID on the MCAT section of the AACOMAS application.	Medical: Release scores to TMDAS electronically through MCAT score reporting system. Dental & Vet: release scores directly to schools.
Transcripts	Official transcripts should be sent to CSDCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to AADSAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to HAMPCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to AMCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to AACOMAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to TMDAS for any US / Canadian college/ university attended
Application Fee	\$125 for first program \$50 for each additional	\$245 for first program \$98 for each additional	\$115 for first program \$40 for each additional	\$160 for first school \$38 for each additional	\$195 for first program \$40 for each additional	\$150 flat fee
Income-Based Fee Assistance	Covers single application; limited quantity	Covers three schools; limited quantity	None	aamc.org/fap	Covers single application; limited quantity	None
Application Service Contact Info	617-612-2030 csdcasinfo@csdcas.org	617-612-2045 aadsasinfo@aadsasweb.org	617-612-2882 hampcasinfo@hampcas.org	202-828-0600 amcas@aamc.org	617-612-2889 aacomasinfo@liasioncas.com	512-499-4786 info@tmdsas.com

NAAHP HEALTH PROFESSIONS CENTRALIZED APPLICATION SERVICES AT-A-GLANCE

	NATUROPATHIC	NURSING	OCCUPATIONAL THERAPY	OPTOMETRY	PHARMACY	PHYSICAL THERAPY
Professional Association	AANMC Assoc. of Naturopathic Medicine Colleges	AACN American Association of Colleges of Nursing	AOTA American Occupational Therapy Association	ASCO Association of Schools and Colleges of Optometry	AACP American Association of Colleges of Pharmacy	APTA American Physical Therapy Association
Centralized Application Service (CAS)	NDCAS Doctor of Naturopathic Medicine Centralized Application Service	NursingCAS Nursing's Centralized Application Service	OTCAS Occupational Therapy Centralized Application Service	OptomCAS Optometry Centralized Application Service	PharmCAS Pharmacy College Application Service	PTCAS Physical Therapist Centralized Application Service
CAS URL	ndcas.liaisoncas.com	nursingcas.liaisoncas.com	otcas.liaisoncas.com	www.optomcas.org	www.pharmcas.org	www.ptcas.org/home.aspx
# of CAS Participating Schools	4 of 7	195	104 of 156	23 of 23	126 of 138	219 of 244
Opening & Submission Date	August	August	July	Late June / early July	July	July
Deadlines	Varies	Varies	Varies	December through June	November through March	October through May
Letters of Recommendation	Individual letters and/or committee letter submitted electronically through NDCAS.	Individual online evaluations submitted through NursingCAS.	Three to five Individual letters submitted electronically through OTCAS.	Up to four individual online evaluations submitted through OptomCAS.	Up to four Individual letters submitted electronically through PharmCAS.	Up to four Individual letters submitted electronically through PTCAS.
Standardized Test Scores	Students have the option to self-report IELTS and TOEFL scores.	GRE Scores can be submitted electronically to NursingCAS directly from ETS using a school-specific NursingCAS GRE code.	GRE Scores can be submitted electronically to OTCAS directly from ETS using a special OT program-specific OTCAS GRE code	Official scores should be sent directly to schools	Arrange for Pearson to send PCAT scores to PharmCAS at School Code 104 and enter your PCAT CID number on your PharmCAS application.	Official scores should be sent directly to schools
Transcripts	Official transcripts should be sent to NDCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to NursingCAS by the Registrar of any US / Canadian college/ university attended	OTCAS requires an official copy of your transcript for each U.S. and Canadian institution attended	Official transcripts should be sent to OptomCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to PharmCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to PTCAS by the Registrar of any US / Canadian college/ university attended
Application Fee	\$115 for first program \$40 for each additional	Undergrad: \$45 for first, \$30 each add'l Grad: \$65 for first, \$35 each additional	\$140 for first program \$60 for each additional	\$170 for first program \$70 for each additional	\$150 for first program \$55 for each additional	\$140 for first program \$45 for each additional
Income-Based Fee Assistance	None	None	Covers single application; limited quantity	None	Covers single application; limited quantity	Covers single application; limited quantity
Application Service Contact Info	617-612-2950 ndcasinfo@ndcas.org	617-612-2880 nursingcasinfo@nursingcas.org	617-612-2860 otcasinfo@otcas.org	617-612-2888 optomcasinfo@optomcas.org	617-612-2050 617-612-2060 TTY info@pharmcas.org	617-612-2040 ptcasinfo@ptcas.org

NAAHP HEALTH PROFESSIONS CENTRALIZED APPLICATION SERVICES AT-A-GLANCE

	PHYSICIAN ASSISTANT	PODIATRIC MEDICINE	PUBLIC HEALTH	SPEECH PATHOLOGY	VETERINARY MEDICINE	
Professional Association	PAEA Physician Assistant Education Association	AACPM American Association of Colleges of Podiatric Medicine	ASPPH Association of Schools and Programs of Public Health	ASHA American Speech-Language Hearing Association	AAVMC Association of American Veterinary Medical Colleges	
Centralized Application Service (CAS)	CASPA Central Application Service for Physician Assistants	AACPMAS American Association of Colleges of Podiatric Medicine Application Service	SOPHAS Schools of Public Health Application Service	CSDCAS Communication Sciences & Disorders Centralized Application Service	VMCAS Veterinary Medical College Application Service	
CAS URL	caspa.liasoncas.com	aacpmas.liasoncas.com	sophas.org	csdcas.liasoncas.com	www.aavmc.org/vmcas	
# of CAS Participating Schools	217 of 210 programs and 19 developing programs	All 9 schools and colleges	89	126	29 US, 2 Canadian, and 7 international colleges	
Opening & Submission Date	April	August	August	August	May	
Deadlines	June through March	April through June	Varies	Nov - Apr for Fall start	September	
Letters of Recommendation	Three to five individual online evaluations submitted through CASPA	Send directly to school.	Three to five individual online evaluations submitted through SOPHAS	Three to five individual online evaluations submitted through CSDCAS	Three to six individual online evaluations submitted through VMCAS	
Standardized Test Scores	Official GRE Scores are submitted electronically to CASPA directly from ETS using special CASPA GRE codes	Applicants must release scores to AACPMAS electronically through use MCAT score reporting system	Official GRE Scores are submitted electronically to SOPHAS directly from ETS using special SOPHAS GRE codes	Official GRE Scores can be submitted electronically to CSDCAS directly from ETS using special GRE codes	VMCAS allows you to enter scores for GRE, MCAT, IELTS, and TOEFL. Official GRE Scores can be submitted electronically to VMCAS directly from ETS using special GRE codes	
Transcripts	Official transcripts should be sent to CASPA by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to AACPMAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to SOPHAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to CSDCAS by the Registrar of any US / Canadian college/ university attended	Official transcripts should be sent to VMCAS by the Registrar of any US / Canadian college/ university attended	
Application Fee	\$175 for first program \$50 for each additional	\$180 for first program \$45-60 for each additional	\$135 for first program \$50 for each additional	\$125 for first program \$50 for each additional	\$200 for first program \$100 for each additional	
Income-Based Fee Assistance	Covers single application; limited quantity		Covers single application; limited quantity. Some service-based waivers offered.	Covers single application; limited quantity	Limited quantity of fee reimbursements available	
Application Service Contact Info	617-612-2080 caspainfo@caspaonline.org	617-612-1900 aacpmasinfo@aacpmas.org	617-612-2090 sophasinfo@sophas.org	617-612-2030 csdcasinfo@csdcas.org	617-612-2884 vmcasinfo@vmcas.org	

The background is a light blue gradient with various medical icons and text. A magnifying glass is on the left. A syringe is in the center. A heart is in a hexagon above the syringe. An eye with a yin-yang symbol is in a hexagon below the syringe. A clipboard is in a hexagon to the right. A molecular structure is in a hexagon at the bottom right. The word 'MEDICAL' appears in several places: once in a hexagon to the right of the heart, once in a hexagon to the left of the eye, and once in a hexagon to the right of the eye. There is also a list of medical terms on the left side of the page, partially obscured by the magnifying glass.

Allopathic Medicine



About Being a Doctor

Physicians diagnose and care for people of all ages who are ill or have been injured. They are life-long learners, good listeners, and problem solvers, and are intrigued by the ways medicine can be used to improve life. Doctors are interested in science, the intricacies of human body's systems, and care deeply about helping people to relieve pain, restore health, and promote well-being.

What are some daily activities/experiences of physicians?

- Diagnose and care for people of all ages who are ill or have been injured
- Take medical histories
- Perform physical examinations
- Conduct diagnostic tests
- Recommend and provide treatment
- Advise patients on their overall health and well-being

What are 3-5 personal characteristics important for happiness and success in the medical profession?

- Interpersonal skills
- Intrapersonal skills
- Thinking and reasoning
- Science

For a more detailed list of competencies for success in medicine, please see the [AAMC Core Competencies for Entering Medical Students](#) web page.

While intellectual capacity is important to success as a physician, so too are other attributes—those that have the ability to develop and maintain effective relationships with patients, work collaboratively with other team members, act ethically and compassionately, and in many other ways master the “art” of medicine. An AAMC publication entitled *Learning Objectives for Medical Student Education: Guidelines for Medical Schools* (AAMC [Medical School Objectives Project \(MSOP\)](#) web page) describes the personal attributes required of a physician. While making note of the fact that graduating medical students must be knowledgeable about medicine and skillful in its application, the publication also emphasizes how vital it is for future doctors to:

- Make ethical decisions
- Act with compassion, respect, honesty, and integrity
- Work collaboratively with team members
- Advocate on behalf of one's patients
- Be sensitive to potential conflicts of interest
- Be able to recognize one's own limits
- Be dedicated to continuously improving one's knowledge and abilities
- Appreciate the complex non-biological determinants of poor health
- Be aware of community and public health issues
- Be able to identify risk factors for disease
- Be committed to early identification and treatment of diseases
- Accept responsibility for making scientifically based medical decisions
- Be willing to advocate for the care of the underserved

NAAHP/AAMC Fact Sheet for Health Professions Advisors
About MD Careers

What are 3-5 key questions students should ask themselves as they prepare for a career in medicine?

- Do you like challenges?
- Are you interested in science and how the body works?
- Do you care deeply about other people, their problems, and their pain?
- Do you enjoy learning?
- Are you intrigued by the ways medicine can be used to improve life?

Preparing for Admission:

- **Prerequisite coursework:** varies by school. Use MSAR (below) or individual school websites to explore prerequisites.
- **Standardized Tests:** Medical College Admission Test (MCAT) – <https://www.aamc.org/mcat>
- **Experience/Exposure:** <https://students-residents.aamc.org/applying-medical-school/preparing-med-school/getting-experience/>
- **Letters of Recommendation:** Schools generally prefer a committee or composite letter if available from the applicant's premedical program of study (undergrad or postbac program). If no such letter is available, students should follow school's guidelines to determine what letters are required.
- **Resources for researching schools:** AAMC Medical School Admissions Requirements website – <http://www.aamc.org/msar>

The Admissions Cycle:

- AMCAS for most MD and MD/PhD programs: <http://www.aamc.org/amcas>
 - Application opens: May
 - Application can be submitted: June
 - Application deadlines: AMCAS application deadline dates vary by school and are listed on the [AMCAS Schools and Deadlines](#) page. Early decision deadline is August 1, regular deadlines range from August through December.
 - Application closes: Varies by school
 - Number of schools participating: 145 accredited US and 17 accredited Canadian medical schools: 7 Texas schools do not participate in AMCAS.
 - Fees: \$160 for first school, \$38 for each additional
 - Fee waivers: Fee Assistance Program, <http://www.aamc.org/fap>
 - Letters of rec logistics: Committee/composite letter preferred if available from undergraduate institution. Letters should be uploaded via AAMC Letter Writer Service for participating schools. [Learn more about letters guidelines.](#)
 - Standardized test logistics: MCAT scores are automatically sent to AMCAS for distribution to applied participating schools.
 - Transcripts: Applicants should send all transcripts to AMCAS attached to an AMCAS Transcript Request Form.
 - Instruction manual and FAQ: <https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/applying-medical-school-amcas/amcas-tools-and-tutorials/>
 - Background checks: The AAMC-facilitated Criminal Background Check service is run through Certiphi Screening, Inc. [Click here](#) for more information.
 - Contact information: amcas@aamc.org, (202) 828-0600
 - AMCAS contact for advisors: advisors@aamc.org, (202) 828-0950

For more information on many health professions, we recommend the NAAHP publication, *Health Professions Admission Guide: Strategies for Success*, available on the NAAHP website.

NAAHP/AAMC Fact Sheet for Health Professions Advisors About MD Careers

- AMCAS - [Twitter](#)
- Advisor portal: <https://services.aamc.org/ais2>

- CAS for MD and DO programs at Texas public schools: <https://www.tmdsas.com/applytmdsas/>
 - Application opens: May
 - Application can be submitted: May
 - Application deadline: September 30
 - Number of schools participating: 10 medical schools participate in TMDSAS
 - Fees, fee waivers: include information about how much it costs for the first school, each additional, whether fee waivers are available, if so, URL for more information
 - Letters of rec logistics: are letters sent through a portal and distributed by the portal? Should they be sent to the individual schools?
 - Standardized test logistics: are scores sent through a portal and distributed by the portal? Should they be sent to the individual schools?
 - Transcripts: are transcripts sent through a portal and distributed by the portal? Should they be sent to the individual schools?
 - Instruction manual and FAQ:
 - Contact information:
 - CAS contact for advisors:
 - Advisor Portal: <https://www.tmdsas.com/TMDAdvisor/>

The Admissions Process for the 2015 application cycle:

- Approximate dates of interviews, offers: rolling
- Total number of applicants in 2015 cycle: 52,550
- Average # of applications per student: 16.8
- Total number of first year students: 20,630
- Test score and GPA averages and ranges, other data on applicants and accepted students (major, age, race/ethnicity, gender, whatever makes sense for the profession) in the 2015 cycle:
 - Overall MCAT median:
 - Total Score: 31
 - Verbal Reasoning: 10
 - Biological Sciences: 11
 - Physical Sciences: 11

- Approximate Total number of students: 83,000 and 115,000 resident physicians

- For an infographic regarding the 2015 applicant pool, see https://aamc-orange.global.ssl.fastly.net/production/media/filer_public/8c/7e/8c7efb3d-e1dc-4bb6-837e-8cd755427b98/amcas_2015-final.pdf.

Learn More about an M.D. Career

Training & Career Opportunities

- Number of years: four year doctoral degree
- Degree attained: Doctor of Medicine (MD)
- Total number of graduates in 2015-2016 academic year: 18,705
- Data on employment of recent graduates, if available:

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP/AAMC Fact Sheet for Health Professions Advisors
About MD Careers

Key Resources for Students

- AAMC Resources for Pre-Med Students: <https://students-residents.aamc.org/>
- Aspiring Docs: <https://students-residents.aamc.org/choosing-medical-career/medical-careers/aspiring-docs/>

Key Resources for Advisors

- AAMC Resources for Pre-Health Advisors: <https://students-residents.aamc.org/advisors/>

Social Media

- AAMC Pre-Med - [Facebook](#)
- AAMC Pre-Med - [Twitter](#)

Advisory Council Professional Association Partner Information

- **Association of American Medical Colleges**, www.aamc.org
- **Mission**
The AAMC serves and leads the academic medicine community to improve the health of all.
- **Size of organization, Number of member institutions**
The AAMC represents 145 accredited U.S. and 17 accredited Canadian medical schools; nearly 400 major teaching hospitals and health systems. Through these institutions and organizations, the AAMC represents 160,000 faculty members, 83,000 medical students, and 115,000 resident physicians.
- **New institutional members in last two years**

Advisory Council Contact Information

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Julie Chanatry

Colgate University

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Date updated: September 12, 2016

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

California Physician Workforce Profile

2	State Population:	38,802,500	Total Female Physicians:	35,534
0	Population ≤ age 21	11,287,420	Total Medical or Osteopathic Students:	7,150
1	Total Active Physicians:	101,859	Total Residents:	10,142
4	Primary Care Physicians:	35,725		

For additional data, including maps and tables, please see the 2015 State Physician Workforce Data Book online at www.aamc.org/2015statedatabook

		CA	CA Rank	State Median
Physician Supply	Active Physicians per 100,000 Population, 2014	262.5	20	251.0
	Total Active Patient Care Physicians per 100,000 Population, 2014	232.4	23	225.6
	Active Primary Care Physicians per 100,000 Population, 2014	92.1	23	90.4
	Active Patient Care Primary Care Physicians per 100,000 Population, 2014	84.2	22	83.1
	Active General Surgeons per 100,000 Population, 2014	7.4	32	7.8
	Active Patient Care General Surgeons per 100,000 Population, 2014	6.5	40	7.1
	Percentage of Active Physicians Who Are Female, 2014	35.0%	16	32.4%
	Percent of Active Physicians Who Are International Medical Graduates (IMGs), 2014	24.3%	14	18.7%
	Percentage of Active Physicians Who Are Age 60 or Older, 2014	32.6%	5	28.5%
Undergraduate Medical Education (UME)	M.D. and D.O. Student Enrollment per 100,000 Population, AY 2014-2015	18.4	43	30.4
	Student Enrollment at Public M.D. and D.O. Schools per 100,000 Population, AY 2014-2015	8.5	40	21.4
	Percentage Change in Student Enrollment at M.D. and D.O. Schools, 2004-2014	20.8%	24	20.8%
	Percentage of M.D. Students Matriculating In-State, AY 2014-2015	37.7%	40	69.2%
Graduate Medical Education (GME)	Total Residents/Fellows in ACGME Programs per 100,000 Population as of December 31, 2014	26.1	31	27.4
	Total Residents/Fellows in Primary Care ACGME Programs per 100,000 Population as of Dec. 31, 2014	9.5	33	10.5
	Percentage of Residents in ACGME Programs Who Are IMGs as of December 31, 2014	10.0%	45	22.2%
	Ratio of Residents and Fellows (GME) to Medical Students (UME), AY 2013-2014	1.5	9	1.1
	Percent Change in Residents and Fellows in ACGME-Accredited Programs, 2004-2014	12.1%	40	18.9%
Retention	Percent of Physicians Retained in State from Undergraduate Medical Education (UME), 2014	62.7%	1	38.6%
	Percent of Physicians Retained in State from Public UME, 2014	68.3%	1	43.9%
	Percent of Physicians Retained in State from Graduate Medical Education (GME), 2014	69.8%	1	44.5%
	Percent of Physicians Retained in State from UME and GME Combined, 2014	80.4%	4	68.4%

State Rank: How the state ranks compared to the other 49. Rank of 1 goes to the state with the highest value for the category.

State Median: The value in the middle of the 50 states, with 25 states above the median and 25 states below (excludes the District of Columbia and Puerto Rico).

Source: 2015 State Physician Workforce Data Book

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California Physician Workforce Profile

Specialty	Total Active		Female		Age 60 or Older	
	Physicians	People Per Physician	Number	Percent	Number	Percent
All Specialties	101,859	381	35,534	35.0	33,178	32.6
Allergy & Immunology	560	69,290	185	33.0	256	45.7
Anatomic/Clinical Pathology	1,605	24,176	570	35.6	727	45.3
Anesthesiology	5,159	7,521	1,285	25.0	1,768	34.3
Cardiovascular Disease	2,272	17,079	315	13.9	1,134	49.9
Child & Adolescent Psychiatry**	1,017	11,099	508	50.0	298	29.3
Critical Care Medicine	961	40,377	257	26.8	72	7.5
Dermatology	1,730	22,429	797	46.1	587	33.9
Emergency Medicine	4,842	8,014	1,272	26.3	1,279	26.4
Endocrinology, Diabetes & Metabolism	753	51,531	329	43.7	279	37.1
Family Medicine/General Practice	12,743	3,045	5,171	40.7	4,006	31.5
Gastroenterology	1,539	25,213	259	16.9	589	38.3
General Surgery	2,868	13,529	579	20.2	980	34.2
Geriatric Medicine***	509	13,867	254	49.9	110	21.6
Hematology & Oncology	1,549	25,050	491	31.7	487	31.4
Infectious Disease	868	44,703	324	37.4	267	30.8
Internal Medicine	14,691	2,641	5,641	38.5	4,061	27.7
Internal Medicine/Pediatrics	335	115,828	172	51.3	*	*
Interventional Cardiology	237	163,724	21	8.9	14	5.9
Neonatal-Perinatal Medicine	617	62,889	301	48.8	219	35.5
Nephrology	1,076	36,062	306	28.5	328	30.5
Neurological Surgery	586	66,216	48	8.2	208	35.6
Neurology	1,523	25,478	435	28.6	607	39.9
Neuroradiology	325	119,392	84	25.8	13	4.0
Obstetrics & Gynecology	4,958	7,826	2,755	55.6	1,739	35.1
Ophthalmology	2,386	16,263	599	25.1	847	35.5
Orthopedic Surgery	2,324	16,696	147	6.3	1,045	45.0
Otolaryngology	1,129	34,369	225	19.9	369	32.7
Pain Medicine & Pain Management	479	81,007	80	16.8	60	12.5
Pediatrics**	7,373	1,531	4,549	61.8	2,293	31.1
Physical Medicine & Rehabilitation	998	38,880	343	34.5	227	22.8
Plastic Surgery	1,106	35,084	149	13.5	409	37.0
Preventive Medicine	905	42,876	325	36.0	453	50.1
Psychiatry	5,453	7,116	1,975	36.2	2,562	47.0
Pulmonary Disease	647	59,973	67	10.4	450	69.6
Radiation Oncology	533	72,800	151	28.3	155	29.1
Radiology & Diagnostic Radiology	3,197	12,137	782	24.5	1,269	39.7
Rheumatology	687	56,481	295	43.2	258	37.6
Thoracic Surgery	509	76,233	45	8.8	232	45.6
Urology	1,070	36,264	105	9.8	437	40.8
Vascular & Interventional Radiology	299	129,774	38	12.7	15	5.0
Vascular Surgery	325	119,392	43	13.2	105	32.3

Sources: AMA Physician Masterfile (12/31/14). Population estimates as of July 1, 2014 are from the U.S. Census Bureau (Release date: December 2014)

* Counts for specialties with fewer than 10 physicians are not shown

** Only those 21 years or younger are included in People Per Physician

*** Only those 65 years or older are included in People Per Physician

California Physician Workforce Profile

2	State Population:	38,802,500	Total Female Physicians:	35,534
0	Population ≤ age 21	11,287,420	Total Medical or Osteopathic Students:	7,150
1	Total Active Physicians:	101,859	Total Residents:	10,142
4	Primary Care Physicians:	35,725		

For additional data, including maps and tables, please see the 2015 State Physician Workforce Data Book online at www.aamc.org/2015statedatabook

		Number	Percent
State Where GME Was Completed for All Active Physicians in State	California	55,842	57%
	New York	8,259	8%
	Illinois	3,253	3%
	Pennsylvania	2,953	3%
	Massachusetts	2,768	3%
	Texas	2,336	2%
	Michigan	2,306	2%
	Ohio	2,072	2%
	Maryland	1,218	1%
	New Jersey	1,216	1%
	All other states	16,174	16%
	Practice Location of Physicians Who Completed GME in State	California	55,842
Washington		2,062	3%
Texas		1,788	2%
Oregon		1,665	2%
Florida		1,228	2%
Arizona		1,166	1%
New York		975	1%
Colorado		961	1%
Nevada		956	1%
Massachusetts		787	1%
All other states		12,092	15%

Notes:

GME = Graduate Medical Education

"All other states" includes physicians who completed GME in Canada.

Source: AMA Physician Masterfile (12/31/14)

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AAMC

Tomorrow's Doctors, Tomorrow's Cures®

Getting into Medical School

AAMC Resources and Services for Pre-Med Students



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About the Association of American Medical Colleges

Founded in 1876 and based in Washington, D.C., the Association of American Medical Colleges (AAMC) is a not-for-profit association representing all 145 accredited U.S. and 17 accredited Canadian medical schools; nearly 400 major teaching hospitals and health systems, including 51 Department of Veterans Affairs medical centers; and 80 academic societies. Through these institutions and organizations, the AAMC represents 148,000 faculty members, 83,000 medical students, and 115,000 resident physicians.

Through its many programs and services, the AAMC strengthens the world's most advanced medical care by supporting the entire spectrum of education, research, and patient care activities conducted by our member institutions. The AAMC and our members are dedicated to the communities we serve and steadfast in our desire to earn and keep the public's trust for the role we play in improving the nation's health.

Welcome to the AAMC—Your Trusted Resource for Official Guidance and Information for Pre-Med Students!

You are about to embark on the most exciting journey of your education and training, and you'll be making some of the most important decisions of your career.

At the AAMC, we're here to help you navigate the journey—from pre-med through residency and beyond—with reliable, trusted resources and services.

We hope that you find this booklet helpful in answering many of your questions about embarking on a career in medicine. We encourage you to visit our website to take advantage of the many resources we've created for you, including webinars, podcasts, inspiring stories, tools, and tips.

Also, be sure to connect with AAMC Pre-Med on social media to get the latest information and join us in discussions about pre-med topics.

We wish you the very best of success in a rewarding and fulfilling career in medicine!

AAMC Pre-Med Team

aamc.org/students



AAMC Pre-Med



@AAMCPreMed



Aspiring Docs

The AAMC's Aspiring Docs website provides resources and inspiration to help you get started on your path to medicine.



There's a lot of planning and preparation leading up to applying to medical school—so start exploring the great information on the Aspiring Docs website right away.

You'll find fact sheets with a wealth of information on:

- Partnering with your advisor
- Deciding if a career in medicine is right for you
- Getting lab experience, shadowing a doctor, and finding summer programs
- Preparing to take the MCAT® exam
- Applying to medical school or MD/PhD programs
- Making the most of a gap year
- Experiencing an anatomy lab, seeing a patient for the first time, and other experiences shared by current medical students
- And much more

Plus, you'll be able to read inspiring Q&A interviews with medical students, residents, and physicians about their personal stories—some of whom took a unique path to medicine or overcame challenges.

And, finally, be sure to follow pre-med, medical student, and resident bloggers as they share their experiences, challenges, and what keeps them motivated on their path to a career in medicine on [AspiringDocsDiaries.org](https://www.aspiringdocsdiaries.org).

[aamc.org/aspiringdocs](https://www.aamc.org/aspiringdocs)

Finding Volunteer and Lab Experiences

Two of the most important things that can help you decide if a career in medicine is right for you is getting volunteer experience in a medically related environment and getting lab experience. Volunteering will help you prepare for medical school in addition to enhancing your medical school application.

Each year, the number of medical school applicants who have significant medically related volunteer experience and/or lab experience grows. Many universities now require internships or a capstone course during the senior year of college. Working in a lab setting will help make you a competitive applicant; it will also help you determine if a career in medicine or medical research is right for you. Here are answers to common questions. Find more answers on the Aspiring Docs website at aamc.org/aspiringdocs.

Where can I find out about opportunities?

If you are still in school, your first step should be to talk with your academic or pre-health advisor. Also check to see if there is a campus office of community service or student activities that maintains a website or database. Check the science department bulletin boards or websites for opportunities to assist with faculty research projects. Join pre-med or service clubs because they're one of the best ways to hear about volunteer and research openings, make friends, and find out about conferences and other opportunities. Hospitals, clinics, labs, research facilities, charities, foundations, or other organizations may have volunteer opportunities listed online.

If you haven't started college or if you've already graduated, focus on networking. Call people you know or a friend's parent to ask if they know of any open positions or research being done. Human resources departments at large research hospitals and universities in your area might be looking for lab technicians. Job opportunities are typically posted on the career pages of their websites.

Is it better to have one ongoing experience or many different experiences?

It's good to have a variety of experiences, but it's also important to show you've cultivated specific interests and are able to commit to an activity over a sustained period of time. You're more likely to gain significant responsibilities or leadership roles if you regularly volunteer with an organization. This also helps you network and develop relationships with potential mentors and other people who may later write your letters of evaluation.

When is the best time to look for a position?

According to Rivka Glaser, PhD, adjunct professor of biology at Stevenson University, if you're interested in a research or laboratory position for the following semester, the best time to look for positions is during the middle of the semester, or a week or two before midterms. There also tend to be a lot of research opportunities, both paid and volunteer, in the summer. Remember, typically there are more applicants than available spots, so complete your applications early.

Medical School Admission Requirements

One of the most important decisions you'll make is where to go to medical school. Rely on accurate data from a trusted source.

The AAMC's Medical School Admission Requirements resources provide the most comprehensive, up-to-date information and data.

The Official Guide to Medical School Admissions: How to Prepare for and Apply to Medical School

This is the most complete and trusted guide for medical school admissions and includes information on financial resources, interview tips, and admissions criteria. Receive exclusive insight from the experts who manage the MCAT® exam and AMCAS® application. This year's edition was comprehensively rewritten, reorganized, and updated to include new information for gap-year students. Worksheets have also been added to help you make strategic decisions during the application process. Available in print, Kindle, and ebook formats.

Medical School Admission Requirements for U.S. and Canadian Medical Schools

When you're ready to start researching medical schools, the Medical School Admission Requirements website is the most accurate resource for requirements, data, and information. This is the only comprehensive resource with current data that come directly from the AMCAS application and MCAT exam. With it, you'll receive information on the procedures for wait-listing, premedical coursework requirements, demographics of the entering class, admissions statistics, and more. Your one-year subscription allows you to search, sort, and save information.

aamc.org/msar

Mission and Interview Questions Worksheet

Medical schools give weight to specific characteristics that align with their missions. Be aware of each school’s mission statement and how your personal traits align with it. Examples could include research inquisitiveness, empathy, teamwork, curiosity, and a desire for knowledge about the health care delivery system. You can find each medical school’s mission statement under the “About” section in the Medical School Admission Requirements website. You don’t need a subscription to view this section. Go to aamc.org/msar, and click on “preview the website for free.”

School name: _____

Factor	Ideal fit	Good fit	No opinion	Unsure	Not a fit	Notes
Course offerings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Class size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Research programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Interviews and/or meetings with faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tuition and financial aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Programs for minority or disadvantaged students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Teaching methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Combined-degree offerings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Campus tour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rural or community offerings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Residency placement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Impression of school: Favorable Undecided Unfavorable

Likelihood of applying: Will apply Undecided Unlikely to apply

Follow-up questions to ask: _____

For a list of interview questions, see the article “Selecting a Medical School: 35 Questions I Wish I Had Asked” at aamc.org/35questions.

Summer Health Professions Education Program

The Summer Health Professions Education Program (SHPEP) is a FREE (full tuition, housing, and meals) six-week academic enrichment summer program for qualified undergraduate freshmen and sophomores from:



- Racial and ethnic groups that historically have been underrepresented in health professions—African-American, Hispanic/Latino, and American Indian
- Rural areas, economically disadvantaged areas, or groups that historically have received substandard health care (regardless of racial or ethnic background)

SHPEP offers students a variety of academic and career experiences that will support their preparation within the health professions:

- Academic enrichment in the basic sciences and quantitative topics
- Learning and study skills development, including methods of individual and group learning
- Clinical exposure through small-group clinical rotations and full-group clinician seminars. This is limited to 5 percent of program time for all sites
- Career development sessions, including the exploration of the health professions, admissions process, and an individualized education plan to identify other appropriate enrichment activities

Housing, meal, and travel costs are covered by the program. Scholars are provided with a \$600 stipend, which typically is distributed midway and at the end of the program.

There are many other summer enrichment programs and pipeline and outreach programs for students who are not eligible for SHPEP. Talk with your advisor, check the list of resources on shpep.org, and visit aamc.org/aspiringdocs for more information.

shpep.org



www.facebook.com/shpepconnect

SHPEP is a national program funded by The Robert Wood Johnson Foundation with direction and technical assistance provided by the Association of American Medical Colleges and the American Dental Education Association.

Medical Minority Applicant Registry

The Medical Minority Applicant Registry (MedMAR) is used by U.S. medical schools to identify U.S. applicants who self-identify as members of a racial or ethnic group historically underrepresented in medicine, or who are economically disadvantaged.



When you register for the MCAT exam, you'll get a chance to participate in the Medical Minority Applicant Registry. The registry was created to enhance admissions opportunities for U.S. students who are members of a racial or ethnic group historically underrepresented in medicine, or who are economically disadvantaged. Please see the website for specific eligibility requirements. The registry provides basic biographical information and MCAT exam scores to minority and admissions offices at AAMC-member medical schools, which may choose to send information to students.

aamc.org/medmar

Fee Assistance Program

The AAMC Fee Assistance Program assists those who, without financial assistance, would be unable to take the MCAT exam and/or apply to medical schools that use the AMCAS application.

Fee Assistance Program benefits include reduced registration fees for the MCAT exam, official MCAT preparation materials, complimentary access to the Medical School Admission Requirements website, waiver of AMCAS fees, and more.

Be sure to check the Fee Assistance Program eligibility requirements before you register for the MCAT exam, submit your AMCAS application, or purchase any AAMC products as benefits are not retroactive.

aamc.org/fap

A Pre-Med Student's Steps to Medical School

Getting into Medical School



**College
Freshman
Year**

1

**Explore Your
Options for Careers
in Medicine**

- Visit Aspiring Docs website
- Meet with an advisor
- Attend pre-health meetings
- Apply to summer programs
- Explore financial aid options



This infographic represents a basic timeline of the steps toward medical school. Your advisor and AAMC resources can help you individualize the timeline and steps.



- Buy books
- Find a place to live
- Attend orientation programs and matriculate

**Get R
Medic**



Medical College Admission Test® (MCAT®)

The AAMC develops and administers the MCAT exam—a standardized, multiple-choice test that has been part of the medical school admissions process for more than 85 years.

The MCAT exam is designed to help better prepare tomorrow's doctors for the rapid changes in science and medical education. It reinforces the diversity of interests and preparation that medical school admissions committees look for in their applicants.

The MCAT exam is designed to test not only what you know, but how you apply that knowledge by assessing your problem-solving and critical-thinking skills and knowledge of natural, behavioral, and social science concepts and principles, all of which are necessary to the study and practice of medicine.

You'll find a variety of resources to help you prepare for the exam, including MCAT practice exams and other materials written by the developers of the exam, video and review questions in the Khan Academy MCAT collection, and more!

To learn more about the MCAT exam, including what's on the exam, test preparation, and scoring, visit aamc.org/mcat.

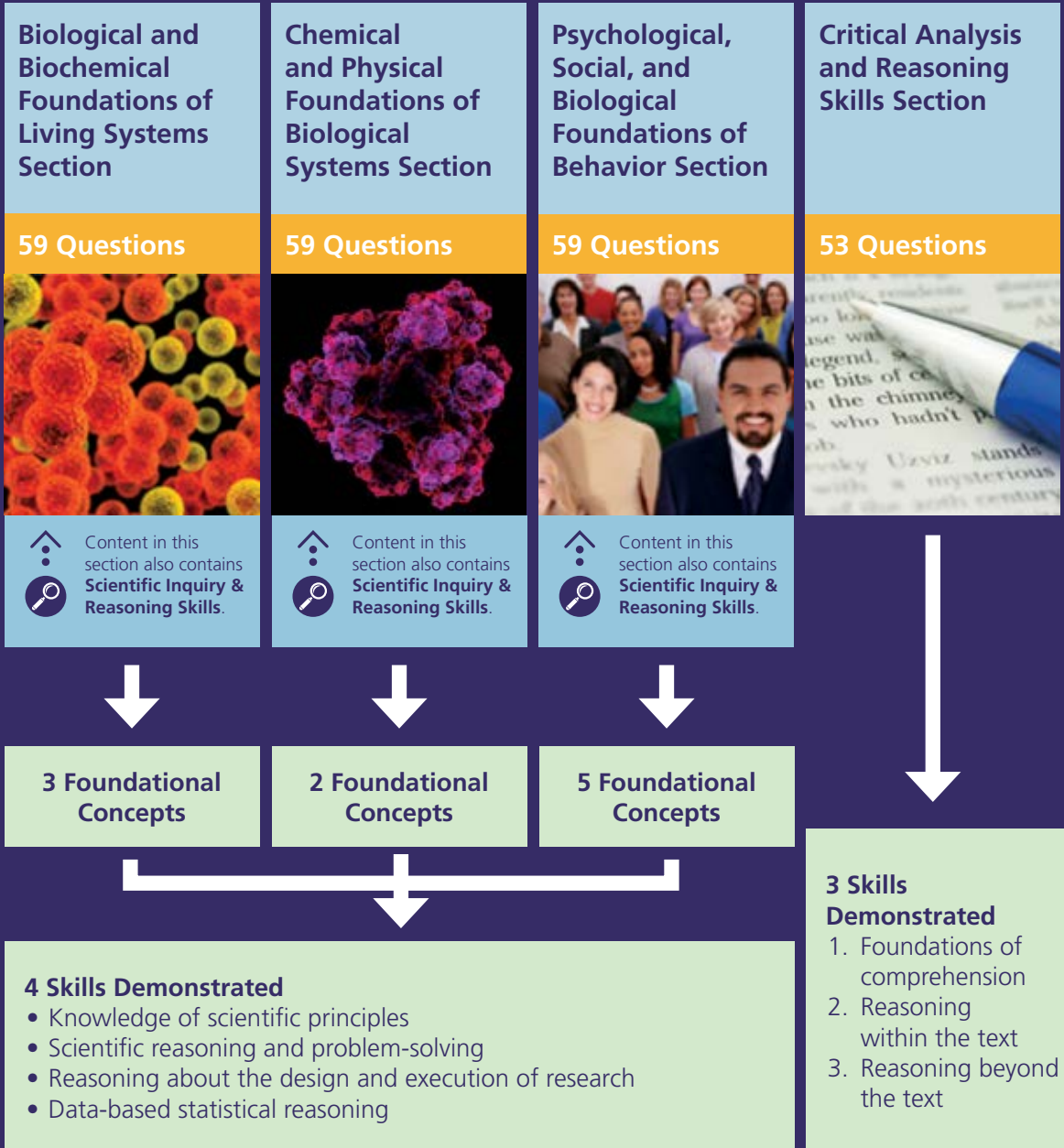
aamc.org/mcat



@AAMC_MCAT



What's on the MCAT Exam?



Get all the details at

students-residents.aamc.org/mcatexam

American Medical College Application Service® (AMCAS®)

Did you know that each pre-med student applies to an average of 15 medical schools?

The best part, however, is that when you use the AAMC's centralized application service, you only need to submit one primary application, regardless of the number of medical schools to which you apply.

AMCAS is available to individuals applying to first-year entering classes at participating U.S. medical schools. If you are applying to an MD or a combined MD program (e.g., MD/PhD), you most likely will use the AMCAS service to complete and submit your application materials. If you are an advanced-standing or transfer applicant, you should contact the medical school directly for assistance.

AMCAS collects and delivers your verified application information, letters of evaluation, and MCAT exam scores to each school you choose. Each participating school is then responsible for making its own individual admissions decisions.

Most medical schools also administer a secondary application and host in-person interviews, which you may be invited to complete. Visit medical school websites for more information about their application and review processes.

Contacting AMCAS

AMCAS representatives are available to answer your questions and assist you in completing your application from Monday through Friday, 9:00 a.m.–7:00 p.m. (ET). Closed Wednesday, 3:00 p.m.–5:00 p.m. (ET)

202.828.0600 | amcas@aamc.org

aamc.org/amcas

 [@amcasinfo](https://twitter.com/amcasinfo)



How Does AMCAS Work?



Application Submitted

Online application completed and submitted to AMCAS

Fees paid (or Fee Assistance Program award used)



Application Processed

All required official transcripts arrive at AMCAS

Verification of coursework and calculation of AMCAS GPAs



Application Delivered

Verified application sent to designated medical schools

Letters delivered as they are received

MCAT scores automatically delivered as they become available

Preparing for AMCAS

- The AMCAS application opens in May of each year for applicants who plan to begin medical school in the following year. When you are ready to begin the application, you should start by visiting the AMCAS website (aamc.org/amcas). The documents and video tutorials available in the Resources section are updated for each application cycle with the most current information.
- AMCAS does not advise applicants on making decisions related to their application, so we encourage you to work with your school's advising office and to review the Medical School Admission Requirements.
- Using the online application, you will enter information about yourself and your background. You will have your official transcripts sent directly to AMCAS, where AMCAS staff will verify your coursework and normalize your GPA based on your school's grading scale. Along with your letters of evaluation, AMCAS then sends your verified application data to the medical schools to which you have chosen to apply.
- For regular applications, your official transcripts must be received by AMCAS within 14 calendar days after the application deadline.
- You can submit your AMCAS application before your official transcripts and letters of evaluation reach AMCAS.
- June-September is the peak application submission period, which means your application may take about six weeks, after all materials are received, to be processed.
- After your application is submitted, you may check its verification status using our automated system or on Twitter @amcasinfo.

View FAQs, video tutorials, download an instruction manual, and more at

aamc.org/amcas

Financial Information, Resources, Services, and Tools (FIRST)

Most medical students borrow at least a portion of the money they need to finance their education, and there are many options to repay.

Financial Information, Resources, Services, and Tools (FIRST) is the AAMC's financial aid and debt management program—and it's packed with FREE materials to help you make wise financial decisions. You will find:

- A library of financial aid fact sheets to help you with budgeting, understanding credit cards, debt management, and more
- Videos that provide answers to many financial aid-related questions
- The Medloans® Organizer and Calculator—a tool specifically designed for medical students at AAMC-member medical schools
- Free access to SALT™, a program that provides practical information and interactive lessons on money management, budgeting, credit, and more

With FIRST, you will find the information you need to make educated borrowing decisions and develop sound debt management skills.

aamc.org/first



You CAN Afford Medical School

You want to be a doctor or physician scientist—that’s a good career choice, both socially and financially. You probably know that medical school is expensive, but what you may not know is once you are admitted to medical school there are options for financing your education. The key is to find the solution that best meets your goals.

Things to Think About

There are many different ways you might choose to pay for your education, but student loans are a reality for most students. The keys to successful repayment are careful planning and budgeting, learning how to effectively manage your debt, and educating yourself on the various repayment options.

Have a Plan

One of your first stops on the road to creating a sound financial plan is AAMC’s FIRST program. FIRST provides extensive information on the cost of applying to medical school, various types of loans, repayment information, and other related topics. Even with these resources, the process of financing medical school may be a bit overwhelming at times. Your next step is identifying a financial aid advisor to assist you.

Get Good Advice

The importance of getting sound, accurate, and timely advice cannot be overstated. Whether it’s your pre-health advisor, a current medical student or resident, or the admissions or financial aid officer where you are applying, there are people who can help you navigate this often complex process. Look at each school’s financial aid office website to see what information is available. Bring your financial aid questions with you when you visit and on interviews, and stop by the financial aid office to get your questions answered.

Learn About Repayment Options

It may seem too early to learn about loan repayment options, but being aware of them can help ease the fear of student loan repayment down the road. There are various repayment plans currently available, and it’s important to know that you have options when it comes to selecting the plan that works best for your financial situation. Another opportunity for repayment can be found with service repayment programs. These programs can help you repay your loans while practicing in a medically underserved area, or through public or military service. For more information, review the financial aid fact sheets at www.aamc.org/first/factsheets.

Final Thoughts

Stay true to your passion. Explore your options. Find a good advisor/mentor. If you can, enter medical school with little or no credit card debt and be aware of the status of your undergraduate loans. The less debt you begin school with, the less debt you will have at the end. Do what you can to not put application and interviewing costs (fees, travel, hotels, etc.) on credit cards. Frankly, there will be no room in your medical school budget to pay off that debt. Lastly, remember the financial aid office; they will be essential to you throughout medical school. They are there to help, so make sure you get the help you need.

aamc.org/first

My Path to Medical School

	✓	Date
College Year 1	Talk with academic advisor about selecting fall semester courses	
	Appointment with a pre-health advisor	
	Add pre-health meetings to my calendar and get on email lists	
	Find opportunities to volunteer, shadow a doc, etc.	
	Explore options for careers in medicine on Aspiring Docs website	
	Apply to summer enrichment programs (if eligible)	
	Explore premedical coursework requirements and application policies in MSAR Online	
	Learn about financial aid and financing strategies through FIRST's website (aamc.org/first)	
Summer	Volunteer/work in medical field; internship, research, leadership	
	Participate in summer enrichment programs	
	Take summer courses as necessary or desired	
College Year 2	Check in with pre-health advisor	
	Add pre-health meetings to my calendar and double-check that I'm getting emails	
	Volunteer/work in medically related activities	
	Develop relationships with faculty, advisors, and mentors on campus (important for getting letters of recommendation later)	
	Apply for summer research/enrichment programs (if eligible)	
Summer	Volunteer/work in medical field; internship, research, leadership	
	Participate in summer enrichment programs	
	Take summer courses as necessary or desired	
	Check out the AMCAS website resources and review the process of applying (aamc.org/amcas)	
	Look at the process of applying and preparing for the MCAT® exam (aamc.org/mcat)	
	Look at the Fee Assistance Program (aamc.org/fap) eligibility requirements	
College Year 3	Pursue leadership opportunities in pre-health organizations on campus	
	Consider which faculty, advisors, and mentors to approach for letters of recommendation	
	Continue with volunteer/work in meaningful clinical experiences, and possibly take on a more substantial role	
	Meet with pre-health advisor to: Strategize my medical school application timeline, whether I want to take a gap year; discuss letters of recommendation; review medical education options; and discuss my schedule for completing premedical and other required coursework	
	Register for a spring date for the MCAT exam (if not taking a gap year)	
	Explore premedical coursework requirements and application policies in MSAR Online	
	Learn about financial aid and financing strategies through FIRST's website (aamc.org/first)	
Summer	Continue with volunteer/work in meaningful clinical experiences, research, and leadership experiences	
	Complete AMCAS application; work on secondary applications	
	Request letters of recommendation from faculty, advisors, mentors	
College Year 4	Continue with volunteer/work in meaningful clinical/research experiences	
	Consult with pre-health advisor on application status, medical education options, etc.	
	Complete supplementary application materials for schools I've applied to	
	Prepare for interviews and campus visits at medical schools	
	Receive acceptances and make a decision on which medical school to choose	
	Notify the medical schools I will not be attending by the deadline date given	
	Complete FAFSA and financial aid forms	
Summer	Purchase books and equipment, and make my living arrangements	
	Attend orientation programs and matriculate into medical school	



**Association of
American Medical Colleges**

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Osteopathic Medicine



General Description:

What are some common daily activities/experiences?

As an osteopathic physician, the goal is to make life easier or more comfortable for the patient by removing disease and enabling functional health. Optimal health encompasses the mind, body and spirit; a daily activity includes engaging with patients socially in order to partner with them to move from their current condition to a state of optimal health.

An example from a Doctor of Osteopathic Medicine:

A person enters the emergency room and has previously had many tests completed. All of the tests were negative and indicated levels in the normal range. The osteopathic doctor took the additional time to speak with the person in detail and to determine possible root causes for these reoccurring symptoms; in this case, anxiety was identified as the source.

What are 3-5 personal characteristics important for happiness and success in your profession?

The number one characteristic for happiness and success in the profession is for students to know what makes them happy. Are they more interested in the stories of people, physiology, or another aspect? This will then guide the student toward a path of success. Another characteristic is the ability for the student to build on what he/she likes and determining how he/she can make a difference for patients. Acceptance is also important for happiness and success in osteopathic medicine. While the goal is optimal health, life is a process and each appointment is not an endpoint.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

Key questions that students should ask themselves as they prepare for the profession include:

- “What do I want my life to look like when I graduate?”
- “Where do I picture myself in 20 years?”
- “What is my philosophy- am I focused on health care or health?”

Preparing for Admission:

- **Academics:** [General Admissions Requirements](#)
- **Standardized Tests:** MCAT, <https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam/>
- **Experience/Exposure:** Check the [College Information Book](#) for each school
- **Letters of Recommendation:** Check the [College Information Book](#) for each school
- **Resources for researching schools:** [College Information Book](#)

NAAHP Fact Sheet for Health Professions Advisors
Osteopathic Medicine

The Admissions Cycle:

- CAS(es): <https://aacomas.liaisoncas.com/applicant-ux/#/login>
 - Application opens: Application opens on May 4, 2016.
 - Application can be submitted: May 4, 2016
 - Colleges begin reviewing applications: No earlier than June 15, 2016
 - Application deadlines: Deadlines vary. The earliest AACOMAS deadline is December 1, 2016; the last AACOMAS deadline is April 1, 2017.
 - Number of schools participating: (As of June 1, 2016) There are 33 colleges of osteopathic medicine delivering instructions at 48 locations (colleges, branch campuses and additional locations). All COMs are part of AACOMAS except the University of North Texas Health Sciences Center College of Osteopathic Medicine.
 - Fees, fee waivers:
 - The fee for submitting the first application is \$195. Each additional application submitted at the time of the first submission is \$40.
 - **Fee waivers:** AACOMAS makes a significant number of fee waivers covering application to three medical schools available. Complete information about qualification requirements and instructions on how to submit a fee waiver application are available in the [AACOMAS instructions](#). Fee waivers run out quickly, so apply by August for best consideration.
 - Letters of rec logistics: Letters of recommendation may be submitted multiple ways. All colleges accept letters of recommendation directly through the AACOMAS application. Additional services and letter requirements vary by college, so applicants must review the processes outlined by each college in the [College Information Book](#).
 - Standardized test logistics: Official MCAT scores must be sent directly to AACOMAS using the online [MCAT Score Reporting System](#). Make sure to accurately enter your name, date of birth, and AAMC ID#. AACOMAS uses this information to match the official score report to your application. More information is available in the online [AACOMAS instructions](#).
 - Transcripts: Send official transcripts directly to AACOMAS. Instructions on sending official transcripts varies based on the source of the transcript, so applicants must review the [AACOMAS online instructions](#) carefully. The AACOMAS mailing address is:
AACOMAS Transcript Processing Center
P.O. Box 9137
Watertown, MA 02471
 - Instruction manual and FAQ:
<http://help.unicas.com:8888/aacomashelpPages/instructions/index.html>
 - Contact information for applicants: 617-612-2889 / aacomasinfo@liaisoncas.com
 - CAS contact for advisors: 716-636-7777 option 7 / webadmitsupport@liaison-intl.com
- AACOMAS on Facebook: <https://www.facebook.com/AACOMAS/>
- AACOMAS on Twitter: <https://twitter.com/AACOMASPreMed>

The Admissions Process:

- Approx dates of interviews, offers: _Interviews can begin as early as mid-August and conclude as late as March.
- Advisor portal: Universal Advisor Portal - <https://uap.webadmit.org/session/new>
- Total number of applicants in 2015---16 (through CAS and/or all member programs if known): 20,720
- Total number of first year students (through CAS and all if known): New first-year students in fall 2015 numbered 7,219, over 25% of new first-year students.

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Osteopathic Medicine

- Test score and GPA averages and ranges, other data on applicants and accepted students (major, age, race/ethnicity, gender, whatever makes sense for the profession) can be found in the [AACOMAS Applicant Pool Summary Report, Entering Class 2016](#).:
 - Total number of students: Osteopathic Medical College enrollment in 2015-16 was 25,876, over 20% of all US medical students. [update for 2015-16]
- Average # of applications per student: 8.96

Learn More about the Profession

Training & Career Opportunities

- Number of years: 4
- Degree attained: Doctor of Osteopathic Medicine (DO)
- Total number of graduates: 5,323 (As of June 30, 2015)
- Data on employment of recent graduates, if available: GME placement information can be found in the [Report on Osteopathic Medicine Placements in 2016 Matches](#).

Key Resources for Students

- A [Recruitment Events Calendar](#) is available for Advisors and their students to view Open Houses and related admissions events

Key Resources for Advisors

- <http://www.aacom.org/become-a-doctor/pre-health-advisors>

Social Media

- Pre-SOMA on Facebook: <https://www.facebook.com/pre.soma>
- AACOM on Facebook: <https://www.facebook.com/pages/AACOM-The-American-Association-of-Colleges-of-Osteopathic-Medicine/49933236324>

Advisory Council Professional Association Partner Information

- **The American Association of Colleges of Osteopathic Medicine**, <http://www.aacom.org>
- **Mission**
The American Association of Colleges of Osteopathic Medicine (AACOM) provides leadership for the osteopathic medical education community by promoting excellence in medical education, research and service, and by fostering innovation and quality across the continuum of osteopathic medical education to improve the health of the American public. The American Association of Colleges of Osteopathic Medicine (AACOM), founded in 1898, exists to lend support and assistance to all the nation's osteopathic medical schools. Having grown from a handful of college administrators a century ago, the organization today represents the administration, faculty and students of the 330 colleges of osteopathic medicine, and five branch campuses that offer the doctor of osteopathic medicine (D.O.) degree in the United States. Currently, instruction is delivered at 484 campus locations and numerous clinical sites across the U.S. The association, guided by its Board of Deans, Assembly of Presidents, and various other councils and committees, is actively involved in all areas of osteopathic medical education.
- **Size of organization, number of member institutions:**
AACOM represents 33 colleges of osteopathic medicine. Currently, instruction is delivered at 48 campus locations and numerous clinical sites across the United States. The Association, guided by

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors
Osteopathic Medicine

its Board of Deans, Assembly of Presidents, and various other councils and committees, is actively involved in all areas of osteopathic medical education.

- **New institutional members in last two years:**
 - Burrell College of Osteopathic Medicine at New Mexico State University
 - NYIT College of Osteopathic Medicine at Arkansas State University
 - Edward Via College of Osteopathic Medicine – Auburn Campus
 - Cleveland campus of Ohio University Heritage College of Osteopathic Medicine
 - Dublin campus of Ohio University Heritage College of Osteopathic Medicine
 - Liberty University College of Osteopathic Medicine
 - Middletown campus of Touro College of Osteopathic Medicine

Advisory Council Contact Information

Stephanie Wurth
swurth@aacom.org

NAAHP liaison and contact information

Carmen Rexach
Mt. San Antonio College
crexach@mtsac.edu

Date updated: 10/25/16

M.D. and D.O. Medical Programs

This graphic illustrates many of the similarities and differences between M.D. and D.O. medical school programs. Speak to your pre-health advisor to decide which programs might be right for you.

Similarities



The MCAT® Exam is used in the admission process



Students matriculate after completing their undergraduate degree



Programs typically last 4 years



Physicians are fully certified after passing board exams



Graduates can practice any specialty



Medical degree is followed by 3-7 years of residency

Just M.D.

- Applicants apply using AMCAS®
- 141 medical schools in the United States and 17 in Canada
- Students take the USMLE licensing exams

Just D.O.

- Applicants apply using AACOMAS®
- 30 D.O. medical schools in the United States
- Students take the COMLEX licensing exams
- Additional training in the musculoskeletal system and Osteopathic Manipulative Treatment (OMT)

The background is a light blue collage of medical-related elements. It features a grid of hexagons, some containing icons like a heart, an eye, a clipboard, and a molecular structure. There are also faint text elements, including the word 'MEDICAL' in several places and a list of medical services. A magnifying glass is visible on the left side, and a stethoscope is at the bottom.

Podiatric Medicine



General Description

A Doctor of Podiatric Medicine (DPM), known also as a podiatric physician surgeon, is qualified by their education and training to diagnose and treat conditions affecting the foot, ankle and related structures of the leg. When treating patients, this system is also known as the lower extremity. Podiatric physicians are uniquely qualified among medical professionals to treat the lower extremity based on their education, training and expertise. Podiatrists are defined as physicians by the federal government.

What are some common daily activities/experiences?

- Prescribe medication designed to treat specific foot and ankle ailments.
- Perform complex surgery and simple outpatient procedure such as excising a toenail.
- Treat diabetic patients, children, athletes, and the elderly.
- Imaging a broken bone using the latest radiological instruments.
- Conduct research or collecting data for clinical trials.
- Teaching/training residents or students rotating in clerkships.

What are 3-5 personal characteristics important for happiness and success in your profession?

- Compassion
- Work Ethic
- Good listener
- Life-long learner

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- Have I shadowed a podiatric physician yet, so that I can best learn about the profession?
- What is the main reason I am considering a career in podiatric medicine?
- Is there a specific area of podiatry I want to specialize in (i.e. diabetic care, wound care, sports medicine) and how do I go about doing that?

Preparing for Admission:

- **Academics:** Successful candidates who apply for entry into one of the nine colleges of podiatric medicine display positive characteristics of mature adults. Evidence of preparation for a career in medicine, and specifically a career in podiatric medicine, should also be present in each application. Candidates with strong science preparation are preferred. Advisors can review academic qualifications by viewing our [Prerequisite Chart](#) of required and recommended courses. Attributes of successful candidates also include good time management, problem solving proficiency and a strong sense of inter- and intrapersonal communication skills. Successful candidates also have a demonstrable record of community service or good works, and are accomplished individuals. Background in research or a desire to conduct research is also desirable.
- **Standardized Tests:** All applicants are required to submit an official MCAT score via AACPMAS. All standardized admissions exams taken more than three (3) years prior to application are NOT ACCEPTABLE.
- **Experience/Exposure:** Most Schools and Colleges require applicants shadow a DPM prior to applying or gaining admissions. The AACPM is proud to be a partner in the effort to create shadowing opportunities for undergraduate students interested in obtaining insight in the practice of a podiatric

NAAHP Fact Sheet for Health Professions Advisors

Podiatric Medicine

physician. Our [DPM Mentors Network](#) is a robust matching service, designed to place students with talented DPMs near where they live or go to school.

- **Letters of Recommendation:** Each School or College of Podiatric Medicine determines its preference for the type or number of letters of recommendation. Additionally, each college provides instructions for either electronic or paper delivery of letters. Details can be found in our 2017-2018 version of the [Podiatric College Information Book](#).
- **Resources for researching schools**
 - Member school links: Our nine schools and colleges of Podiatric Medicine are conveniently linked on our webpage, [Accredited U.S. Colleges of Podiatric Medicine](#), for easy access.
 - [Podiatric College Information Book](#): This reference guide, published biannually in even years, provides prospective students with an overview of the breadth and depth to a career in podiatric medicine and specific information about admission requirements for each of the colleges and schools of podiatric medicine in the U.S. recognized by the Council on Podiatric Medical Education (CPME). Complimentary printed copies are available to advisors and interested students upon request. School specific data is updated in the odd years and posted to our web site.

The Admissions Cycle:

- CAS Information: <https://portal.aacpmas.org>
 - Application opens: first Wednesday in August 2016
 - Application can be submitted: first Wednesday in August 2016
 - Priority Deadline: April 1, 2017
 - Application service closes: end of June 2017
 - Number of schools participating: 9 out of 9 accredited programs
 - Fees, fee waivers: The initial application to AACPMAS is \$180. There is an additional \$60 fee for each additional submission. The AACPM does not offer any fee waivers.
 - Letters of rec logistics: Each School or College of Podiatric Medicine determines its preference for the type or number of letters of recommendation. Additionally, each college provides instructions for either electronic or paper delivery of letters. Details can be found in our 2017-2018 version of the [Podiatric College Information Book](#).
 - Standardized test logistics: Official MCAT scores must be submitted directly to AACPMAS for verification.
 - Transcripts: All official transcripts must be sent to **AACPMAS Transcript Verification Department, P.O. Box 9200, Watertown, MA 02471** for verification. Students may be asked to submit an official set of transcripts prior to matriculating.
 - Instruction manual and FAQ: Instructions and FAQs for the current AACPMAS cycle can be found by navigating here: <http://help.unicas.com:8888/aacpmasHelpPages/instructions/index.html>
 - Contact information:
 - Phone Number: 617-612-2900 (if in the U.S.)
 - Email: aacpmasinfo@aacpmas.org (When contacting via email, please include your full name, AACPMAS ID number and detailed question.)
 - Mail: AACPMAS, P.O. Box 9200, Watertown, MA 02471
 - CAS contact for advisors:
 - Phone Number: 617-612-2900 (if in the U.S.)
 - Email: aacpmasinfo@aacpmas.org (When contacting via email, please include your full name, AACPMAS ID number and detailed question.)
 - Mail: AACPMAS, P.O. Box 9200, Watertown, MA 02471

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Podiatric Medicine

The Admissions Process:

- Approximate dates of interviews, offers: The Schools and Colleges of Podiatric Medicine adhere to the established [Traffic Rules](#), which establishes which applicants are eligible to be invited for an interview, when offers of acceptance can be disseminated and how deposits can be collected.
- Advisor portal: Beginning in late October 2016, advisors will be able to view the list of designated DPM programs for their students in the previous cycle and the final admission decision submitted by each program via AACPMAS Advisor Portal. 2014-2015 and 2015-2016 data on students (who have designated your institution as the “primary” college attended and authorized AACPMAS to release their information) will also be available in the 3.0 version.
- Total number of applicants in most recent cycle (through CAS and/or all member programs if known): 1194
- Average # of applications per student: 4.91
- Total number of first year students: 674
- Test score and GPA averages and ranges, other data on applicants and accepted students (major, age, race/ethnicity, gender, whatever makes sense for the profession): Women made up 467 (39%) of the applicants and 275 (41%) of matriculating students in 2015. About 97% of the students who enter a college of podiatric medicine have a bachelor’s degree. Of those having earned a degree, most will have studied a life or natural science; however, non-science majors are very successful podiatric medical students. A growing number of candidates have also completed some graduate study. For 2015 matriculating students into the first year of study at a school or college of podiatric medicine the average GPA was 3.39, the average science GPA was 3.26 and the average non-science GPA was 3.61.
- Total number of students: 2439

Learn More about the Profession

Training & Career Opportunities:

- Number of years: Four (4)
- Degree attained: DPM, Doctor of Podiatric Medicine
- Total number of graduates in most recent academic year:
- Data on employment of recent graduates, if available: After completing four years of podiatric medical studies, podiatric physicians apply for a comprehensive three-year Podiatric Medicine and Surgery Residency (PMSR). Residency training provides a combination of medical and surgical experiences that are resource-based, competency driven and assessment validated.

Key Resources for Students:

- The AACPMC’s [Student Brochure](#) is the primary piece of literature that is disseminated by the organization. This handy guide gives prospective students and advisors alike all of the basic information about education and careers in podiatric medicine, as well as a cover featuring a series of interesting facts about the foot and podiatry as a whole.

Key Resources for Advisors:

- Toolkit (coming in Fall 2016)
- [DPM Mentors Network](#)
- [Student Brochure](#)
- [College Information Booklet](#)

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Podiatric Medicine

- Complimentary copies are available to advisors upon request. Email podinfo@aacpm.org to request materials.

Social Media:

- AACPM - Education - [Facebook](#)
- AACPM - Admissions Page - [Facebook](#)
- AACPM - [Twitter](#)

Advisory Council Professional Association Partner Information

The Mission of the **American Association of Colleges of Podiatric Medicine (AACPM)** is to serve as the leader in facilitating and promoting excellence in podiatric medical education leading to the delivery of the highest quality lower extremity healthcare to the public.

- **Size of organization, Number of member institutions:** There are nine (9) member college institutions and 203 teaching hospital institutions.
- **New institutional members in last two years:** none

Advisory Council Contact Information

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mnorth@aacpm.org

Mandy Nau
Career Promotion Strategist
American Association of Colleges of Podiatric
Medicine
253-906-4167
mnau@aacpm.org

NAAHP liaison and contact information

Kathleen Kolberg
University of Notre Dame
kkolberg@nd.edu

Date updated: Thursday, October 27, 2016

Schools and Colleges of Podiatric Medicine

Arizona

Arizona School of Podiatric Medicine at Midwestern University (AZPod)
Glendale, AZ
(623) 572-3275; (888) 247-9277
www.midwestern.edu/azpod

California

California School of Podiatric Medicine at Samuel Merritt University (CSPM)
Oakland, CA
(510) 869-6789
www.samuelmerritt.edu/podiatric_medicine

Western University of Health Sciences - College of Podiatric Medicine (WUCPM)
Pomona, CA
(909) 469-5485
<http://prospective.westernu.edu/podiatry/welcome>

Florida

Barry University School of Podiatric Medicine (BUSPM)
Miami Shores, FL
(305) 899-3123; (800) 695-2279
www.barry.edu/podiatry

Illinois

Dr. William M. Scholl College of Podiatric Medicine
at Rosalind Franklin University of Medicine and Science (SCPM)
North Chicago, IL
(847) 578-8400; (800) 843-3059
www.rosalindfranklin.edu/scholl

Iowa

College of Podiatric Medicine & Surgery at Des Moines University (DMU - CPMS)
Des Moines, IA
(515) 271-7497
www.dmu.edu/cpms/pm

New York

New York College of Podiatric Medicine (NYCPM)
New York, NY
(212) 410-8098; (800) 526-6966
www.nycpm.edu

Ohio

Kent State University College of Podiatric Medicine (KSUCPM)
Independence, OH
(216) 231-3300
www.kent.edu/cpm

Pennsylvania

Temple University School of Podiatric Medicine (TUSPM)
Philadelphia, PA
(215) 625-5451; (800) 220-FEET
<http://podiatry.temple.edu>



AMERICAN ASSOCIATION OF COLLEGES OF PODIATRIC MEDICINE

American Association of Colleges of Podiatric Medicine

15850 Crabbs Branch Way, Suite 320
Rockville, MD 20855
301-948-0957
podinfo@aacpm.org
www.AACPM.org
Like us on Facebook at [facebook.com/AACPM](https://www.facebook.com/AACPM)
Follow us on Twitter @PodMedColleges

AACPMAS Application Service

P.O. Box 9200
Watertown, MA 02471
617-612-2900
www.portal.aacpmas.org

American Podiatric Medical Association

9312 Old Georgetown Road
Bethesda, MD 20814-1621
301-581-9200
www.APMA.org

Diabetes is the **7th** leading cause of death in the United States, affecting over **25 MILLION PEOPLE**

Podiatric physicians are licensed in all **50** states, the District of Columbia, and Puerto Rico.

The average DPM works just over **40** hours per week and treats approximately **100** patients per week.

After completing **4 years** of podiatric medical studies, podiatric physicians apply for a comprehensive 3 year Podiatric Medicine and Surgery Residency (PMSR).

9 Schools and Colleges of Podiatric Medicine in the U.S.

\$181,000
average salary in 2015

10% of the applicant pool self-identified as an under-represented minority and comprised 12% of new enrollees in 2015.

97% of the students who enter a college of podiatric medicine have a bachelor's degree.

26 BONES

comprise the structure of the foot.

Most podiatric physicians enjoy the satisfaction of working **1:1** with their patients.

Applicants need **90** semester hours or the equivalent of college credit at an accredited institution to apply.

The **4-YEAR** podiatric medical curriculum is robust and rigorous, offering you many challenges and much satisfaction.

Women made up **41%** of matriculating students in 2015.

A podiatrist is a Doctor of Podiatric Medicine, known also as a podiatric physician or surgeon, qualified by their education and training to diagnose and treat conditions affecting the foot and ankle. A doctor of podiatric medicine (DPM) is a specialist in the prevention, diagnosis, and treatment of foot, ankle and related structures of the leg.

DPMs specialize in a variety of areas such as surgery, orthopedics, or public health. DPMs practice sports medicine, pediatrics, dermatology, radiology, geriatrics, or diabetic foot care. A DPM utilizes x-rays and laboratory tests for diagnostic purposes, prescribes medications, orders physical therapy, sets fractures, and performs surgery.

While some podiatric physicians will cite compensation as the main reason they chose to pursue podiatric medicine, most will state it was the best fit when comparing the lifestyles of other medical specialties. In a recent practice survey, most podiatrists stated they enjoy a 30 to 60 hour work week, with the average DPM working just over 40 hours per week. This is well below the average work week for the most sought after MD and DO specialties (e.g., dermatology (45.5 hours/week) or ophthalmology (47 hours/week) (Dorsey, Jarjoura, & Rutecki, 2003)). There are many additional benefits however.

Most podiatric physicians enjoy the satisfaction of working one-on-one with their patients. In a 2014 practice survey conducted by the American Podiatric Medical Association, (APMA), podiatric physicians reported treating approximately 100 patients per week. This manageable patient load allows for a DPM to provide in-office treatments and focus on patient wellness.

Frequently, podiatric physicians set their own hours, but often work evenings and weekends to accommodate their patients. Podiatrists who are affiliated with hospitals or clinics may also have an on-call schedule, where they respond to all lower extremity related emergencies during weekends or evenings. However, most lower-extremity treatments are elective and may be scheduled during normal office hours.

The individual who is called to be come a Doctor of Podiatric Medicine joins a community of deeply committed physicians who provide care to vulnerable populations in the U.S. -those who are seeking healthcare for themselves, or seeking healthcare for a loved-one. Podiatric physicians are rigorous scholars, curious researchers, and public health advocates with deep commitments to community service and volunteering. Doctors of Podiatric Medicine perform acts of humanitarianism and outreach, globally, to pursue their passion: excellence in foot and ankle medical care and surgery.



Podiatric physicians are rigorous scholars, curious researchers, and public health advocates with deep commitments to community services and volunteering.



Want to learn more?

Shadowing a DPM has been proven to be one of the best ways for you to learn about the countless positive aspects of a career in podiatric medicine. You may be allowed to watch actual patient procedures, discuss potential diagnoses with physician or permitted to review diagnostic images with the DPM. To find a DPM near you live, visit www.aacpm.org/becoming-a-podiatric-physician. While investigating careers in medicine, you may be surprised to learn the specialists of the lower extremity follow distinctive education path, not the traditional medicine path with which you might be most familiar.

Podiatric physicians receive medical education and training comparable to medical doctors, including three to four years of undergraduate education, four years of graduate education at a college of podiatric medicine and three years of hospital-based residency training.

The first two years of study include a broadly based, basic science curriculum comprising study of Gross Anatomy, Biochemistry, Microbiology and Pathology, to name just a few. Students also study the anatomical, physiological and structural function of the lower extremity in detail. Didactic instruction evolves into clinical classroom study with application to the fundamentals of podiatric medicine and surgery and actual clinical exposure. Topics of study include Pharmacology, Surgery, Radiology, Biomechanics and General Medicine. At some schools, students are introduced to interdisciplinary study with students from other healthcare disciplines.

The third and fourth years include clinical rotations through podiatric medical clinics, hospitals, long-term care facilities, and professional office settings where students are afforded the privilege of working with real patients. The goal of podiatric clinical training is to provide students with basic competencies in prevention, diagnosis and treatment of the lower extremity. Students are also exposed to cutting edge research, practice management methodologies and electronic medical records as part of their hands-on training.

With just nine schools and colleges of podiatric medicine in the U.S., it's easy to discover which school is the best fit for you. Schools and colleges which offer the doctor of podiatric medicine degree are accredited by the Council on Podiatric Medical Education. Most schools and colleges of podiatric medicine also are accredited by a regional educational accrediting organization. For more information about the schools and colleges of podiatric medicine, please contact:

American Association of Colleges of Podiatric Medicine
15850 Crabbs Branch Way, Suite 320
Rockville, MD 20855
301-948-0957 podinfo@aacpm.org www.AACPM.org



While investigating careers in medicine, you may be surprised to learn that specialists of the lower extremity follow a distinctive education path, not the traditional medicine path with which you might be most familiar.

Successful candidates who apply for entry into one of the nine schools and colleges of podiatric medicine display positive characteristics of mature adults. Evidence of preparation for a career in medicine, and specifically a career in podiatric medicine, should also be present in each application. Candidates with strong science preparation are preferred. Attributes of successful candidates also include good time management, problem solving proficiency and a strong sense of inter- and intrapersonal communication skills. Successful candidates also have a demonstrable record of community service or good works, a strong academic record in the sciences, and are well-rounded individuals.

Applicants must take the MCAT no later than spring of the year of admission. MCAT exams taken more than (3) years prior to application are not acceptable. However, some colleges will accept the US Dental Admission Test (DAT). If a student has not taken the MCAT, they should check the policy of each individual college in which they are interested to ascertain if test scores other than the MCAT acceptable for admission.

Actual minimum semester credit hour requirements for all of the colleges of podiatric medicine include the following prerequisites:

Course	Semester Hours
Biology	8-12
Chemistry	8
Organic Chemistry	8
Physics	8
English	6-8

The American Association of Colleges of Podiatric Medicine Application Service (AACPMAS) allows students to apply to all nine of the colleges of podiatric medicine with one online application.

Apply now! www.portal.aacpmas.org

Many forms of financial aid are available to podiatric medical students, including scholarships and loans. Some financial aid is available directly from the colleges, and many state, local and national podiatric medical organizations offer scholarships or loans to students. Financial aid officers at colleges of podiatric medicine will have more information.

Podiatric medicine embraces a multitude of diverse students and practicing podiatric physicians. The colleges of podiatric medicine actively recruit students from all ethnic backgrounds, races and genders. The podiatric medical schools and colleges and AACPM welcome admission inquiries from individuals trained in other health disciplines. AACPMAS, its parent organization, AACPM, and the colleges adhere to all legal requirements, including the American with Disabilities Act.



AMERICAN ASSOCIATION OF
COLLEGES OF
PODIATRIC MEDICINE

COLLEGES OF PODIATRIC MEDICINE

ARIZONA

ARIZONA SCHOOL OF PODIATRIC MEDICINE AT MIDWESTERN UNIVERSITY
(AZPOD)
Glendale, AZ
(623) 572-3275; (888) 247-9277
www.midwestern.edu/azpod

CALIFORNIA

CALIFORNIA SCHOOL OF PODIATRIC MEDICINE AT SAMUEL MERRITT UNIVERSITY
(CSPM)
Oakland, CA
(510) 869-6789
www.samuelmerritt.edu/podiatric_medicine

WESTERN UNIVERSITY OF HEALTH SCIENCES COLLEGE OF PODIATRIC MEDICINE
(WUCPM)
Pomona, CA
(909) 469-5485
<http://prospective.westernu.edu/podiatry/welcome>

FLORIDA

BARRY UNIVERSITY SCHOOL OF PODIATRIC MEDICINE
(BUSPM)
Miami Shores, FL
(305) 899-3123; (800) 695-2279
www.barry.edu/podiatry

ILLINOIS

DR. WILLIAM M. SCHOLL COLLEGE OF PODIATRIC MEDICINE AT ROSALIND FRANKLIN UNIVERSITY OF MEDICINE & SCIENCE
(SCPM)
North Chicago, IL
(847) 578-3204; (800) 843-3059
www.rosalindfranklin.edu/scholl

IOWA

DES MOINES UNIVERSITY COLLEGE OF PODIATRIC MEDICINE & SURGERY
(DMU - CPMS)
Des Moines, IA
(515) 271-7497
www.dmu.edu/cpms/pm

NEW YORK

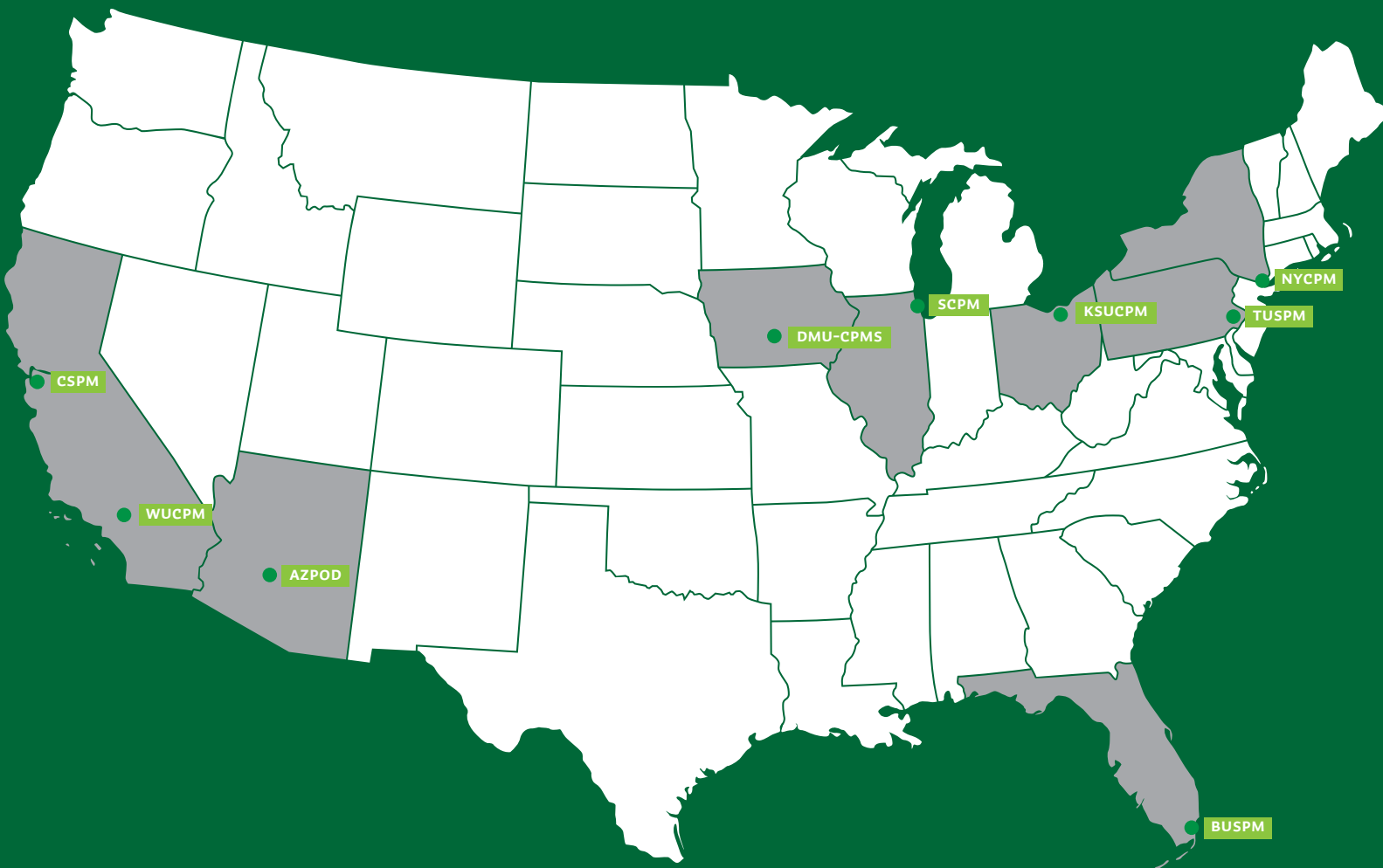
NEW YORK COLLEGE OF PODIATRIC MEDICINE
(NYCPM)
New York, NY
(212) 410-8098; (800) 526-6966
www.nycpm.edu

OHIO

KENT STATE UNIVERSITY COLLEGE OF PODIATRIC MEDICINE
(KSUCPM)
Independence, OH
(800) 821-6562 (INSIDE OHIO); (800) 238-7903 (OUTSIDE OHIO)
www.kent.edu/cpm

PENNSYLVANIA

TEMPLE UNIVERSITY SCHOOL OF PODIATRIC MEDICINE
(TUSPM)
Philadelphia, PA
(215) 625-5451
<http://podiatry.temple.edu>



AZPOD

ARIZONA SCHOOL OF PODIATRIC MEDICINE
AT MIDWESTERN UNIVERSITY

CSPM

CALIFORNIA SCHOOL OF PODIATRIC MEDICINE
AT SAMUEL MERRITT UNIVERSITY

WUCPM

WESTERN UNIVERSITY OF HEALTH SCIENCES
COLLEGE OF PODIATRIC MEDICINE

BUSPM

BARRY UNIVERSITY SCHOOL OF PODIATRIC MEDICINE

SCPM

DR. WILLIAM M. SCHOLL COLLEGE OF PODIATRIC MEDICINE AT
ROSALIND FRANKLIN UNIVERSITY OF MEDICINE & SCIENCE

DMU-CPMS

DES MOINES UNIVERSITY COLLEGE OF
PODIATRIC MEDICINE & SURGERY

NYCPM

NEW YORK COLLEGE OF PODIATRIC MEDICINE

KSUCPM

KENT STATE UNIVERSITY COLLEGE OF PODIATRIC MEDICINE

TUSPM

TEMPLE UNIVERSITY SCHOOL OF PODIATRIC MEDICINE

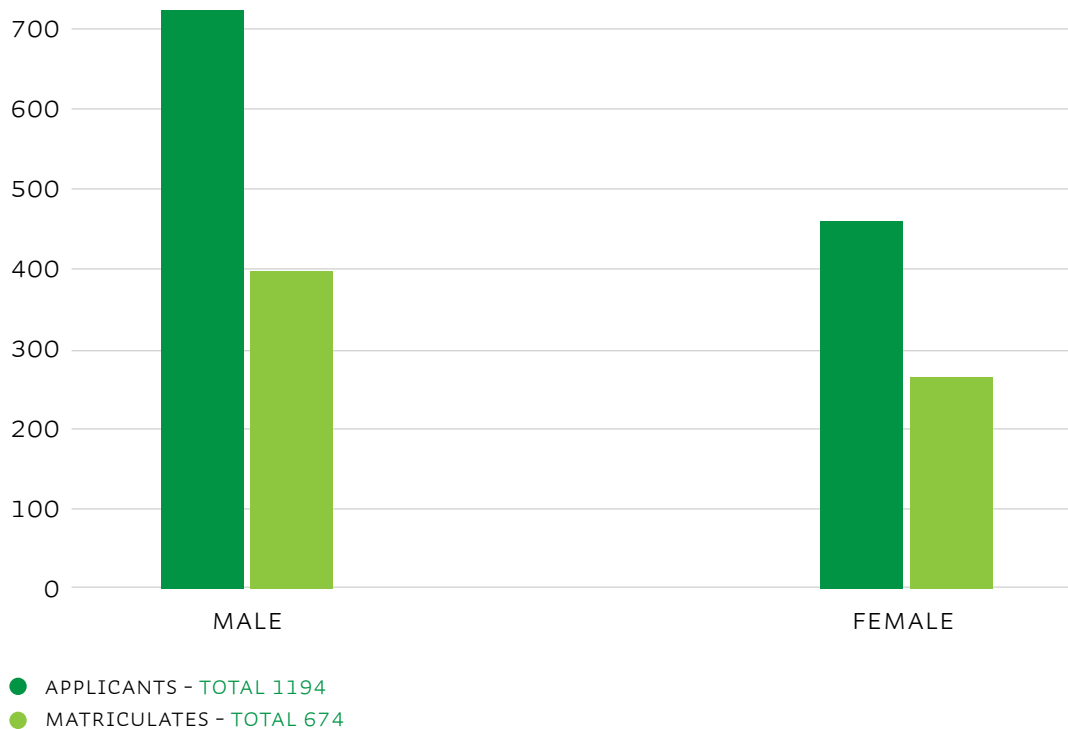
QUALIFICATIONS FOR PODIATRIC MEDICAL SCHOOL

Successful candidates who apply for entry into one of the nine colleges of podiatric medicine display positive characteristics of mature adults. Evidence of preparation for a career in medicine, and specifically a career in podiatric medicine, should also be present in each application. Candidates with strong science preparation are preferred. Attributes of successful candidates also include good time management, problem solving proficiency and a strong sense of inter- and intrapersonal communication skills. Successful candidates also have a demonstrable record of community service or good works, a strong academic record in the sciences, and are well-rounded individuals.

In 2014-15, 1194 individuals applied to at least one of the nine colleges of podiatric medicine. A total of 674 first year students entered into study in the fall of 2015. Women made up 467 (39%) of the applicants and 275 (41%) of matriculating students in 2015.

Underrepresented minority student populations are expected to increase well into the future.

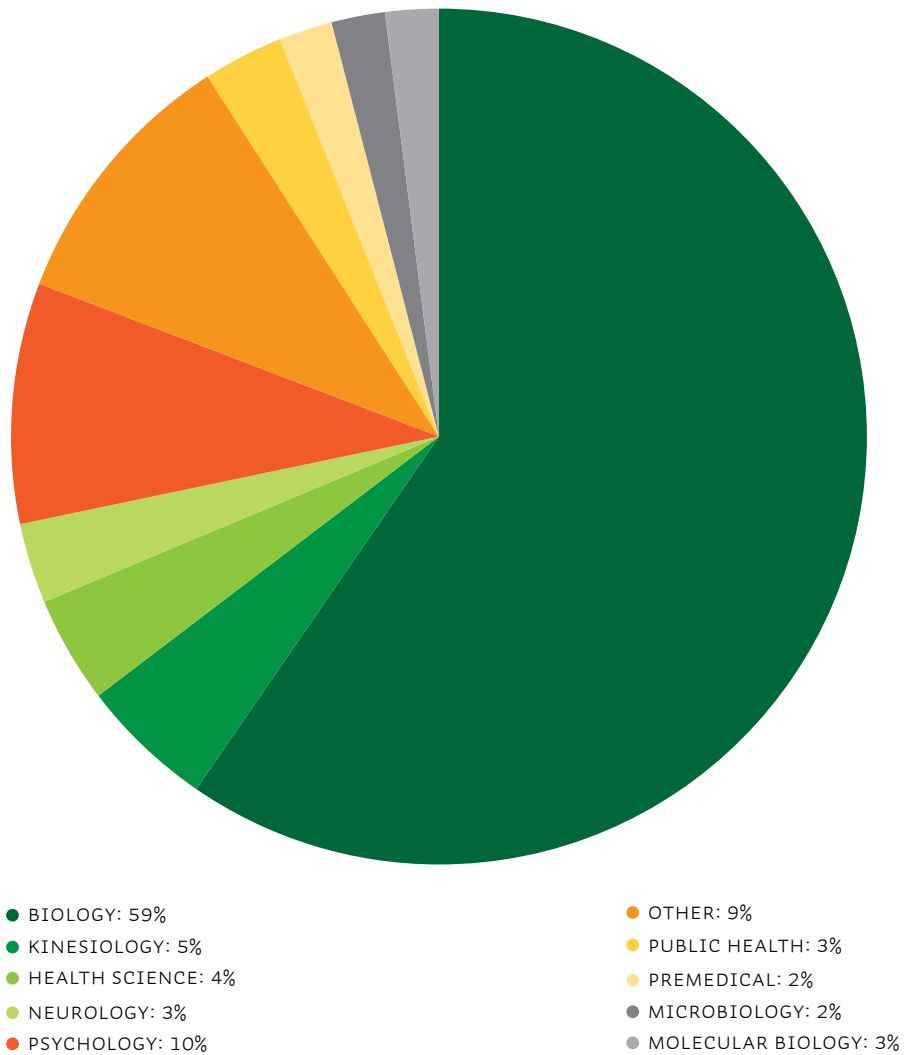
APPLICANTS VS. MATRICULANTS BY GENDER IN 2015



GENERAL ADMISSIONS REQUIREMENTS

The specific criteria to enter a college of podiatric medicine includes first completing at least three years (90 semester hours or the equivalent) of college credit at an accredited institution. About 97% of the students who enter a college of podiatric medicine have a bachelor's degree. Of those having earned a degree, most will have studied a life or natural science; however, non-science majors are very successful podiatric medical students. A growing number of candidates have also completed some graduate study.

TOP 10 UNDERGRADUATE MAJORS IN 2015



SUMMARY OF COURSE PREREQUISITES FOR ADMISSION TO PODIATRIC MEDICAL SCHOOL

	AZPOD	BUSPM	CSPM	DMU-CPMS	KSCUPM	NYCPM	SCPM	TUSPM	WUCPM
ANATOMY/PHYSIOLOGY			●	●	●			●	●
BEHAVIORAL SCIENCES									●
BIOCHEMISTRY			●	●	●			●	●
BIOLOGY	●	●	●	●	●	●	●	●	●
CELL BIOLOGY								●	
CHEMISTRY	●	●	●	●	●	●	●	●	●
EMBRYOLOGY								●	
ENGLISH/COMPOSITION	●	●	●	●	●	●	●	●	●
GENETICS								●	
HISTOLOGY			●	●	●			●	●
IMMUNOLOGY			●						
MEDICAL TERMINOLOGY				●	●				
MICROBIOLOGY			●		●			●	●
ORGANIC CHEMISTRY	●	●	●	●	●	●	●	●	●
OTHER LIBERAL ARTS									
PHYSICS	●	●	●	●	●	●	●	●	●
PSYCHOLOGY				●				●	
SOCIOLOGY									
ZOOLOGY			●						●
TOTAL MINIMUM # OF HOURS REQUIRED (SEMESTER/QUARTER)	90/135	90	90/135	90	90/135	90/135	90/135	90/135	90/135
BACCALAUREATE DEGREE PREFERRED	YES	YES	YES	YES	YES	YES	YES	YES	YES

● REQUIRED COURSE ● RECOMMENDED COURSE

AZPOD - ARIZONA SCHOOL OF PODIATRIC MEDICINE

BUSPM - BARRY UNIVERSITY SCHOOL OF PODIATRIC MEDICINE

CSPM - CALIFORNIA SCHOOL OF PODIATRIC MEDICINE AT SAMUEL MERRITT UNIVERSITY

DMU-CPMS - COLLEGE OF PODIATRIC MEDICINE & SURGERY AT DES MOINES UNIVERSITY

KSCUPM - KENT STATE UNIVERSITY COLLEGE OF PODIATRIC MEDICINE

NYCPM - NEW YORK COLLEGE OF PODIATRIC MEDICINE

SCPM - DR. WILLIAM M. SCHOLL COLLEGE OF PODIATRIC MEDICINE AT ROSALIND FRANKLIN UNIVERSITY OF MEDICINE & SCIENCE

TUSPM - TEMPLE UNIVERSITY SCHOOL OF PODIATRIC MEDICINE

WUCPM - WESTERN UNIVERSITY OF HEALTH SCIENCES COLLEGE OF PODIATRIC MEDICINE

The schools and colleges of podiatric medicine look at many factors when deciding which applicants to accept into their programs. Initially, admissions committees evaluate the applicant's results from the Medical College Admission Test (MCAT), grade point average (GPA), letters of recommendation, and personal interview. Additional information provided in the application, including leadership, volunteerism, work experience, and demonstrable knowledge of the practice of podiatric medicine, all play a role in the final acceptance decision.

UNDERGRADUATE TIMELINE FOR APPLYING TO PODIATRIC MEDICAL COLLEGES

It's never too early to start thinking about a career in podiatric medicine. Both advisors and students can use this guide as a general outline of how to prepare to apply to the colleges of podiatric medicine. Please know that applicants can be successful even if they arrive at the decision to apply to podiatry later in their academic career or if they are not "science-majors." Preparing for a career in podiatry looks a lot like preparing for a career in most medical fields.

PLEASE REFER TO THE TABLE ON PAGES 32-34.

UNDERGRADUATE TIMELINE FOR APPLYING TO PODIATRIC MEDICAL COLLEGES

FRESHMAN

- MEET WITH A PRE-HEALTH ADVISOR TO PLAN COURSEWORK AND LEARN MORE ABOUT PODIATRIC MEDICINE. REVIEW THE AACPM COLLEGE INFORMATION BOOK (CIB) ONLINE BY ADDING WWW.AACPM.ORG TO YOUR FAVORITES.

THE CIB INCLUDES INFORMATION FOR ALL NINE OF THE PODIATRIC MEDICAL COLLEGES, ADMISSIONS CRITERIA, MINIMUM ENTRANCE REQUIREMENTS, AND MORE. WHILE MOST SCHOOLS REQUIRE A MINIMUM OF ONE YEAR OF BIOLOGY, GENERAL (INORGANIC) CHEMISTRY, ORGANIC CHEMISTRY, PHYSICS AND ENGLISH, SPECIFIC REQUIREMENTS VARY FROM SCHOOL TO SCHOOL.

- COMPLETE REQUIRED COURSEWORK.
- THINK ABOUT WHICH MAJOR AND/OR MINORS YOU MAY WISH TO PURSUE.
- DEVELOP GOOD STUDY SKILLS BY FORMING STUDY GROUPS OR ATTENDING STUDY-SKILLS PROGRAMS.
- MAINTAIN A COMPETITIVE GPA.
- IDENTIFY EXTRACURRICULAR ACTIVITIES YOU ENJOY OR PROVIDE YOU WITH AN OUTLET TO RELIEVE STRESS. MAKE TIME TO PARTICIPATE.
- APPLY TO VOLUNTEER OR WORK IN A MEDICAL SETTING (I.E., CLINIC, ER, HOSPITAL) DURING BREAKS OR SUMMER MONTHS.
- READ ARTICLES, RESEARCH AND CURRENT INTERESTS TO LEARN ABOUT PODIATRIC MEDICINE AND HEALTHCARE IN AMERICA.
- TALK TO UPPER-CLASS, PRE-PODIATRY STUDENTS.
- GET TO KNOW A PODIATRIC PHYSICIAN (DPM). INQUIRE ABOUT SHADOWING OPPORTUNITIES DURING BREAKS OR SUMMER MONTHS.
- INVESTIGATE CAREERS AND PRE-HEALTH ENRICHMENT PROGRAMS BY VISITING WEBSITES LIKE WWW.EXPLOREHEALTHCAREERS.ORG.

SOPHOMORE

- MEET WITH A PRE-HEALTH ADVISOR.
- COMPLETE REQUIRED COURSEWORK TO KEEP YOU ON TRACK.
- SELECT MAJOR AND MINOR COURSES OF STUDY. WORK OUT ANY SCHEDULE CONFLICTS WITH GRADUATION REQUIREMENTS AND APPLICATION REQUIREMENTS. PLAN FOR SUMMER SCHOOL ATTENDANCE IF NECESSARY.
- MAINTAIN COMPETITIVE GPA.
- CONTINUE SHADOWING A VARIETY OF DPMS.
- RESEARCH PODIATRIC MEDICAL SCHOOL ENTRANCE REQUIREMENTS. REVIEW THE AACPM'S CIB, WHICH INCLUDES DESCRIPTIONS OF ALL OF THE PODIATRIC MEDICAL COLLEGES, ADMISSIONS CRITERIA, MINIMUM ENTRANCE REQUIREMENTS, AND MORE.
- LOOK FOR AND APPLY TO PARTICIPATE IN A RESEARCH STUDY WHICH COMPLEMENTS CAREER OBJECTIVES (WITH A FACULTY MEMBER OR OUTSIDE CAMPUS).
- LEARN MORE ABOUT PODIATRIC MEDICINE (I.E., SHADOWING, CLASSMATES, ADVISOR, OR COLLEGE WEBSITES).
- JOIN YOUR SCHOOL'S PRE-PODIATRY SOCIETY IF ONE IS AVAILABLE. OR, JOIN YOUR SCHOOL'S PRE-HEALTH SOCIETY TO LEARN MORE ABOUT CAREERS IN MEDICINE.
- ATTEND PRE-HEALTH ACTIVITIES, SERVICE OPPORTUNITIES, OR MEETINGS.
- EXPLORE NON-HEALTH RELATED COMMUNITY SERVICE OPPORTUNITIES THROUGH YOUR SCHOOL OR OTHER NOT-FOR-PROFIT AGENCY. IF POSSIBLE, CONTINUE A FEW SELECT ACTIVITIES THROUGHOUT UNDERGRADUATE CAREER.
- LOOK INTO PAID OR VOLUNTEER RESEARCH OPPORTUNITIES DURING THE SUMMER MONTH.
- BEGIN MCAT PREPARATION AND DETERMINE A STUDY SCHEDULE. STUDY GROUPS OFTEN WORK WELL - INQUIRE WITH THE SCHOOL'S PRE-PODIATRY OR PRE-HEALTH CLUBS FOR OTHERS INTERESTED IN STUDYING MATERIAL TOGETHER.

UNDERGRADUATE TIMELINE FOR APPLYING TO PODIATRIC MEDICAL COLLEGES

JUNIOR

- ❑ MEET WITH A PRE-HEALTH ADVISOR TO FINALIZE PRE-REQUISITE COURSE PLAN OR OTHER GRADUATION REQUIREMENTS.
- ❑ SIGN UP FOR COMMITTEE PROCESS (COMMITTEE LETTER OF RECOMMENDATION) OR LETTER OF RECOMMENDATION SERVICE WITH ADVISOR, FACULTY OR CAREER SERVICES AT YOUR SCHOOL.
- ❑ MAINTAIN COMPETITIVE GPA.
- ❑ CONTINUE TO WORK OR VOLUNTEER IN A MEDICAL SETTING. OBTAIN LETTERS OF RECOMMENDATION TO DOCUMENT THE NUMBER OF HOURS YOU HAVE ACQUIRED.
- ❑ CONTINUE SHADOWING A DPM ON A REGULAR BASIS. ASK FOR A LETTER OF RECOMMENDATION TO BE SENT TO THE SCHOOLS YOU HAVE CHOSEN TO APPLY TO IN AUGUST.
- ❑ STUDY AND REGISTER FOR MCAT.
- ❑ TAKE THE MCAT.
- ❑ VISIT COLLEGES OF PODIATRIC MEDICINE TO WHICH YOU ARE INTERESTED APPLYING. ATTEND OPEN HOUSES, OR OTHER ON-CAMPUS EVENTS. MOST COLLEGES OF PODIATRIC MEDICINE OFFER ONE-ON-ONE ADMISSIONS COUNSELING TO HELP ANSWER QUESTIONS YOU MIGHT HAVE ABOUT APPLYING.
- ❑ REVIEW AACPM'S COLLEGE INFORMATION BOOK BY VISITING [WWW.AACPM.ORG](http://www.aacpm.org), WHICH INCLUDES DESCRIPTIONS OF ALL OF THE PODIATRIC MEDICAL COLLEGES, ADMISSIONS CRITERIA, MINIMUM ENTRANCE REQUIREMENTS, AND MORE.
- ❑ LOOK FOR LEADERSHIP OPPORTUNITIES ON CAMPUS AND OFF.
- ❑ DISCUSS PODIATRIC MEDICAL SCHOOLS WITH OTHERS: ADVISORS, PARENTS, UPPER-CLASS STUDENTS, CURRENT PODIATRY STUDENTS AND DPMS.
- ❑ VISIT AACPM'S WEBSITE AT [WWW.AACPM.ORG](http://www.aacpm.org) TO LEARN ABOUT APPLYING TO THE COLLEGES OF PODIATRIC MEDICINE; REVIEW FAQs AND TIPS FOR APPLYING.
- ❑ RESEARCH SCHOOLS AND REVIEW EACH SCHOOL'S REQUIRED DOCUMENTS EARLY IN THE SPRING SEMESTER.
- ❑ IDENTIFY PROFESSORS AND/OR ADVISORS TO WRITE LETTERS OF RECOMMENDATION (IF NO COMMITTEE EVALUATION IS AVAILABLE); ASK POLITELY FOR LETTERS OF RECOMMENDATION WELL IN ADVANCE OF THE DEADLINES. IT IS OFTEN HELPFUL TO PROVIDE THOSE WRITING YOUR RECOMMENDATIONS WITH INSTRUCTIONS FOR SUBMITTING LETTERS. REMEMBER TO THANK THEM FOR THEIR TIME.
- ❑ MAKE LIST OF ALL PODIATRIC MEDICAL SCHOOLS TO WHICH YOU PLAN TO APPLY. REMEMBER TO KEEP GOOD RECORDS OF COMMUNICATION WITH EACH SCHOOL'S OFFICE OF ADMISSION.
- ❑ SCHEDULE A VOLUNTEER OR PAID PRE-PODIATRY ACTIVITY FOR THE SUMMER.

UNDERGRADUATE TIMELINE FOR APPLYING TO PODIATRIC MEDICAL COLLEGES

SUMMER BEFORE SENIOR YEAR

- APPLY – APPLICATIONS OPEN THE FIRST WEDNESDAY IN AUGUST EACH YEAR TO NEW APPLICANTS. APPLICATIONS AND INSTRUCTIONS FOR APPLYING CAN BE FOUND BY VISITING:
[HTTP://PORTAL.AACPMAS.ORG/](http://portal.aacpmas.org/).
- REQUEST OFFICIAL TRANSCRIPTS OF ALL COLLEGE WORK ATTEMPTED.
- REQUEST LETTERS OF RECOMMENDATION TO BE SENT TO THE COLLEGES YOU PLAN TO APPLY TO IN AUGUST.
- TAKE THE MCAT IF YOU HAVE NOT DONE SO ALREADY.
- PREPARE FOR SCHOOL INTERVIEWS IN THE FALL.
- BUDGET TIME AND FINANCES APPROPRIATELY TO ATTEND INTERVIEWS. INTERVIEWS ARE NOT AN ACCEPTABLE REASON TO MISS LECTURES OR LABS. PLAN ACCORDINGLY.
- PARTICIPATE IN A VOLUNTEER OR PAID RESEARCH OPPORTUNITY.

SENIOR

- TAKE THE MCAT IF YOU HAVE NOT DONE SO ALREADY.
- MEET WITH A PRE-HEALTH ADVISOR TO REVIEW COMPLETED COURSEWORK AND PRE-REQUISITES WHICH ARE IN-PROGRESS (IP) OR PLANNED (PL).
- ATTEND INTERVIEWS WITH SCHOOLS.
- VOLUNTEER OR WORK IN A MEDICAL SETTING (I.E., CLINIC, ER, HOSPITAL).
- CONTINUE EXTRACURRICULAR ACTIVITIES AND LEADERSHIP ROLES ON AND OFF CAMPUS.
- ACCEPT AN OFFER AND NOTIFY OTHER SCHOOLS OF YOUR FINAL DECISION IN A TIMELY MANNER.
- WRITE THANK-YOU NOTES TO REFERENCES AND ADMISSION OFFICERS.
- THANK YOUR PRE-MED ADVISOR FOR HIS OR HER ASSISTANCE; APPRISE THEM OF YOUR FINAL DECISION.
- APPLY FOR FEDERAL FINANCIAL AID AND SCHOLARSHIPS FOR WHICH YOU MAY BE ELIGIBLE.

APPLICATION PROCESS

The American Association of Colleges of Podiatric Medicine Application Service (AACPMAS) allows students to apply to all nine of the colleges of podiatric medicine with one online application.

AACPMAS provides a simplified process of applying to the colleges of podiatric medicine. Applicants complete one application and submit it with all official transcripts to the centralized service. AACPMAS verifies the application components for accuracy, calculates the applicant's grade point averages (GPA), and delivers the materials to the podiatric schools and colleges that the applicant designates. AACPMAS may take up to 5 weeks to process applications once materials have been received.

Official transcripts from each college attended must be sent directly to:

AACPMAS APPLICATION SERVICE
P.O. BOX 9200
WATERTOWN, MA 02471

AACPMAS now accepts transcripts sent electronically from Credentials Solutions. To see if your school participates with this service please check this link:

WWW.CREDENTIALS-INC.COM/CGI-BIN/DVCGITP.PGM?ALUMTROLIAISN

If your school does participate please follow the link below:

WWW.TRANSSCRIPTSPLUS.NET/ORDER

APPLICATION FEES

The fee for using AACPMAS is based on a graduated scale that varies according to the number of colleges an individual designates when submitting an application. Applicants may request that AACPMAS send a completed application to more schools for an additional fee. Applicants can pay the application fee with a credit card once they have e-submitted a completed application.

AACPMAS accepts only MasterCard and Visa.

Application materials will not be processed until payment is received.

For the 2017 AACPMAS cycle, the fee for the initial application and first designated college is \$180. An additional \$60 is added for each additional designation at the time of submission.

AACPMAS begins accepting new applications for admission the first Wednesday in August each year for fall admission the following year. Complete and verified applications will be delivered to the designated schools and colleges of podiatric medicine during the third week of September and will continue to deliver new and revised applications on a daily basis thereafter until the cycle closes.

Deadline dates are as follows:

For priority consideration March 1ST of each year for the upcoming fall admission. The final application deadline date is June 30TH of each year for fall admission of the same year.

Applicants should check with each school or college of podiatric medicine for additional information about final deadlines for submitting materials.

LETTERS OF RECOMMENDATION AND STANDARDIZED EXAMS

Letters of recommendation or evaluation and other extraneous materials, (e.g., past achievements, research performed, resumes, diplomas or certificates) should be sent directly to your designated colleges or brought to your interview. Some colleges of podiatric medicine accept letters via confidential letter transmission services:

SCHOOL	ACCEPTING E-LORS IN 2016-2017
AZPOD	INTERFOLIO OR VIRTUALEVALS
BUSPM	INTERFOLIO
CSPM	INTERFOLIO
DMU-CPMS	INTERFOLIO OR VIRTUALEVALS
NYCPM	INTERFOLIO OR VIRTUALEVALS
KSUCPM	INTERFOLIO OR VIRTUALEVALS
SCPM	INTERFOLIO OR VIRTUALEVALS
TUSPM	INTERFOLIO OR VIRTUALEVALS
WUCPM	INTERFOLIO OR VIRTUALEVALS

SCHOOL	STANDARDIZED TESTS ACCEPTED	
AZPOD	MCAT	LAST MCAT TEST DATE: JANUARY
BUSPM	MCAT	LAST MCAT TEST DATE: MAY
CSPM	MCAT	LAST MCAT TEST DATE: MAY
DMU-CPMS	MCAT	LAST MCAT TEST DATE: MAY
NYCPM	MCAT	LAST MCAT TEST DATE: JUNE
KSUCPM	MCAT	LAST MCAT TEST DATE: MAY
SCPM	MCAT	LAST MCAT TEST DATE: MAY
TUSPM	MCAT	LAST MCAT TEST DATE: JUNE
WUCPM	MCAT	LAST MCAT TEST DATE: JUNE

APPLICANTS WHO CHOOSE TO TAKE THE MCAT AS AN ENTRANCE REQUIREMENT MUST TAKE THE MCAT NO LATER THAN SPRING OF THE YEAR OF ADMISSION. ALL STANDARDIZED ADMISSIONS EXAMS TAKEN MORE THAN THREE (3) YEARS PRIOR TO APPLICATION ARE NOT ACCEPTABLE.

TO REGISTER FOR THE MCAT AND FOR DATES AND TEST SITE LOCATIONS, VISIT: WWW.AAMC.ORG/STUDENTS/APPLYING/MCAT/RESERVING/.

STUDENTS SHOULD MAKE NOTE OF THEIR AAMC ID NUMBER. THIS INFORMATION IS TRANSMITTED TO THE AACPMAS DURING THE APPLICATION PROCESS.

TO HAVE OFFICIAL MCAT SCORES SENT TO AACPMAS VISIT: [HTTPS://SERVICES.AAMC.ORG/MCATTHX/](https://SERVICES.AAMC.ORG/MCATTHX/) FOR ADDITIONAL INSTRUCTIONS.

To apply now,
students should visit:
<http://portal.aacpmas.org>

AACPM ADMISSIONS GUIDELINES

The AACPM encourages each of its member schools and colleges to conduct an application process that is inclusive and professional. The purpose of these traffic rules is to allow prospective students to explore their options within the podiatric medical community, and to give the schools and colleges of podiatric medicine the ability to process, select and matriculate applicants in a fair and timely manner.

Each school or college of podiatric medicine shall publish annually, amend publicly, and adhere to its application, acceptance and admission procedures. Schools or colleges of podiatric medicine may begin extending offers of admission to acceptable candidates any time after the interview. Each school or college's acceptance deposit shall not exceed \$1000. If the applicant enrolls at the college, the school or college is encouraged to credit the deposit toward tuition. Applicants will be requested to submit any necessary documents, including a deposit, according to the following schedule:

- THROUGH FEBRUARY 28, ALLOW 30 DAYS FOR CANDIDATES TO RESPOND TO OFFERS OF ADMISSION
- BETWEEN MARCH 1 AND MAY 31, ALLOW 14 DAYS FOR CANDIDATES TO RESPOND TO OFFERS OF ADMISSION
- AFTER JUNE 1, CANDIDATES MAY BE ASKED FOR AN IMMEDIATE DEPOSIT.

Applicants are expected to become familiar with admissions requirements, follow application procedures, meet all deadlines at each institution to which they apply and conduct themselves in a professional manner. Additionally, applicants are responsible for the collection and timely submission of letters of evaluation, transcripts, standardized exam scores and applicable fees. Applicants are also responsible for reporting and updating any changes in the initially submitted application (e.g., address, email, academic status and state of residence). Applicants are responsible for responding promptly to all interview invitations and offers of admissions (either to accept or decline). Further, applicants who have made a final decision regarding the podiatric medical school or college they plan to attend have an obligation to promptly withdraw their applications from all other schools. After March 1st, AACPM will promptly begin notifying the podiatric medical schools and colleges the names of candidates who continue to hold one or more deposits at other schools or programs.

AACPMAS reviews the applicant's application form for completion, verifies academic coursework, receives official standardized admissions test scores, and processes payment of application fees. AACPMAS then electronically transmits applicant's data to the colleges selected by the applicant. There are no secondary application forms or fees for the schools and colleges of podiatric medicine.

AACPM is responsible for providing fair and equitable treatment throughout the application process.

Please refer to the aacpm.org web site for a printable copy of the AACPMAS Traffic Rules.

AACPM DOES NOT SELL OR OTHERWISE RELEASE ADDRESSES, EMAILS, PHONE NUMBERS OR OTHER CONTACT INFORMATION ABOUT APPLICANTS TO COMMERCIAL VENDORS OR RESEARCHERS WHO ARE OUTSIDE AACPM OR OUR MEMBER INSTITUTIONS.

There are no secondary application forms or fees for the schools and colleges of podiatric medicine.

TIPS FOR APPLYING – GUIDANCE FROM THE ADMISSIONS ADVISOR:

GET ORGANIZED

- COUNSEL STUDENTS TO GATHER ALL WORK, VOLUNTEER, AND HEALTH CARE EXPERIENCE INTO A DESCRIPTIVE TIMELINE. ENCOURAGE STUDENTS TO KEEP RECORDS OF CONTACT INFORMATION OF THOSE SPECIFIC EXPERIENCES AS WELL.
- ADVISE STUDENTS TO KEEP METICULOUS RECORDS OF EXTRACURRICULAR ACTIVITIES, SCHOLASTIC AWARDS, SCHOLARSHIPS.
- ENCOURAGE STUDENTS TO MAINTAIN A DETAILED RECORD OF THEIR COMMUNICATION WITH EACH DESIGNATED COLLEGE; THIS IS SO THEY CAN KEEP TRACK OF DATES, SUBMITTED INFORMATION AND CONTACTS AT EACH COLLEGE OF PODIATRIC MEDICINE.

WHEN APPLYING

- STUDENTS SHOULD MAKE NOTE OF THEIR AAMC ID NUMBER WHEN REGISTERING FOR THE MCAT. THIS INFORMATION IS TRANSMITTED TO THE AACPMAS DURING THE APPLICATION PROCESS.
- ADDITIONAL AND MORE TECHNICAL APPLICATION SUBMISSION FAQs CAN BE FOUND BY VISITING [HTTPS://PORTAL.AACPMAS.ORG/](https://portal.aacpmas.org/).

UNDERSTANDING THE PREREQUISITES

- THE PREREQUISITE COURSES LISTED IN THIS GUIDE AND AT THE COLLEGE OF PODIATRIC MEDICINE ARE MEANT TO BE A GUIDELINE FOR THE MINIMUM NUMBER OF COURSES STUDENTS SHOULD COMPLETE IN EACH SUBJECT AREA – IT IS BENEFICIAL TO COMPLETE MORE THAN THE MINIMUM REQUIRED HOURS.
- BEFORE TAKING ANY PREREQUISITE COURSEWORK ONLINE, STUDENTS SHOULD CONTACT THE SCHOOL OR COLLEGE OF PODIATRIC MEDICINE DIRECTLY TO DETERMINE WHAT WILL SATISFY THE PREREQUISITE.
- PREREQUISITE COURSES TAKEN AT AN ACCREDITED JUNIOR OR COMMUNITY COLLEGE MAY FULFILL ADMISSIONS REQUIREMENTS. APPLICANTS SHOULD CHECK WITH EACH COLLEGE FOR SPECIFIC AND DETAILED INFORMATION PERTAINING TO EACH COURSE.
- WHEN COMPLETING THE AACPMAS COURSEWORK SECTION, IMPROPERLY LABELED COURSES COULD SIGNIFICANTLY AFFECT A STUDENT’S GPA.

WRITING A PERSONAL STATEMENT

- PERSONAL STATEMENTS SHOULD BE A GENERAL STATEMENT INDICATING THE STUDENT’S DEVELOPMENT FOR A CAREER IN THE PODIATRIC MEDICAL PROFESSION, NOT DIRECTED AT A SPECIFIC SCHOOL.
- PERSONAL STATEMENTS SHOULD BE CHECKED FOR SPELLING AND GRAMMAR PRIOR TO SUBMITTING. CHANGES FOR CONTENT REVISIONS OR TYPOGRAPHICAL ERRORS ARE NOT ALLOWED AFTER THE APPLICATION IS SUBMITTED.
- ENCOURAGE STUDENTS TO HAVE AT LEAST ONE OTHER PERSON READ THE PERSONAL STATEMENT; SEEK HELP FROM THE COLLEGE’S WRITING CENTER, OR ATTEND A WORKSHOP ON WRITING A PERSONAL STATEMENT.
- USUALLY, IT IS ACCEPTABLE TO WRITE ABOUT AN INTERNSHIP EXPERIENCE AT ONE OF THE COLLEGES OF PODIATRIC MEDICINE IN THE PERSONAL STATEMENT. THE ADMISSIONS COMMITTEE IS MAINLY INTERESTED IN HOW YOU OBTAINED KNOWLEDGE OF THE PROFESSION AND YOUR INSIGHT FROM THE EXPERIENCE.

BACCALAUREATE DEGREES

- GENERALLY SPEAKING, A BACCALAUREATE DEGREE IS NOT A PRE-REQUISITE FOR ACCEPTANCE INTO A COLLEGE OF PODIATRIC MEDICINE.
- IF A STUDENT IS PLANNING TO MATRICULATE TO A DPM PROGRAM AFTER COMPLETION OF ONLY 90 SEMESTER HOURS OF UNDERGRADUATE COURSEWORK, IT IS IMPORTANT TO DETERMINE - IN ADVANCE - IF THEY WILL BE ELIGIBLE FOR A BACHELOR’S DEGREE AT THE COLLEGE OF PODIATRIC MEDICINE. MOST SCHOOLS AND COLLEGES OF PODIATRIC MEDICINE ARE NOT UNDERGRADUATE-DEGREE GRANTING INSTITUTIONS; THEREFORE THEY ARE UNABLE TO AWARD A BACCALAUREATE DEGREE UPON COMPLETION OF THE FIRST YEAR OF DPM COURSEWORK IN THEIR PROGRAM.

FREQUENTLY ASKED QUESTIONS

Q: A STUDENT APPLIED LAST YEAR AND IS NOW REAPPLYING. CAN APPLICATIONS OR TRANSCRIPTS FROM LAST YEAR BE RE-SUBMITTED?

A: IF YOU APPLIED TO AACPMAS IN THE PREVIOUS CYCLE, YOU CAN COPY DATA FROM YOUR PREVIOUS APPLICATION. JUST LOG IN TO AACPMAS WITH THE SAME USERNAME AND PASSWORD FROM THAT CYCLE AND YOU WILL BE WALKED THROUGH THE RE-APPLICANT PROCESS. IF YOU CREATE A NEW ACCOUNT USING A NEW EMAIL ADDRESS, YOU WILL NOT BE PROMPTED TO COPY DATA FROM THE PAST APPLICATION.

Q: IS SHADOWING A DPM REQUIRED TO APPLY?

A: IT IS COMMONLY ACCEPTED THAT STUDENTS SHOULD BE KNOWLEDGEABLE ABOUT THE PODIATRIC MEDICAL PROFESSION PRIOR TO APPLYING; MOST STUDENTS WILL GAIN KNOWLEDGE OF THE PRACTICE OF PODIATRIC MEDICINE THROUGH THE ACT OF SHADOWING. IN MANY CASES, STUDENTS WILL BE ASKED TO SUBMIT A LETTER OF RECOMMENDATION FROM A PRACTICING DPM PRIOR TO MATRICULATING. STUDENTS WILL WANT TO CHECK WITH THE INDIVIDUAL SCHOOLS AND COLLEGES FOR EXACT REQUIREMENTS AND MINIMUM ACCEPTABLE HOURS.

Q: CAN STUDENTS APPLY TO OTHER HEALTH DISCIPLINES SCHOOLS WHILE APPLYING TO THE COLLEGES OF PODIATRIC MEDICINE?

A: YES, STUDENTS MAY HAVE APPLICATIONS TO MULTIPLE HEALTH DISCIPLINES SCHOOLS SUBMITTED AT THE SAME TIME. THE APPLICATION PROCESSES ARE SIMILAR, IN SOME CASES, BUT INDEPENDENT OF EACH OTHER. PLEASE REVIEW THE AACPMAS INSTRUCTIONS BEGINNING ON PAGE 34 CAREFULLY AND MAKE SURE THAT YOU HAVE COMPLETED EACH STEP. DON'T FORGET TO INCLUDE THE REASONS THAT YOU WANT TO STUDY PODIATRIC MEDICINE IN YOUR PERSONAL STATEMENT, AND DURING YOUR INTERVIEW.

Q: WHEN ADVISING STUDENTS INTO POST-BACCALAUREATE PROGRAMS VERSES GRADUATE SCIENCE STUDY, DO THE COLLEGES OF PODIATRIC MEDICINE PREFER ONE FORM OF PREPARATION OVER THE OTHER?

A: IN MOST INSTANCES, IT WILL DEPEND ON THE SITUATION. STUDENTS WHO ARE IN NEED OF ACADEMIC PREPARATION MAY BENEFIT FROM POST-BACCALAUREATE STUDY; STUDENTS IN NEED OF ACADEMIC REMEDIATION MAY HAVE MORE OPPORTUNITY TO DEMONSTRATE ACTUAL ABILITY THROUGH GRADUATE SCIENCE PROGRAMS DESIGNED TO ENHANCE THE ACADEMIC RECORD.

Q: WHERE SHOULD TRANSCRIPTS BE SENT, AND ARE THERE FORMS THAT MUST ACCOMPANY THE TRANSCRIPTS?

A: THE INSTITUTIONS ATTENDED SECTION OF THE AACPMAS APPLICATION ALLOWS STUDENTS TO PRINT TRANSCRIPT REQUEST FORMS. AACPMAS STRONGLY RECOMMENDS THAT STUDENTS PRINT AND ADVISE THEIR REGISTRAR'S OFFICE TO ATTACH A TRANSCRIPT REQUEST FORM TO THE OFFICIAL TRANSCRIPT. THIS FORM HELPS AACPMAS PROPERLY MATCH THE OFFICIAL TRANSCRIPTS TO THE AACPMAS APPLICATION. IF THE STUDENT'S CURRENT NAME IS DIFFERENT FROM THE NAME LISTED ON THE TRANSCRIPT, THEY MUST INCLUDE BOTH THE CURRENT AND FORMER NAME ON THE TRANSCRIPT REQUEST FORM. TRANSCRIPTS MUST BE SENT DIRECTLY FROM THE REGISTRAR'S OFFICE. PLEASE DIRECT THE OFFICE OF REGISTRARS TO SEND OFFICIAL TRANSCRIPTS TO THE FOLLOWING ADDRESS:

AACPMAS TRANSCRIPT PROCESSING CENTER
P.O. BOX 9200
WATERTOWN, MA 02471

AACPMAS NOW ACCEPTS TRANSCRIPTS SENT ELECTRONICALLY FROM CREDENTIALS SOLUTIONS. PLEASE REFER TO PAGE 35 FOR ONLINE INFORMATION.

Q: CAN I WRITE A LETTER OF RECOMMENDATION FOR A STUDENT, AND WILL THIS BE SUBSTITUTED FOR A FACULTY LETTER?

A: IN MOST CASES, WHEN A COMMITTEE LETTER IS NOT AVAILABLE, A LETTER FROM THE STUDENT'S PRE-HEALTH ADVISOR IS AN ACCEPTABLE SUBSTITUTE FOR ONE NON-SCIENCE, FACULTY LETTER OF RECOMMENDATION.

Q: A STUDENT PREVIOUSLY APPLIED TO MD AND/OR DO PROGRAMS. CAN LETTERS OF RECOMMENDATION (OR A COMMITTEE EVALUATION) BE RE-USED FOR THE DPM APPLICATION?

A: STUDENTS PURSUING ENTRY INTO ONE OF THE NINE COLLEGES OF PODIATRIC MEDICINE ARE CONSIDERED TO BE "PRE-MEDICAL" STUDENTS; ACCEPTABLE LETTERS OF RECOMMENDATION OFTEN ADDRESS STUDENTS' PREPAREDNESS FOR A CAREER IN MEDICINE. STUDENTS SHOULD BE ENCOURAGED TO SUBMIT ADDITIONAL LETTERS OF RECOMMENDATION THAT ADDRESS THEIR RECENT PREPARATION FOR A CAREER IN PODIATRIC MEDICINE.

Q: ARE AP CREDITS ACCEPTED FOR PRE-REQUISITE COURSES AT THE COLLEGES OF PODIATRIC MEDICINE?

A: IN MOST CASES, YES. STUDENTS SHOULD CHECK WITH EACH SCHOOL OR COLLEGE TO SEE WHICH AP CREDITS ARE ACCEPTED.

FINANCIAL AID AND SCHOLARSHIPS

Many forms of financial aid are available to podiatric medical students, including scholarships and loans. Some financial aid is available directly from the colleges, and many state, local and national podiatric medical organizations offer scholarships or loans to students. Financial aid officers at the schools and colleges of podiatric medicine will have more information.

FEDERAL PROGRAMS

Podiatric medical students may be eligible for a number of federal loan programs. To be eligible for Federal financial aid, the student must:

- BE AN ENROLLED STUDENT ATTENDING AT LEAST HALF TIME.
- BE A CITIZEN OF THE UNITED STATES, OR A PERMANENT RESIDENT WITH THE APPROPRIATE DOCUMENTED AUTHORIZATION FROM THE U.S. IMMIGRATION SERVICE.
- NOT BE IN DEFAULT OR OWE A REFUND ON ANY U.S. DEPARTMENT OF EDUCATION TITLE IV GRANT OR EDUCATIONAL LOAN, AND PROVIDE WRITTEN CERTIFICATION OF THAT FACT.
- HAVE FINANCIAL NEED AS DETERMINED BY AN APPROVED NEEDS ANALYSIS SYSTEM.
- MAINTAIN SATISFACTORY ACADEMIC PROGRESS.
- FILE A STATEMENT OF EDUCATIONAL PURPOSE STATING THAT ALL FINANCIAL AID FUNDS RECEIVED WILL BE USED FOR EDUCATIONAL PURPOSES.
- FILE A STATEMENT OF SELECTIVE SERVICE REGISTRATION STATUS TO INDICATE COMPLIANCE WITH SELECTIVE SERVICE REGULATION.
- COMPLETE A STUDENT LOAN ENTRANCE INTERVIEW.
- COMPLETE A STUDENT LOAN EXIT INTERVIEW CONDUCTED BY THE FINANCIAL AID OFFICE AT THE TIME THE STUDENT GRADUATES AND/OR CEASES TO BE A STUDENT.

For more information about any of the federal loan programs visit:

WWW.STUDENTAID.ED.GOV

- SUBSIDIZED STAFFORD/DIRECT LENDING PROGRAM
- UNSUBSIDIZED STAFFORD/DIRECT LENDING PROGRAM
- FEDERAL PERKINS LOANS FEDERAL
- COLLEGE WORK STUDY HEALTH
- PROFESSIONS STUDENT LOANS

Encourage students to apply for federal funding via the Free Application for Federal Student Aid:

WWW.FAFSA.ED.GOV

SCHOLARSHIPS

Many private scholarships have a financial need requirement; in most instances, students will need to file a Free Application for Federal Student Aid (FAFSA) with the government so that their need can be determined.

Organizations such as the American Podiatric Medical Association (APMA), the American Association of Women Podiatrists (AAWP), and the Podiatry Insurance Company of America (PICA) are just a few examples of agencies providing scholarships to students.

INDIAN HEALTH SERVICE SCHOLARSHIPS:

Native Americans and Alaskan Natives are eligible to apply for an Indian Health Service Scholarship. The purpose of the IHSS is to provide an incentive for Native people to seek education in the health fields, and ensure that Native people will ultimately serve their tribal communities, whether on reservations or in urban Indian health clinics. A service commitment is required for scholarship participation.

For more information and to obtain an application, contact:

INDIAN HEALTH SERVICE SCHOLARSHIP
TWINBROOK METRO PLAZA - GRANT MANAGEMENT BRANCH
12300 TWINBROOK PARKWAY SUITE 100
ROCKVILLE, MD 20852
301-443-6197

SCHOLARSHIPS FOR DISADVANTAGED STUDENTS:

The Scholarships for Disadvantaged Students program provides grant assistance to needy students who are determined to be educationally or economically disadvantaged. Students must supply complete parental financial data on their Free Application for Federal Student Aid to be considered.

Funding is dependent on federal appropriations, and the amount available at each college varies per year. The Financial Aid Office, or a special committee at the institution, selects the recipients. Students should contact the Financial Aid Office at the institution they plan to attend for more information.

ARMED FORCES HEALTH PROFESSIONS SCHOLARSHIP PROGRAM (HPSP) AND HEALTH SERVICES COLLEGIATE PROGRAM (HSCP)

The Department of Defense offers funding for a wide range of podiatric medical educational expenses in exchange for an active duty military service commitment. Applications are handled by local area military recruiters. Prospective applicants should meet with a Navy recruiter for more information. They may also want to speak with current Navy podiatric physicians who can provide a fuller perspective on the practice of military medicine.

NAVY HSPS AND HSCP:
[WWW.NAVY.COM/NAVY/CAREERS/HEALTHCARE/
CLINICAL-CARE/PODIATRY](http://WWW.NAVY.COM/NAVY/CAREERS/HEALTHCARE/CLINICAL-CARE/PODIATRY)

NAVY RECRUITING COMMAND
5722 INTEGRITY DR., BLDG. 784
MILLINGTON, TN 38054-5057
800-USA-NAVY

INTERNATIONAL APPLICANTS

An international student is a native of a foreign country and plans to study in the U.S. on a student visa. International applicants are eligible for admission to select U.S. colleges of podiatric medicine, if they meet the minimum admission standards. For restrictions and requirements, please see the individual college descriptions. Admission requirements for international students will be posted by each college of podiatric medicine. However, most schools and colleges of podiatric medicine require international students to complete all the application materials mandated for U.S. citizens and permanent residents.

In addition, international students may be asked to take the Test of English as a Foreign Language (TOEFL) or demonstrate English language proficiency. International students should expect to finance the entire cost of their podiatric medical education; they should also be prepared to show evidence of funding prior to being issued the appropriate travel documents.

Applicants who have completed coursework outside the U.S. (except through study abroad) should supply their official foreign transcripts to an approved foreign transcript evaluation service for a course-by-course U.S. equivalency report. They must arrange for the foreign transcript reports to be sent directly to AACPMAS from the foreign transcript evaluation agency. Contact the foreign transcript evaluation service as early as possible. The services may take several weeks to process a foreign transcript, once it is received.

INTERNATIONAL APPLICANTS (CONTINUED)

Official copies of foreign transcripts should not be sent to AACPMAS. AACPMAS only accepts the official foreign credential evaluation. Applicants should check with each designated program for further instruction for submitting documentation of foreign coursework.

International students should be mindful that obtaining a residency program in the U.S. is challenging for some graduates. Many hospitals do not wish to accept the legal responsibility of sponsoring podiatric physicians for their graduate medical education (residency) programs. Each school or college of podiatric medicine accepting international students provides them with adequate graduate placement counseling; however, the student still bears the responsibility to procure a U.S. residency. Additional resources and information can be found by visiting WWW.AACPM.ORG/RESIDENCIES

It is strongly recommended that international students begin researching graduate medical education programs as early as possible to determine which residency programs of interest will sponsor them. International students should begin the process as early as the first year of study.

Please note, students who have permanent residency status in the U.S. are not considered international students; they have the same rights, responsibilities, and options as U.S. citizens applying for admission to college of podiatric medical and residency.

Below is a list of suggested services for the translation and review of foreign transcripts; however, check with your designated programs for final approval.

WORLD EDUCATION SERVICES
BOWLING GREEN STATION
P.O. BOX 5087
NEW YORK, NY 10274-5087
212-966-6311
WWW.WES.ORG

JOSEF SILNY & ASSOCIATES, INC.
7101 SW 102 AVE.
MIAMI, FL 33173
305-273-1616
WWW.JSILNY.COM

EDUCATION CREDENTIAL EVALUATORS
PO BOX 514070
MILWAUKEE, WI 53203-3470
414-289-3400
WWW.ECE.ORG

The background is a light blue gradient with various medical icons. A magnifying glass is on the left. A syringe is in the center, with a heart shape cut out of its barrel. To the right is a clipboard with a checklist. Below the syringe is a molecular structure. The word 'MEDICAL' is written in a sans-serif font in the upper right. There are also some faint, illegible text fragments scattered throughout.

Chiropractic Medicine

Naturopathic Medicine



NAAHP Fact Sheet for Health Professions Advisors Chiropractic



General Description

Chiropractors are primary care professionals and play a vital, life-changing role. Chiropractic uses a wide variety of techniques and approaches to relieve pain, increase mobility and optimize performance through safe and effective spinal adjustments and manipulation. They play a vital and life-changing role, healing with a human touch. CareerCast.com ranked chiropractic as the 11th best career in 2013.

What are some common daily activities/experiences?

Doctors of Chiropractic work one-on-one with patients, helping them improve their overall health and find relief from headaches, back, neck and joint pain, without reliance on drugs or surgery. Chiropractors often care for entire families and develop close relationships over time, which makes chiropractic a deeply fulfilling profession. Many chiropractors are in business for themselves or working in a group practice or hospital setting, including the VA.

If you enjoy serving and caring for people chiropractic is a very rewarding profession. One can be one's own boss. Over 40% of doctors of chiropractic are self-employed individuals who own their own clinic. A practicing clinician might have hospital privileges (6.9% do according to a 2009 study), or they might work in a military practice or the VA. Almost 40% practice in a city, 24.7% in a suburb, and 20.4% in a small town.

What are 3-5 personal characteristics important for happiness and success in your profession?

- Communication skills - patient education is an important aspect of chiropractic.
- Independent, leader, self-starter – build and maintain independent practice and patient base.
- An open mind to complementary and alternative medicine.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- What is my personal philosophy or definition of health?
- Would I like to join a healing profession that makes a difference everyday helping patients improve their health and quality of life?
- Is a conservative natural approach to healthcare appealing to me and my approach to caring about future patients?
- Is the approach that the human body has the innate ability to heal itself something that resonates with me, and an approach I wish to incorporate into my health care practice?
- Chiropractic education and practice ranges widely from focused spinal health specialists to very broadly trained primary care practitioners with a focus on wellness rather than disease. Where do I fall on this spectrum, and which chiropractic programs will be a good fit for me?
- What sort of specializations are possible in a chiropractic career? Many chiropractic programs also offer dual degrees or certifications to allow for specialization in areas such as Sports Performance, Nutrition, Radiology, Acupuncture & Oriental Medicine, and more.

Preparing for Admission:

- Prerequisite coursework: Admitted students must complete a minimum of 90 semester hours of undergraduate study at an accredited US institution(s) or an equivalent foreign agency with a GPA for these 90 hours of not less than 3.0 on a 4.0 scale. However, it should be noted that some states require an earned Bachelor's degree to obtain licensure. The 90 hours must include a minimum of

NAAHP Fact Sheet for Health Professions Advisors Chiropractic

24 semester hours in life and physical science courses. Specific course requirements vary by program – be sure to check individual program websites. Most include:

- Biological Sciences with lab
- Chemistry with lab
- Physics with lab
- English Communication / Language
- Psychology
- Social Sciences or Humanities
- See http://www.chirocolleges.org/prospective_students.html for more information, or prerequisite chart here: <http://www.discoverchiropractic.org/pdf/prerequisites.pdf>
- Standardized Tests: none
- Experience/Exposure: Exposure to health care settings, especially chiropractic is strongly recommended. Many chiropractic schools can help match pre-chiropractic students with one of their practicing alumni for shadowing experience upon request.
- Letters of Recommendation: to be submitted directly to individual chiropractic colleges.
- Resources for researching schools: There are currently 22 Doctor of Chiropractic (DC) programs, 18 in the USA and 4 in Canada, New Zealand, and Korea:
 - Association of Chiropractic Colleges List of member institutions: <http://www.chirocolleges.org/members.html>
 - Discover Chiropractic Map of programs: <http://www.discoverchiropractic.org/map.html#.Vx-zyfkrIpg>

The Admissions Cycle:

- CAS(es): ChiroCAS has not been widely adopted by chiropractic colleges or widely used by students. Apply directly to chiropractic colleges.
- Application opens: Multiple start dates and some rolling admissions; research schools directly. Application cycles and deadlines vary by individual program. Several programs have rolling admissions and multiple start dates. It is recommended that students apply ~6 months before intended matriculation date.

The Admissions Process:

- Total number of first year students: Approximately 2,500 students
- Data on applicants and accepted students :
 - Schools' minority students ratios ranged from 11-40%
 - Gender ratios ranged from 50%/50% to 65%/35% male/female.
 - The rising number of minorities and the number of female students continues an increasing trend in chiropractic enrollment.
 - More than 13% held Masters, Doctorates or other advanced degrees.
- Total number of students: ~10,000 students in the United States

Learn More about the Profession

Training & Career Opportunities

- Number of years: four
- Degree attained: Doctor of Chiropractic (DC)
- Total number of graduates in most recent academic year: Approximately 2,500 students

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors

Chiropractic

Key Resources for Students

- www.chirocolleges.org/prospective_students.html
- www.discoverchiropractic.org

Key Resources for Advisors

- [NAAHP-Net Focus on Chiropractic: December 2015](#)
- [The Advisor Special Edition: Chiropractic: December 2014](#)

Social Media

- None provided

Advisory Council Professional Association Partner Information

Association of Chiropractic Colleges: www.chirocolleges.org

Mission

The Association of Chiropractic Colleges primarily represents accredited chiropractic colleges in North America and seeks to advance chiropractic education, research and service. ACC values evidence-informed, quality, patient-centered care, by expert, ethical, inclusive professionals, and the improvement of health care systems through chiropractic education and research.

Size of organization, Number of member institutions

22 member institutions/campuses

New institutional members in last two years

One new US institution opened in Florida that will go through the accreditation process over the next four years. Several new dual degree program options.

Advisory Council Contact Information

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4424 Montgomery Avenue, Suite 202
Bethesda, Maryland 20814
obryonco@aol.com
Info@ChiroColleges.org
800.284.1062

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Date updated: August 2016

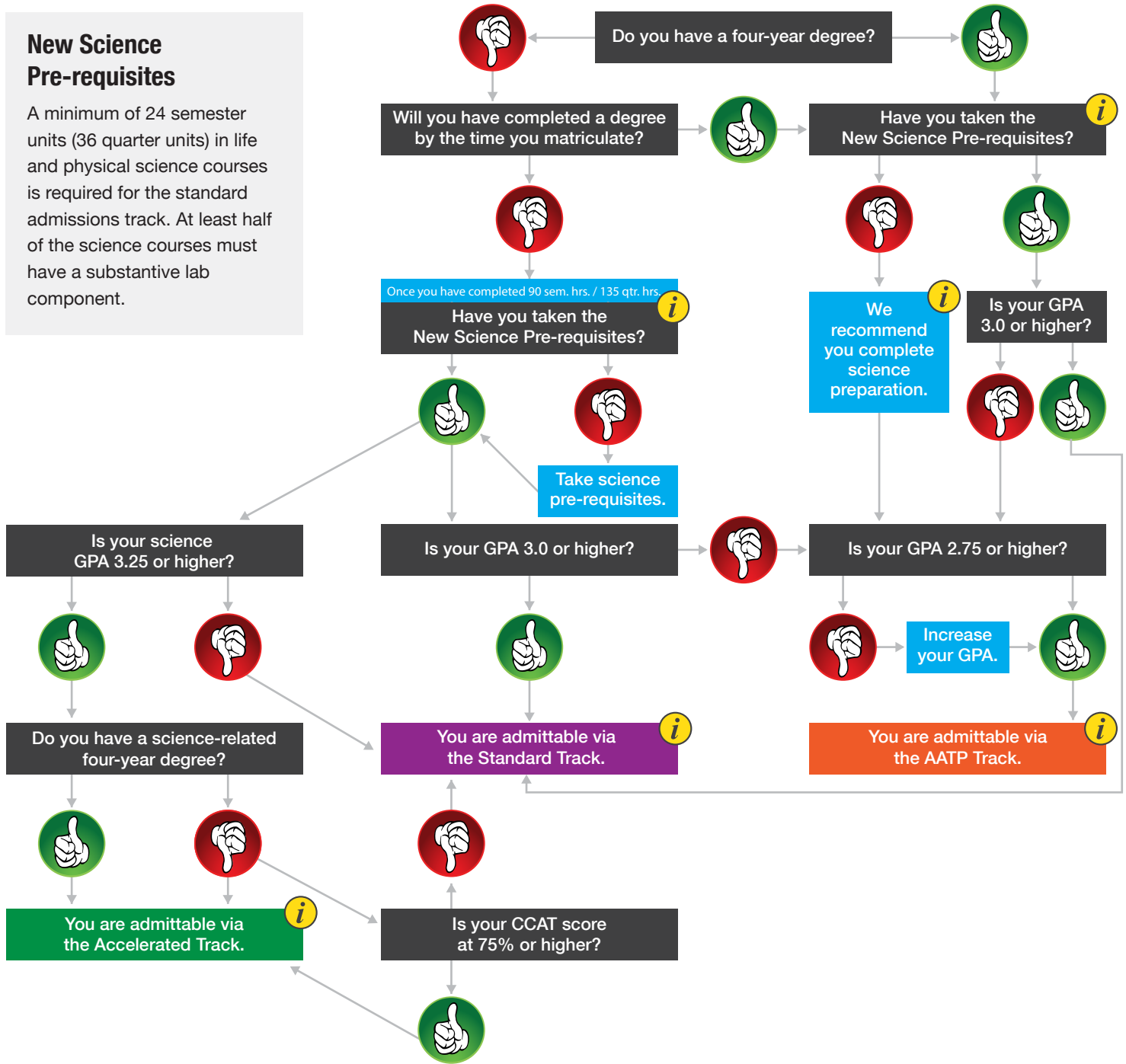
For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

Life Chiropractic College West Admissions Readiness Flow Chart

Life West is fully accredited by the CCE. This flow chart represents the CCE Policy 7 Standards for Admission.

New Science Pre-requisites

A minimum of 24 semester units (36 quarter units) in life and physical science courses is required for the standard admissions track. At least half of the science courses must have a substantive lab component.



Please speak to a Life West Admissions Representative at **1-510-780-4501** or Email **admissions@lifewest.edu**

Accelerated Track:

Students with high science GPAs and a strong science background may qualify to complete the curriculum at an accelerated 12 qtr. pace.

Standard Track:

Most students will use the standard 14 qtr. track for completion of their DC degree.

Alternative Admissions Track (AATP):

This track provides support for students who enter chiropractic school without an extensive science background. This 14 qtr. curriculum provides additional support and counseling from the Dean's Office.

Recommended Science Classes:

- | | |
|---------------------|-------------------|
| Anatomy I | Biochemistry |
| Physiology I | Human Anatomy |
| Cell Biology | Kinesiology |
| Biomechanics | Chemistry I & II |
| Nutrition | Molecular Biology |
| Exercise Physiology | Microbiology |



Requirements for Admission at Life West

Life Chiropractic College West follows the guidelines for enrollment established by the CCE (Council on Chiropractic Education). The CCE accredits all DC (Doctor of Chiropractic) programs in the US and is recognized by the US Secretary of Education.

Over-all Requirements:

All entering students must have earned a minimum of 90 transferable semester units or 135 quarter units at an institution or institutions accredited by a regional or nationally recognized agency.

Applicants who have earned a cumulative grade point average of at least 3.0 on a scale of 4.0 for the required 90-semester units will be reviewed by the admissions committee for acceptance to the standard curriculum track.

Applicants who have earned a cumulative grade point average of at least 2.75 on a scale of 4.0 for the required 90-semester units will be reviewed by the admissions committee and may be admitted on an alternate curriculum track.

Applicants with an undergraduate degree may be admitted with all majors, including those with and without a science emphasis. Applicants should contact the admissions staff to discuss their current preparedness and potential recommendations for admittance.

Applicants without an undergraduate degree should use the recommended coursework below to guide their course selection as they work to complete their classes. Applicants are strongly encouraged to work with the admissions staff to select the courses that will best prepare them for success in chiropractic school and beyond.

Sciences: A minimum of 24 semester units (36 quarter units) in life and physical science courses (at least half of these courses must have a substantive lab component).

Recommended Courses:

- Anatomy & Physiology I & II
- Cell Biology
- Biomechanics
- Nutrition
- Exercise Physiology
- Biochemistry
- Human Anatomy
- Kinesiology
- Chemistry I and II
- Molecular Biology
- Physics I and II
- Microbiology

Also accepted: (but not limited to)

- Organic Chemistry I & II
- Statistics
- Genetics
- Astronomy

General Studies: No specific requirements are made of these units, however Life Chiropractic College West strongly recommends a well-rounded course of study. All coursework must be at a 100 level or above.

Recommended Courses:

- English
- Human Development
- Information Systems
- Rhetoric
- Psychology
- Speech
- Philosophy
- Business
- Math
- Ethics
- Communication

It is strongly recommended that all applicants complete a bachelor's degree while enrolled in undergraduate coursework.



General Description

Naturopathic physicians are primary health care providers who are experts in the intersection of conventional practice and natural therapies. NDs emphasize prevention, wellness and optimal health and encourage individuals' inherent self-healing process. The practice of naturopathic medicine includes modern and traditional, scientific and empirical methods, combining the wisdom of nature with the rigors of modern science.

What are some common daily activities/experiences?

A deep doctor-patient relationship, the ability to focus on lifestyle issues, patient education and the root cause of illness constitutes the core of the ND-patient experience. Naturopathic physicians in clinical practice see fewer patients per day than MD or DO counterparts and spend anywhere from one to two hours with new patients. Additionally, naturopathic doctors work in many types of industries, including science, medical and environmental. They can follow diverse career paths, becoming, for example:

- Primary care physicians
- Educators
- Public health administrators
- Research and development scientists
- Consultants for business, insurance, public service and other organizations
- Natural products industry experts
- Media consultants and authors

ND school alumni have created private and collaborative clinics, natural products companies, community education programs and a range of treatment centers around the world, promoting integrative medicine, research and innovative approaches to health.

The majority of ND graduates go on to become clinicians.

What are 3-5 personal characteristics important for happiness and success in your profession?

- NDs are primary care physicians who focus on the health and wellness of their patient. They are doctors with an expressed desire to look beyond symptoms and treat the root cause to help their patients heal. They are doctors who focus on overall health, wellness and disease prevention; doctors who listen to and educate their patients in the steps to achieving and maintaining optimal health; and doctors who measure their success in terms of impact.
- Passion for effective natural medicine and a desire to help patients reach optimal wellness
- Intelligence with an aptitude for the sciences and a history of academic success
- Inquisitive nature, like to get to the root of the problem
- Respect for the environment and social issues, a rich background in volunteerism
- Good communicator with a pleasant "bedside manner"
- Understands and respects both the art and the science of medicine

NAAHP Fact Sheet for Health Professions Advisors Naturopathic Medicine

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- What emphasis do I put on quality of life and work/life balance?
- How important is it to have a career consistent with one's ideals/philosophy?
- How can I help others and maintain my own health?
- How important is it to focus on overall health and the root cause of illness?
- Is patient impact or status more important to me?
- Am I prepared to challenge the current healthcare paradigm and be a leader practicing in a rapidly growing field, even though it is not yet the mainstream in today's healthcare system?

Preparing for Admission:

- **Academic**
 - Academic prerequisites vary by school. In general, a common core of pre-med Health Sciences, Biology, General and Organic chemistry is required. Students are accepted from any major as long as GPA and prerequisite requirements are met.
www.aanmc.org/naturopathic-schools/academic-prerequisites/
 - Information on prerequisite courses by individual school:
<https://aanmc.org/naturopathic-schools/academic-prerequisites/>
- **Standardized test(s):** No standardized test is required for admission.
- **Experience/Exposure:** Naturopathic students are encouraged to speak with or shadow a naturopathic physician prior to application. Pertinent life experience related to medicine, naturopathic or conventional, is also considered.
- **Letters of Recommendation:** Information on LOR vary by school – see details on the NDCAS FAQ: <https://portal.ndcas.org/ndcasHelpPages/instructions-faqs/supporting-information/references/index.html>
- **Resources for researching schools:**
AANMC List of accredited programs: <https://aanmc.org/naturopathic-schools/>

The Admissions Cycle:

- CAS: <https://ndcas.liaisoncas.com/applicant-ux/#/login> Application opens: August 31
 - Application deadlines: vary by program
 - Application closes: August 15
 - Number of schools participating: Four participating programs, out of seven total member programs: Boucher Institute, University of Bridgeport, Canadian College of Naturopathic Medicine and Southwest College of Naturopathic Medicine
 - Fees: \$115 for first designation, \$40 for each additional designation
 - Fee waivers: not offered
 - Letters of rec logistics: Electronic only
 - Standardized test logistics: NDCAS allows you to enter scores for IELTS, and TOEFL ONLY. Any additional scores must be sent directly to the school
 - Transcripts: Submit to NDCAS directly
 - Instruction manual and FAQ: <https://portal.ndcas.org/ndcasHelpPages/instructions-faqs/index.html>
 - Contact information: ndcasinfo@ndcas.org
- NDCAS - [Facebook](#)
 - NDCAS - [Twitter](#)

For more information on many health professions, we recommend the NAAHP publication, *Health Professions Admission Guide: Strategies for Success*, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors

Naturopathic Medicine

**Note: all AANMC member schools do not participate in NDCAS, please contact the NUHS, NUNM and Bastyr University Admissions offices for more information about their specific admissions processes.

The Admissions Process:

- Approx dates of interviews, offers: Interview dates vary by institution, contact each school directly www.aanmc.org/naturopathic-schools/
- Advisor portal: <https://uap.webadmit.org/session/new>
- Total number of applicants in most recent cycle (through CAS and/or all member programs if known): NDCAS 1158
- Average # of applications per student:
- Total number of first year students (through CAS and all if known): Approximately 500 total
- Total number of students: Approximately 2500

Learn More about the Profession

Training & Career Opportunities

- Number of years: 4 with 5 year options offered
- Degree attained: ND
- Total number of graduates in most recent academic year: Approximately 500

Key Resources for Students

- AANP [Online Directory](#) to find an ND
- ND Student Association - [Naturopathic Medical Student Association \(NMSA\)](#)

Key Resources for Advisors

- AANMC Advisor information: <http://aanmc.org/advisors/>
- US Professional Association - [American Association of Naturopathic Physicians \(AANP\)](#)

Social Media

- AANMC on Facebook: <https://www.facebook.com/TheAANMC>
- AANMC on Twitter: <https://twitter.com/AANMC>
- AANMC on LinkedIn: <https://www.linkedin.com/company/association-of-accredited-naturopathic-medical-colleges>
- AANMC on Instagram: <https://www.instagram.com/theaanmc/>
- AANMC YouTube Channel: <https://www.youtube.com/user/AANMCEditor/videos>

Advisory Council Professional Association Partner Information

- **The Association of Accredited Naturopathic Medical Colleges, www.aanmc.org**
The Association of Accredited Naturopathic Medical Colleges (AANMC) is the nonprofit organization representing all accredited naturopathic programs in the United States and Canada and works collaboratively toward the advancement and improvement of naturopathic medical education.
- **Mission**
The mission of the AANMC is to enhance the individual and collective success of member

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors

Naturopathic Medicine

organizations in delivering high quality, innovative, and accessible naturopathic medical education and research. The AANMC advocates for:

- Outcomes-based, challenging, humane, and holistic medical education experience
 - Public awareness and support of Naturopathic Medical Education
 - Naturopathic medicine research that improves the knowledge about and the teaching / practice of naturopathic medicine
 - Provision of high quality clinical training through health services in the community
- **Vision**
Naturopathic medical education will be an important, vital, and high-quality choice for individuals seeking health professional careers as physicians.
 - **Size of organization, Number of member institutions**
Seven member institutions offering ND programs at eight campuses
 - Bastyr University - Kenmore, WA and San Diego, CA
 - Boucher Institute – Vancouver, BC, Canada
 - Canadian College of Naturopathic Medicine - Toronto, ON, Canada
 - National University of Health Sciences, -Chicago, IL
 - National University of Natural Medicine - Portland, OR
 - Southwest College of Naturopathic Medicine - Phoenix, AZ
 - University of Bridgeport - Bridgeport, CT
 - **Accreditation:** AANMC member institutions in the U.S. are accredited by one of the regional accrediting agencies approved by the U.S. Department of Education. In addition, all naturopathic medicine programs of the member schools have been accredited (or are candidates for accreditation) by the Council on Naturopathic Medical Education (CNME). The CNME is the recognized accreditation agency for naturopathic medical programs in North America
 - **New institutional members in last two years**
None

Advisory Council Contact Information

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Date updated: August 22, 2016

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.



Naturopathic Doctors in California

In order to be licensed as a naturopathic doctor in California, NDs must graduate from a school accredited by the Council of Naturopathic Medical Education that offers a graduate degree of Doctor of Naturopathy or Doctor of Naturopathic Medicine. The education requirements consist of at least 4,100 hours of training, of which not less than 2,500 hours are academic training and not less than 1,200 hours are supervised clinical training. ND license candidates must also pass a licensing exam that is administered by the North American Board of Naturopathic Examiners.

California Naturopathic Medicine Committee

The Bureau of Naturopathic Medicine was established by the Legislature as part of the Department of Consumer Affairs, and began licensing NDs in January 2005. The Bureau became the Naturopathic Medicine Committee under the Osteopathic Medical Board of California in October 2009. The Committee is designed as a resource for California consumers who choose naturopathic doctors for their healthcare.

In addition to licensing, the Committee provides license status, investigates consumer complaints, and, if needed, pursues disciplinary actions against licensed NDs. Licensure ensures that naturopathic doctors have the required educational training, have passed the

required examination(s), and have met ongoing educational requirements that help them stay current with professional practice. Please visit the Committee's Web site for additional information at www.naturopathic.ca.gov

How Are Complaints Filed?

You can obtain a complaint form by calling the Naturopathic Medicine Committee at (916) 928-4785, by using the on-line complaint form, or by downloading a complaint form on the Web site at www.naturopathic.ca.gov/consumers/complaint.

Other Resources

The California Naturopathic Doctors Association (CNDA) is a professional association of naturopathic doctors in California. Contact information:

1017 "L" Street, Suite 192
Sacramento, CA 95814
www.calnd.org

600 S. Lake Avenue, Suite 308
Pasadena, CA 91106
(626) 793-0140
www.calnd.org

The American Association of Naturopathic Physicians (AANP) is a national professional society representing licensed or licensable naturopathic physicians. Contact information:

4435 Wisconsin Ave NW, Suite 403
Washington, DC 20016
Toll free: 1-866-538-2267
www.naturopathic.org



A Consumer's Guide to



Naturopathic Medicine

What is Naturopathic Medicine?

Naturopathic medicine is a distinct and comprehensive system of primary health care that uses natural methods and substances to support and stimulate the body's self-healing process. It is distinguished by the principles on which its practice is based. These principles include:

- 1. The Healing Power of Nature:** Naturopathic doctors (NDs) trust in the body's inherent wisdom to heal itself.
- 2. Identify and Treat the Cause:** Look beyond the symptoms to effectively address the underlying cause(s) of illness.
- 3. First Do No Harm:** Seek to utilize the most natural, least invasive, and least toxic therapies first.
- 4. Doctor as Teacher:** The primary role of an ND is a teacher who educates and encourages people to take responsibility for their own health and to take steps to achieve and maintain optimal health.
- 5. Treat the Whole Person:** Total health includes physical, emotional, mental, genetic, environmental, social, spiritual, and other factors.
- 6. Prevention:** Encourage and emphasize disease prevention and focus on promoting health and wellness.



Naturopathic doctors are trained in a wide variety of complementary and alternative therapies, including:

- Herbal and Homeopathic Medicine
- Clinical Nutrition and Diet
- Vitamins, Amino Acids, Minerals, Enzymes, and Nutraceuticals
- Physical Medicine such as Massage, Bodywork, Exercise Therapy, and Hydrotherapy
- Counseling and Behavioral Therapies
- Health and Lifestyle Counseling

In addition, NDs may prescribe hormones. They may also order other prescription drugs in collaboration with a medical doctor.

Why Visit a Naturopathic Doctor?

If you are looking for any or all of the following:

- a primary health care provider
- treatment for acute or chronic conditions
- a prevention-oriented holistic approach to your health
- someone to work in an integrated way with your current medical doctor

Naturopathic medical care can benefit all Californians, from those looking for help with a



specific health condition to those seeking to improve general health and wellness. NDs treat infants to senior citizens, men and women, and those in all stages of health and disease. Naturopathic medicine can benefit people who prefer a natural approach to their health care as well as those seeking integrated solutions to their health needs.

What to Expect from a Visit to a Naturopathic Doctor

Discussing your needs with a naturopathic doctor will help to focus your care. A typical first visit with an ND lasts 60–90 minutes and includes taking a relevant health history, conducting an appropriate examination, and making recommendations for treatment. It may include gathering information such as laboratory test results, medical records, a diet diary, and other information. Follow-up visits vary in length and frequency depending on the individual nature of



the health issues being addressed, therapies being utilized, and other treatment goals.

NDs have different styles and areas of emphasis in their practices. Some may act as general practitioners—some may focus on particular areas of health such as detoxification or immune support, and others may focus on particular therapies such as homeopathy or nutrition. Selecting a naturopathic doctor who is right for you depends on the type of condition for which you are seeking help and the types of therapies that interest you.

When working with a naturopathic doctor, plan to be actively involved in your treatment. Your ND may work with you to change your diet or exercise habits, teach you ways to reduce stress, as well as use supplements, vitamins, herbs, and other medicines and treatments to help you meet your goals. Ask questions about your treatment and inform your ND about signs of improvement or stubborn symptoms. Your ND may consider further diagnostic tests, changes in your treatment plan, or referrals to other health care professionals.

Insurance Coverage for Naturopathic Care

More and more insurance companies are covering naturopathic medical care. Ask your carrier about coverage or reimbursement.

If you have insurance that does not cover naturopathic medical care, use of a Health Savings Account (HSA) or flexible spending account may cover this care. Check with your employer to determine if one of these options is available to you.

How Do I Find a Licensed Naturopathic Doctor?

You can access a list of licensed naturopathic doctors by selecting “Verify a License” on the Naturopathic Medicine Committee’s Web site at www.naturopathic.ca.gov.

Naturopathic Medical Training and Education

Naturopathic doctors attend four-year, graduate-level, accredited naturopathic medical schools. NDs are trained as primary care practitioners. Training covers a wide range of therapies as well as science and clinical courses. An important aspect of naturopathic medical training is learning about other health care professions and appropriate referral patterns.





Dentistry

Dental (D.D.S.): Academic and Career Information

NATURE OF THE WORK, EARNINGS AND OCCUPATIONAL OUTLOOK

Dentistry is a branch of the healing arts and sciences devoted to maintaining the health of the teeth, gums, and other hard and soft tissues of the oral cavity and adjacent structures. The United States Department of Labor Statistics reports that in 2014 dentists held about 151,500 active jobs in the United States. Dentistry requires diagnostic ability and manual skills. Dentists should have good visual memory, excellent judgment of space and shape, a high degree of manual dexterity, and scientific ability. Good business sense, self-discipline, and communication skills are helpful for success in private practice.

Though earnings vary according to number of years in practice, location, hours worked, and specialty, the ADA reports that in 2014 the average net income for an independent private practitioner who owned all or part of his or her practice was \$202,760, while dental specialists earned an average net income of \$303,790. The overall median pay for a dentist was \$159,770. Employment of dentists is expected to grow faster than average for all occupations through 2022. Although employment growth will provide some job opportunities, most jobs will result from the need to replace the large number of dentists expected to retire. Job prospects should be good as new dentists take over established practices or start their own (OOH, 2016).

DENTAL EDUCATION

Currently there are 66 dental schools in the United States and 10 Canadian dental schools. Most dental schools award the degree of Doctor of Dental Surgery (D.D.S.). The rest award an equivalent degree, Doctor of Dental Medicine (D.M.D.). Dental school usually lasts 4 academic years. Studies begin with classroom instruction and laboratory work in basic sciences including anatomy, microbiology, biochemistry, and physiology. Beginning courses in clinical sciences, including laboratory techniques, are also provided at this time. During the last 2 years, students treat patients, usually in dental clinics, under the supervision of licensed dentists. All 50 States and the District of Columbia require dentists to be licensed. In most states, a candidate must graduate from a dental school accredited by the American Dental Association's Commission on Dental Accreditation, and pass written and practical examinations to qualify for a license. A degree in dentistry can lead to dental careers in a variety of settings including, academic dentistry, general dentistry (private or group practice), dental specialties, dental research, public policy, international health, and government/military.

THERE ARE 10 CLINICAL FIELDS OR SPECIALITIES IN DENTISTRY:

1. **General Dentistry:** use their oral diagnostic, preventive, surgical, and rehabilitative skills to restore damaged or missing tooth structure and treat diseases of the bone and soft tissue in the mouth and adjacent structure
2. **Dental Public Health:** treats the community rather than the individual patient
3. **Endodontics:** deals with diseases of the pulp and other dental tissues
4. **Oral and Maxillofacial Pathology:** study and research of the causes, processes, and effects of diseases with oral manifestations
5. **Oral and Maxillofacial Radiology:** taking and interpretation of conventional, digital, CT, MRI, and allied imaging modalities of oral-facial structures and disease.
6. **Oral and Maxillofacial Surgery:** concerned with diseases, injuries, and defects of the neck, head, jaw, and associated structures
7. **Orthodontics and Dentofacial Orthopedics:** concerned with treating problems related to irregular dental development, missing teeth, and other abnormalities

8. **Pediatric Dentistry:** concerned with the treatment of children, adolescents and young adults whose dental development is not complete
9. **Periodontics:** concerned with diseases that affect the oral mucous membranes that surround and support the teeth
10. **Prosthodontics:** science and art of replacing missing natural teeth with fixed or removable substitutes

PRE-DENTAL PREPARATION

Aside from prerequisite courses, it is recommended that students engage in extracurricular activities such as volunteering in a dental setting and community service. Pre-dental students should be able to demonstrate their potential for independent critical thought, leadership, concern for others, and an understanding of the dental profession. Additionally, pre-dental students should work at developing and/or improving manual dexterity and eye-hand-coordination.

For the fall 2016 entering class, about 51% of applicants were accepted to dental school (12,058 applicants and 6,099 enrollees). In 2016, **the mean GPA** for accepted students to US dental schools **was a 3.55 (Total) and 3.46 (Science)** (ADEA: Official Guide to Dental Schools, 2017). The average 2016 enrollee **DAT test score was 20.3**.

Any major is appropriate for dental school preparation. While a science major requires many of the same basic prerequisites, selecting a science major is not required for admission to any dental school. Students are advised to select a major they find interesting and to work at developing a broad-based, interdisciplinary foundation of knowledge and skills from which they can build upon.

COURSE REQUIREMENTS

Prerequisite admission requirements vary from school to school. For the specific requirements at individual dental schools, refer to ADEA: Official Guide to Dental Schools available for purchase, at the American Dental Education Association (ADEA) website: <http://www.adea.org>.

CSULB Courses that fulfill admission requirements for some dental schools:

Students maintain responsibility for verifying course selection with individual Dental programs.

Prerequisite Courses	CSULB Courses
One year of General Chemistry with lab	Chemistry 111A & 111B
One year of Organic Chemistry with lab	Chemistry 220A & 220B + 320 L (Chem. & Biochem. majors) OR 220A w/ 223A & 220B w/ 223B
One year of General Biology with lab	Biology 211, 212 & 213
One year of General Physics with lab	Physics 100A & 100B OR 151 & 152
One year of English (Composition and/or Literature)	English 100 AND one of the following 101, 102, or 300
* Additional courses in biology, including anatomy	Biology 208
One or more courses in Psychology	Psychology 100
One or more courses in Biochemistry	Chemistry 441A and/or 441B or 448
One semester to one year of Math (Calculus)	Math 119A OR 122 & 123
One course in Statistics	Biology 260 OR Statistics 108

All United States dental schools require applicants to take the Dental Admission Test (DAT). The UCLA School of Dentistry offers Pre-Dental laboratory courses to strengthen perceptual skills. These courses are offered over weekend days a few times a year. Visit the following website for additional information: <https://www.dentistry.ucla.edu/learning/pre-dental-courses>.

([http://www.adea.org/GoDental/Application Prep/The Application Process/10 tips to apply.aspx](http://www.adea.org/GoDental/Application%20Prep/The%20Application%20Process/10%20tips%20to%20apply.aspx))

For more information about dental school, visit <http://www.adea.org/GoDental/> and see the HPAO website for further information on the application process, application assistance, and a list of upcoming workshops and events.

Applying to Dental School?

The ADEA Associated American Dental Schools Application Service (ADEA AADSAS®) is a centralized application service for individuals applying to dental school that uses one application form for all dental schools.

ADEA AADSAS Application

ADEA AADSAS OPENS EARLY JUNE

1

Applicants:

1. Complete the online ADEA AADSAS application and designate dental schools.
2. Send all official college transcripts to:
ADEA AADSAS
PO Box 9110
Watertown, MA 02471
3. Indicate who is writing the letters of evaluation.
4. Schedule a date to take the Dental Admission Test (DAT), administered by the American Dental Association (ADA).
ada.org/dat

2

ADEA AADSAS:

1. Verifies all transcripts and calculates the ADEA AADSAS GPA.
2. Imports DAT scores from the ADA when available.
3. Processes and submits the final application to the designated dental schools.

3

Dental schools:

1. Review completed applications.
2. Match to supplemental materials.
3. Schedule interviews.
4. Make individual admissions decisions.

ADEA AADSAS closes in early February.

Schools begin notifying applicants of provisional offers of admission beginning December 1.

Tips

FOR A SUCCESSFUL ADEA AADSAS APPLICATION

1. **Research dental schools** with the help of a health professions advisor and discuss which schools are a good fit.
2. **Complete and submit the ADEA AADSAS application early**, as the application process can take up to six weeks.
3. **Collect copies of all transcripts** and have them available for reference.
4. **Confirm individuals who will be providing letters of evaluation.**
5. **Write a strong personal statement.**
6. **Be honest** throughout the application process.

Have questions?

aadsasinfo@aadsasweb.org

617-612-2045

adea.org/aadsas

Follow us:

 @adea_AADSAS

 ADEA AADSAS

ADEA | THE VOICE OF
DENTAL EDUCATION

American Dental Education Association

Fall 2014 Profession Updates

Number of applicants, with data on the profile of the pool including gender, race/ethnicity, age, etc.

Total number of applicants by ADEA AADSAS by end of cycle for 2014 was 11,200.

ADEA AADSAS Minority Applicants by Year

** New Department of Education classifications for race/ethnicity starting with the 2010 application cycle.*

When comparing race/ethnicity figures starting with the 2010 application cycle, keep in mind that the definitions of categories have changed. Most significantly, non-resident aliens are created as a separate category and applicants now have the option of reporting two or more races.

ADEA AADSAS Ethnic Identification	2009	2010	2011	2012	2012	2013	2014
American Indian or Alaska Native	50	35	34	23	23	37	39
Asian (includes Native Hawaiian and Other Pacific Islander through 2009)	2910	3136	3244	3351	3324	3259	3172
Black/African American	654	653	688	705	696	652	590
Hispanic/Latino	631	759	808	900	896	931	886
Native Hawaiian or Other Pacific Islander	—	12	10	9	9	7	12
Two or More Races	—	252	315	361	361	371	347
Non-Resident Alien	—	185	203	184	182	169	163
Unknown	—	393	350	355	353	368	357

Definition of Race/Ethnicity:

- **American Indian or Alaska Native:** A person having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment
- **Asian:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam
- **Black or African American:** A person having origins in any of the black racial groups of Africa
- **Hispanic or Latino:** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race
- **Native Hawaiian or Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

- **White:** A Person having origins in any of the original peoples of Europe, the Middle East, or North Africa
- **Non-Resident Alien:** A person who is not a U.S. citizen or Permanent Resident

Profile of the admitted applicant including GPA, tests score, etc.

Applicants and Enrollees

Total	Applicants	11,745	Enrollees	5,892
Men	50.4%	5,925	51.5%	3,035
Women	48.4%	5,686	47.8%	2,818
Do Not Wish to Report/Unknown	1.1%	134	0.7%	39
American Indian or Alaska Native	0.3%	40	0.3%	16
Asian	24.6%	2,891	23.4%	1,376
Black or African American	4.9%	581	4.3%	256
Hispanic or Latino	8.2%	965	8.5%	500
Native Hawaiian or Pacific Islander	0.1%	12	0.1%	3
White	50.3%	5,912	53.8%	3,167
Two or More Races	2.9%	340	3.0%	176
Do Not Wish to Report/Unknown	3.2%	370	3.1%	182
Non Resident Alien	5.2%	624	3.0%	164

DAT/GPA

	Academic Average		Perceptual		Total Science	
	Range	Mean	Range	Mean	Range	Mean
Applicant	9 - 28	18.9	7 - 30	19.3	10 - 30	18.6
DAT						
Enrollee	9 - 28	20.0	12 - 30	20.0	13 - 30	19.9
DAT						
	Science GPA		Total GPA			
	Range	Mean	Range	Mean		

Applicant	1.08 -	3.26	1.51 -	3.38
GPA	4.27		4.27	
Enrollee	2.11 -	3.47	2.41 -	3.55
GPA	4.27		4.27	

Report on trends (bar graphs)

Not provided

Vinmar Solutions Pre-Dental Courses hosted at UCLA School of Dentistry

Do you know anyone who's interested in Dental School? Before or after they take the DAT, manual dexterity is an important ability to have before going to dental school.

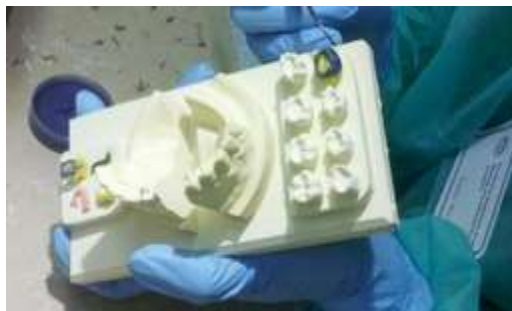
The Pre-Dental Laboratory Technique Courses has helped thousands of participants in major universities and colleges in the Northern and Southern California areas since 1979. Many participants have taken advantage of these courses throughout the United States and have traveled from other countries. The **Pre-Dental Courses are like no other.**

Each course goes into detailed instructions and illustrations that will help participants through the construction process in a step-by-step manner. It also helps each participant to get a quick start to practice manual dexterity before dental school. Manual dexterity is an important ability to have, because it is a requirement for dental school.

- Learning the basics of tooth anatomy and occlusal surfaces.
- Learning a rapid waxing technique of extensive occlusal rehabilitation of tooth structure.
- Identify in detail the character of mandibular movement and how it can affect occlusal anatomy.
- Self-examination and homework.
- Utilization of dental hand instruments and waxing techniques.
- Final practical examinations.
- **UCLA Certificate of Completion and Letter of Recommendation in 2 Days**

In this digital age tooth waxing and setting denture teeth can be very frustrating in dental school. These courses will help beginners to overcome the problem by learning hands-on techniques before the school dental experience. After participating in these courses it will greatly enhance hand instrument techniques such as: finger dexterity, Arm-hand steadiness and aiming, reaction time, which will help your technical skills.

No experience required!!



Discount Photo

Group Discount on Vinmar Solutions Pre-Dental Beginners Tooth Waxing and Denture Course Kit

for details "click Photo"



Pre-Dental Beginner Tooth Waxing and Denture Course (intro course)

Learning Objectives

- Hands-on techniques of hot dropping wax patterns and shapes
- Behavior of wax hot flow and solidification
- Learn step-by-step procedure of reconstructing a mandibular molar
- Setting upper and lower anterior denture teeth
- Denture festooning techniques

1 Day Course

2017 Dates:

May 20 **REGISTER ONLINE** | June 3 **REGISTER ONLINE** | July 15 **REGISTER ONLINE**
August 26 **REGISTER ONLINE** | September 9 **REGISTER ONLINE** | October
21 **REGISTER ONLINE**
November 4 **REGISTER ONLINE** | December 2 **REGISTER ONLINE**

Course Fee: (per date) \$145

Required Course Materials: [Beginner Course Kit: \\$165](#)



Pre-Dental Tooth Waxing

Anterior Teeth of Maxillary Arch and Posterior Teeth of Mandibular Arch

Pre-Requisite: All participants must take the “Beginner Tooth Waxing and Denture Course” before registering for this advanced course.

Learning Objectives

- Learn the basics of tooth anatomy and occlusal surfaces
- Learn a rapid waxing technique of extensive occlusal rehabilitation of anterior and posterior tooth structure
- Identify, explain, drawing exercises and self-test prior final exam
- Utilization of dental hand instruments and waxing techniques
- Correctly name parts of the tooth numbers 6 through 11 and 19 and 30

2 Day Course

2017 Dates:

February 25-26

June 17-18

REGISTER ONLINE

September 16-17

REGISTER ONLINE

December 9-10

REGISTER ONLINE

Course Fee (Saturday and Sunday): \$145

Required Course Materials: [Tooth Waxing Kit: \\$295](#)



Pre-Dental Quadrant Denture

Pre-Requisite: All participants must take the “Beginner Tooth Waxing and Denture Course” before registering for this advanced course.

Learning Objectives

- Behavior of wax hot flow and solidification to contour gingiva surface
- Learn a step-by-step procedure of the anterior and posterior teeth
- Identification of upper and lower anterior denture teeth
- The art of arranging plastic teeth
- Gingiva contouring of both the upper and lower arches
- Teeth arrangement and anatomical landmarks
- Wax-up and festooning techniques
- 3 steps of setting mandibular posterior teeth
- Written examination

2 Day Course 2017 Dates:

April 22-23 **REGISTER ONLINE** | August 5-6 **REGISTER ONLINE** | November 18-19 **REGISTER ONLINE**

Course Fee (Saturday and Sunday): \$145

Required Course Materials: [Quadrant Denture Kit: \\$295](#)



Pre-Dental - Impression and Cast Making Course

Learning Objectives

- Learn to hand mix dental materials
- Learn adequate alginate impressions
- Learn to trim dental model to proper dimensional height for study purposes
- Learn to use Techniques on (dental model trimmer and dental vibrator)

1 Day Course 2017 Date:

July 1

REGISTER ONLINE

Course Fee: (per date) \$145

Required Course Materials: [Impression Course Kit: \\$165](#)

The Vinmar Solutions Pre-Dental Golden Hands Performance Award



The Vinmar Solutions Golden Hands Performance Award honors selected individuals who have accomplished or have met certain requirements in their abilities to exercise fine motor control and possess excellent eye hand coordination.

This award also, identifies **selfless individuals** who have worked together to assist other participants to achieve their motor skills without seeking to put oneself in the spotlight or credit for his or her efforts.

The nominees will be selected by the Vinmar Solutions Course Director and selected TA's during the pre-dental courses. This will also include participants taking part in the courses. (The participants includes: Pre-Dental Students, Dental Assistants, Dental Technicians, Dental Hygienists and International Dentist.)

The nominees will be selected based on the following criteria:

Have registered for the Beginners Tooth Waxing and Denture Course to qualify as a nominee. And have passed 2 Pre-Dental Courses and have completed the Polymer Clay Model Study Block.

Have displayed outstanding performance in eye- hand coordination, good steady hands and stamina.

Shown strong interpersonal skills as a people person. Interacting with other participants and had listened to instructions.

Great communication skills with the ability to explain technical and dental terminology.

Have displayed compassion and honesty toward his or her work projects. Also showed honesty at judging other participants work projects.

Good problem solver in making corrections in areas needed on his or her work projects. Having the ability to be exact in his or her work and the ability to pay attention to details in his or her work assignments.

If you want to join the ranks of the **best** of the **best**, this is your opportunity to make your performance count. Remember, its putting forth the effort that count, which sharpens your fine motor skills in manual dexterity for dental school. Dental school admissions committees expect that applicants have worked hard to develop these skills prior to admission. And most important, these one-of-a-kind courses will assist you in developing an unselfish attitude in helping you to think about what is good for other people, not just about your own advantage, which is one of the qualities of leadership in the dental profession.

The recipient:

Will receive this award upon completing and passing the Tooth Waxing Course Part 1 or 2 and the Quadrant Denture Course Part 1 and 2, along with completing the Polymer Clay Study Block. Added to the Golden Hand Performance Award the recipient will be given a Certification of Completion from the UCLA Continuing Education Programs and a personal Letter of Recommendation from the Pre-Dental Course Director/Instructor. Vinmar Solutions, "Is putting eyes and hands to work".

Register at UCLA School of Dentistry ["Continuing Dental Education"](#)

Vinmar Solutions Pre-Dental Polymer Clay Tooth # 30 Study
For Pre-Dental Students, Dental Students, Dental Technicians, and Dental Assistants



Optometry



General Description:

Some people will tell you that doctors of optometry diagnose and treat disorders of the eye. What optometrists really do – each and every day – is make a real difference in real lives. Optometrists reveal new vistas, return lost joys, empower greater achievement, and preserve un-lived lives. That’s what optometrists do.

What are some common daily activities/experiences?

Optometrists provide full-scope primary optometric care. Their day can be quite varied and challenging. Patient interaction can include performing routine visual exams, removing a foreign body from the cornea, evaluating a child who is not performing well in school, fitting a contact lens patient, prescribing medication for glaucoma, providing follow-up care after refractive surgery, and/or fitting a patient who is legally blind with a magnifying device that enables the patient to read.

What are 3-5 personal characteristics important for happiness and success in your profession?

- Must enjoy people and be energized by interacting with them: this is a number one priority!
- Must enjoy working with others in a collaboratively way to solve problems: this happens with patients and with office staff.
- Must like repetition: being an optometrist is more like a teacher who teaches the same class over and over where the only thing that changes is the student.
- Must be accepting of the “human animal”: patient care involves handling a human being.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- Am I energized by interaction with people or is it taxing?
- Can I work collaboratively to solve problems in a solution-oriented way?
- Can I deal with repetition and explaining the same things over and over?
- Can I deal with up close and personal with a human being?

Preparing for Admission:

- **Academic:** The requirements for admission to the schools and colleges of optometry vary, but students wishing to study optometry should be certain to take at least a year of biology, chemistry, organic chemistry, general physics, and microbiology; English; college mathematics; and other social science and humanities courses. The science courses should be pre-professional level courses designed for science majors or health professional students and should offer laboratory experience. Brief survey courses in the sciences will not prepare students for optometry school. Students should be sure to consult with the health professions advisor at their school or an advisor at the school or college of optometry that they plan to attend.
 - Access a list of prerequisites here: <http://www.opted.org>
- **Standardized test(s):** All schools and colleges of optometry require the Optometry Admission Test (OAT). For further information, please go to the [OAT website](#).
- **Experience/Exposure:** Most schools consider an applicant’s exposure to optometry to be of vital importance. Each applicant should become acquainted with at least one optometrist and if possible gain some firsthand experience to see what optometrists do on a daily basis.
- **Letters of Recommendation:** Suggested sources strongly encouraged for LORs include:
 - An optometrist who can state through documented experience that the applicant knows what the profession of optometry entails.

- A professor with whom the applicant has done personal work (such as assisted on a specific project or served as a TA or reader), or with whom the applicant took a course.
- An employer or extracurricular activity advisor who can comment about the applicant's maturity, diligence, and conscientiousness.
- **Resources for researching schools:**
[List](http://opted.org/about-asco/member-schools-and-colleges/) of member schools and colleges: <http://opted.org/about-asco/member-schools-and-colleges/>.

The Admissions Cycle:

- CAS(es): [OptomCAS](http://www.optomcas.org/): <http://www.optomcas.org/>
- Application opens / application can be submitted: Late June / early July 2016
- Deadlines: Submission deadlines are between December and first of June depending on the program; deadlines are available at on the [OptomCAS website](#).
- Application closes: early June 2017
- Number of schools participating: All 23 schools and colleges of optometry participate in OptomCAS.
- Fees, fee waivers: For 2016-2017, the application fee is \$170 for one institution and \$70 for each additional institution. OptomCAS does not offer fee waivers.
- Letters of rec logistics: Applicants may designate up to four letters of recommendation. OptomCAS will only accept electronic LORs. The LOR requirements for each school and college are available on the [OptomCAS website](#).
- Standardized test logistics: Official OAT scores must be sent to optometry schools when the exam is taken. Applicants are asked to self-report OAT scores on the OptomCAS application.
- Transcripts: Official transcripts should be sent directly to OptomCAS by the program deadline.
- Instruction manual and FAQ: Included at the bottom of the OptomCAS application.
- Criminal Background Checks: Criminal backgrounds will continue as an option for schools and colleges of optometry.
- Contact information for students: 617-612-2888/optomcasinfo@optomcas.org
- CAS contact for advisors: Kate Owen, Senior Customer Solutions Manager, 617-612-2086, kowen@liaisonedu.com
- Social Media for the CAS: N/A

The Admissions Process:

- Approx dates of interviews, offers: Varies from institution to institution.
- Advisor portal: OptomCAS provides a portal for advisors to access school-specific information about their applying advisees.
 - [Click here](#) to create an OptomCAS account.
 - [Click here](#) to log in to an existing OptomCAS account.
- Total number of applicants in 2016 admissions cycle (through CAS and/or all member programs if known): 2,812
- Average # of applications per student: 4.84
- Total number of first year students (through CAS and all if known): 1,818 in 2015-16
- More information on previous application cycles can be found on the [OptomCAS website](#) under Applicant Data Reports.
- Total number of students: The total enrollment in 2015-16 for the schools and colleges of optometry was 6,900.

Learn More about the Profession

Training & Career Opportunities

- Number of years: Four
- Degree attained: Doctor of Optometry (OD)

NAAHP Fact Sheet for Health Professions Advisors

Optometry

- Total number of graduates in most recent academic year: 1,557 graduates in 2016
- Data on employment of recent graduates, if available: N/A

Key Resources for Students

- [Applicants Resource Page](#)
- [Be a Doctor of Optometry: Put Your Future in Focus Video](#)
- [The “True Stories” Booklet](#)
- [Optometry: A Career Guide](#)

Key Resources for Advisors

- Advisor Portal URL(s): To create an account: <https://uap.webadmit.org/advisor/requests/new> or to log in to an existing account: <https://uap.webadmit.org/session/new>
- [Advisor Resource Page](#)
- Data/Stats/Info Warehouse: On the [OptomCAS website](#) under Applicant Data Reports.

Social Media

- ASCO Facebook: <https://www.facebook.com/pages/Association-of-Schools-and-Colleges-of-Optometry/527509967333901>
- ASCO YouTube Channel: <https://www.youtube.com/channel/UCmws13yqQhOpSIR2qKjizQ>
- ASCO Twitter Page: <https://twitter.com/OptometricED>
- ASCO LinkedIn Page: <https://www.linkedin.com/company/3113027>
- ASCO Instagram: <http://www.instagram.com/optometriced>

Advisory Council Professional Association Partner Information

Association of Schools and Colleges of Optometry (ASCO), www.opted.org

- **Mission**

Founded in 1941, the Association of Schools and Colleges of Optometry (ASCO) is a non-profit education association representing the interests of optometric education. ASCO's membership encompasses the twenty-three schools and colleges of optometry in the United States and Puerto Rico. A number of foreign optometry schools are affiliate members.

ASCO is committed to achieving excellence in optometric education and to helping its member schools prepare well-qualified graduates for entrance into the profession of optometry.

The mission of the Association of Schools and Colleges of Optometry is to serve the public through the continued advancement and promotion of all aspects of academic optometry.

- **Size of organization, Number of member institutions:** 23 schools
- **New institutional members in last two years:** University of Pikeville – Kentucky College of Optometry and Chicago College of Optometry at Northwestern University

Advisory Council Contact Information

Paige Pence
Association of Schools and Colleges of Optometry
Director, Student and Residency Affairs
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NAAHP liaison and contact information

Nancy Blass
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Date updated: January 2017

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

Optometry

A Career Guide



ASSOCIATION *of*
SCHOOLS *and* COLLEGES
of OPTOMETRY

Acknowledgments

This career guide was written and compiled by the Association of Schools and Colleges of Optometry (ASCO). The guide was written to provide a “core document” that could represent the most current, consistent, and reliable information on optometry as a career for use by prospective students, prehealth advisors, and optometrists who want to share information about their profession with others. The material is intended for use by ASCO and its member schools and colleges in any format that will make information about optometry accessible and available to those who express interest in the profession.

Director, Student and Residency Affairs
Association of Schools and Colleges of Optometry
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Rockville, MD 20852
www.opted.org

Updated Spring 2016

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I. DEFINITION OF THE PROFESSION

“Doctors of optometry (ODs) are the independent primary health care professionals for the eye. Optometrists examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify related systemic conditions affecting the eye” (American Optometric Association [AOA]).

Today, the profession of optometry involves much more than just prescribing and fitting glasses and contact lenses. ODs are trained to evaluate any patient’s visual condition and to determine the best treatment for that condition. ODs are viewed increasingly as primary care providers for patients seeking ocular or visual care.

Conditions typically cared for by ODs are:

- » Corneal abrasions, ulcers, or infections; glaucoma; and other eye diseases that require treatment with pharmaceutical agents, management, and referral when necessary;
- » Visual skill problems such as the inability to move, align, fixate, and focus the ocular mechanism in such tasks as reading, driving, computer use, and in tasks related to hobbies and employment;
- » The inability to properly process and interpret information requiring perception, visualization, and retention such as that needed for most learning tasks;
- » Poor vision-body coordination when one interacts with the environment, as in sports, occupations, and other everyday activities requiring spatial judgments; and
- » Clarity problems such as simple nearsightedness or farsightedness or complications due to the aging process, disease, accident, or malfunction.

ODs also work to:

- » Diagnose, manage, and refer systemic diseases such as hypertension, diabetes, and others that are often first detected in the eye;
- » Provide presurgical and postsurgical care of cataracts, refractive laser treatment, retinal problems, and other conditions that require presurgical and postsurgical care; and
- » Encourage preventative measures such as monitoring infants’ and children’s visual development, evaluating job/school/hobby-related tasks, and promoting nutrition and hygiene education.

II. OUTLOOK FOR THE PROFESSION

According to the U.S. Department of Labor's Bureau of Labor Statistics, job opportunities should be very good over the next decade. With favorable working conditions, regular hours, and a minimum of emergency calls, optometric careers offer many options and great freedom in choosing a location to live and practice. Optometrists provide the majority of primary vision care administered. Even people who may not require corrective eyewear need regular care to prevent, detect, and manage eye disease.

Population Changes and the Optometry Profession

The aging of the U.S. population has had two effects on the practice of optometry. First, many practicing optometrists are approaching retirement age. As the baby-boomer generation enters retirement, many aging optometrists are looking for younger doctors who can take over their practices or offer new areas of emphasis to their practices.

Second, as the population ages, optometry services will be in increasing demand. The growing numbers of senior citizens with age-related eye diseases such as cataracts, glaucoma, diabetic retinopathy, hypertensive retinopathy, and macular degeneration will require increased services from optometrists.

Senior citizens are in a better position to consult optometrists following a change in the Medicare law in 1987, which authorized reimbursement to optometrists. Primary eye care examinations for individuals over the age of 65 performed by optometrists have increased since the Medicare law was passed.

Another milestone in optometric care was the Affordable Care Act (ACA). The Harkin Amendment that is part of the ACA made it against the law for health insurance companies to discriminate against optometrists for vision care. In addition, every insurance policy available must cover comprehensive eye exams for children up to age 18. This requirement is called the Pediatric Eye Care Essential Benefit.

Social and Legal Changes Affecting Optometry

ODs are highly valued by a population that is increasingly conscious of the benefits of good health and regular vision care. Rising personal incomes, ACA, and Medicare coverage for optometry services make regular eye care provided by optometrists even more desirable and affordable.

As society becomes more mechanized and digital, vision requirements become more exacting. The number of persons needing professional help for near-point visual tasks, including both older patients and school-children, is steadily growing. Increased demands for vision care result not only from population changes, but also from an increased understanding of how good vision relates to driving, workplace requirements, student achievement, leisure activities, adjustments to aging, and other areas crucial to a modern computer and technology-driven society.

Demand for optometry services is also expected to increase as state laws, which regulate optometric practice (similar to all medical professions), have expanded to place responsibilities for virtually all primary eye care services on optometrists. All states in the United States recognize that optometrists are trained to prescribe medications to treat eye diseases.

Most new opportunities for graduates are created by the retirement of optometrists, the establishment of new offices, the inclusion of optometrists in interdisciplinary practices, and the growth of group practices, in addition to the expanding scope of care provided by optometrists. There has also been an increase in the number of corporate optometry locations, which has created demand for optometrists.

The number of new practicing optometrists is limited by the fact that there are 23 schools and colleges of optometry in the United States and Puerto Rico, with two additional schools in Canada. Class sizes are restricted; therefore, the number of new graduates remains fairly constant. Federal data indicate employment of optometrists is projected to grow 27% through 2024. Because vision problems tend to occur more frequently later in life, an aging population will require more optometrists. As people age, they become more susceptible to conditions that impair vision such as cataracts and macular degeneration. In addition, an increasing number of insurance plans provide some vision or eye care coverage. Furthermore, the number of individuals, particularly children, who have vision or eye care insurance will increase as a result of federal health insurance reform legislation. More optometrists will be needed in order to provide services to more patients, as cited by the U.S. Department of Labor's Bureau of Labor Statistics in the Occupational Outlook Handbook, 2016-2017 edition.

Professional Satisfaction

Practicing ODs experience keen satisfaction in their profession. The fact that many optometrists choose to practice on a part-time basis well into their retirement speaks highly of the rewards of the profession.

Adding to optometrists' satisfaction is the fact that they have a great work/life balance with a great salary. Over the years, optometrists have expanded their services to include more eye-health-related procedures, which assist their patients and have enabled their practices to grow.



III. NEW FRONTIERS IN EYE CARE

New technologies have helped the profession of optometry to expand both the scope and the efficiency of practice. Optometrists and their patients are benefiting from the many advances in eye care and medical technology.

There has been a significant increase in the use of new and relatively new lens treatments, designs, and corrective materials such as contact lenses. Today, millions of people wear contact lenses.

Lasers

Lasers have been used for many years for treating eye diseases (e.g., diabetes, macular degeneration, glaucoma, and some forms of cataracts) and for help with diagnosing visual problems. In recent years, the use of lasers to correct forms of refractive errors (near-sightedness, farsightedness, or astigmatism) has been increasing. Traditionally, these conditions were correctable only with glasses, contact lenses, and invasive surgery.

ODs play a key role in helping patients determine whether they are candidates for new procedures in laser surgery. When laser surgery is appropriate for a patient, optometrists provide nearly all preoperative and postoperative care. Kentucky, Oklahoma, and Louisiana were the first three states to allow optometrists to perform certain laser surgeries.

Instrumentation

Technology is rapidly improving diagnostic instruments used by all health care practitioners. More accurate and efficient test results enable ODs to better diagnose, manage, and treat eye disorders and diseases. Technology also helps optometrists educate patients about their conditions—long a hallmark of the profession—and allows patients to participate in their care and treatment decisions.

Medication

New medications are developed each year that optometrists use to treat diseases of the human eye. This area, perhaps more than any other, reinforces the need for a well-rounded continuing education because it serves as the foundation of an OD's lifelong service in a modern health care delivery system.

IV. MODES OF PRACTICE

Optometrists practice in many different kinds of situations and with different types of employers.

Individual Private Practice

The individual private practitioner usually is a primary care optometrist with a stand-alone practice. Such practitioners may specialize in fields such as:

- » Contact lenses,
- » Pediatrics,
- » Low vision/geriatrics, and
- » Vision therapy.

An individual practice may be in a variety of settings and locations, ranging from a free-standing to a professional building.

Partnership or Group Practice

This mode of practice is very similar to an individual practice except that there are two or more optometrists in the group. Each member of the group may specialize in a different area of practice. This is an increasingly popular form of practice.

Retail/Optical Settings

In this setting, optometrists usually rent space from or are employed by a large retail outlet. However, they remain independent practitioners.

Optometric/Ophthalmologic Professional Settings

The optometrist practices in conjunction with the ophthalmologist and manages the patients in this setting.

Military/Public Health

Optometrists are commissioned officers who work in a hospital or clinical setting with other health care practitioners.

Interdisciplinary Care

The optometrist works with other health care practitioners in a hospital-based or clinic setting, such as in a Department of Veterans Affairs (VA) hospital, as part of an interdisciplinary team.

Academic/Research

The OD teaches about primary care and/or performs research in a university setting. Academics pursue additional training after optometry school and have completed a residency, or a master of science or doctoral program.

Corporate/Industrial

Optometrists are employed by large corporations to perform clinical research or to provide patient care in a clinic within the corporate setting.

Consultants

Optometrists work as consultants to the ophthalmic industry, education, sports (high school to professional), and government.

V. INCOME POTENTIAL

Optometrists enjoy the benefits of financial security, independence, and recognition in their communities. Optometry is often rated an “excellent” career choice because of its expectations for job growth, earnings potential, and the opportunity for meaningful work and good quality of life.

The average net income from the practice of optometry was \$122,667 in 2014, according to a recent AOA survey of member optometrists.



American Optometric Association

VI. OPTOMETRY AREAS OF EMPHASIS

Most ODs practice “full-scope,” primary care optometry and treat and manage all forms of visual and ocular conditions. However, a practitioner may choose to concentrate his/her practice on treating a selected population or visual condition.

Residencies are not required to develop an area of emphasis. Because the four-year optometry curriculum prepares graduates in all areas, a residency does not introduce but enhances experience in a selected area.



These areas of emphasis include:

Family Practice Optometry: The clinical and didactic curricula will be devoted to topics and practice broadly represented in general optometric care. The patient population will include an age range from pediatric to geriatrics.

Primary Eye Care: The majority of the clinical and didactic curricula will be devoted to topics and practice relevant to the program's unique patient population. This patient population may be evident in the title, e.g., Primary Eye Care-Dept. of Veteran Affairs, Primary Eye Care-Indian Health Services.

Cornea and Contact Lenses: The majority of the clinical and didactic curricula will be devoted to topics and practice prevalent in the cornea and contact lens population.

Geriatric Optometry: The majority of the clinical and didactic curricula will be devoted to topics and practice prevalent in the geriatric population.

Pediatric Optometry: The majority of the clinical and didactic curricula will be devoted to topics and practice prevalent in the pediatric population.

Vision Therapy and Rehabilitation: The majority of the clinical and didactic curricula will be devoted to topics and practice relevant to dysfunctions of eye movement, accommodative, binocular and perceptual systems, reduced visual acuity, and compromised visual fields.

Low Vision Rehabilitation: The majority of the clinical and didactic curricula will be devoted to topics and practice relevant to low vision patients.

Ocular Disease: The majority of the clinical and didactic curricula will be devoted to topics and practice relevant to the diagnosis, management, and treatment of ocular disease.

Refractive and Ocular Surgery: The majority of the clinical and didactic curricula will be devoted to topics and practice relevant to refractive and ocular surgery.

Community Health Optometry: The clinical and didactic curricula will be devoted to community-based optometric care with an emphasis on public health and cultural issues that impact care.

Brain Injury Rehabilitation: The majority of the clinical and didactic curricula will be devoted to topics and practice relevant to assessment, management, and interdisciplinary rehabilitation of patients with brain injury and neurologic disease.

VII. A TYPICAL DAY IN THE LIFE OF AN OD

Each workday is different for ODs, and the scope and mode of practice in which the doctor are engaged can make the differences even more pronounced. If he/she specializes, the day is filled with evaluating new patients and providing the treatment particular to the area of emphasis. If the doctor is a member of a group practice, he/she may be the specialist in that group for certain kinds of patients or conditions. If the doctor



is involved in a more commercial practice or as an employee, he/she may be limited by the dictates of the corporation or employer. If the doctor chooses to provide care in a nursing home or makes house calls, the patient demands and instrumentation available to him/her are different from the doctor who consults in a hospital or a grade school. The self-employed doctor or a partner in a group practice can more easily set his/her own hours, whereas the doctor employed in other settings is less able to do so.

Most ODs are "generalists" and, assuming they provide full-scope primary optometric care, their day can be quite varied and challenging. Patient interaction can include performing routine visual exams, removing a foreign body from the cornea, evaluating a child who is not performing well in school, fitting contact lenses, prescribing medication for glaucoma, providing follow-up care after refractive surgery, and/or fitting a patient who is legally blind with a magnifying device that enables the patient to read.

Typically, the doctor works with a technician who administers preliminary tests, advises patients on the use and care of contact lenses, and assists patients in selecting frames. The doctor spends time with the patient, gathering more information, testing, making a diagnosis, determining the treatment required, and discussing the treatment regimen with the patient. The doctor records all information into the patient's record, dictating letters of referral if conditions such as diabetes or hypertension are detected or letters to schools reporting on a child's visual status. An office manager or receptionist (depending on the size of the practice) may take care of completing information required by the patient's health insurance provider.

VIII. FUNCTIONAL STANDARDS FOR AN ADMISSIONS CANDIDATE TO CONSIDER

Following are the Functional Standards for Didactic and Clinical Optometric Education. The Board of Directors of ASCO developed these standards in 1998 and revised them in 2009. Although developed for several reasons, the functional standards give prospective students an accurate idea of the skills required to perform the duties of an optometrist.

To provide guidance to those considering optometry as a profession, ASCO has established functional guidelines for optometric education. The ability to meet these guidelines, along with other criteria established by individual optometric institutions, is necessary for graduation from an optometric professional degree program.

One of the missions of each school and college of optometry is to produce graduates fully qualified to provide quality comprehensive eye care services to the public. To fulfill this mission, each institution must ensure that students demonstrate satisfactory knowledge and skill in the provision of optometric care. Admission committees, therefore, consider a candidate's capacity to function effectively in the academic and clinical environments, as well as a candidate's academic qualifications and personal attributes.

The functional guidelines in optometric education require that the candidate/student possess appropriate abilities in the following areas:

1. observation;
2. communication;
3. sensory and motor coordination;
4. intellectual-conceptual, integrative and quantitative abilities; and
5. behavioral and social attributes. Each of these areas is described in this document.

In any case where a student's abilities in one of these areas are compromised, he or she must demonstrate alternative means and/or abilities to meet the functional requirements. It is expected that seeking and using such alternative means and/or abilities shall be the responsibility of the student. Upon receipt of the appropriate documentation, the school or college will be expected to provide reasonable assistance and accommodation to the student.

OBSERVATION ABILITIES

The student must be able to acquire a defined level of required knowledge as presented through lectures, laboratories, demonstrations, patient interaction and self-study. Acquiring this body of information necessitates the functional use of visual, auditory and somatic sensation enhanced by the functional use of other sensory modalities. Examples of these observational skills in which accurate information needs to be extracted in an efficient manner include:

Visual Abilities:

(as they relate to such things as visual acuity, color vision and binocularity)

- » Visualizing and reading information from papers, films, slides, video and computer displays
- » Observing optical, anatomic, physiologic and pharmacologic demonstrations and experiments
- » Discriminating microscopic images of tissue and microorganisms
- » Observing a patient and noting non-verbal signs
- » Discriminating numbers, images, and patterns associated with diagnostic tests and instruments
- » Visualizing specific ocular tissues in order to discern three-dimensional relationships, depth and color changes

Auditory Abilities:

- » Understanding verbal presentations in lecture, laboratory and patient settings
- » Recognizing and interpreting various sounds associated with laboratory experiments as well as diagnostic and therapeutic procedures

Tactile Abilities:

- » Palpating the eye and related areas to determine the integrity of the underlying structures
- » Palpating and feeling certain cardiovascular pulses

COMMUNICATION ABILITIES

The student must be able to communicate effectively, efficiently and sensitively with patients and their families, peers, staff, instructors and other members of the health care team. The student must be able to demonstrate established communication skills using traditional and alternative means. Examples of required communications skills include

- » Relating effectively and sensitively to patients, conveying compassion and empathy
- » Perceiving verbal and non-verbal communication such as sadness, worry, agitation and lack of comprehension from patients
- » Eliciting information from patients and observing changes in mood and activity
- » Communicating quickly, effectively and efficiently in oral and written English with patients and other members of the health care team
- » Reading and legibly recording observations, test results and management plans accurately
- » Completing assignments, patient records and correspondence accurately and in a timely manner

SENSORY AND MOTOR COORDINATION ABILITIES

Students must possess the sensory and motor skills necessary to perform an eye examination, including emergency care. In general, this requires sufficient exteroception sense (touch, pain, temperature, proprioceptive sense (position, pressure, movement, stereognosis, and vibratory) and fine motor function (significant coordination and manual dexterity using arms, wrists, hands and fingers). Examples of skill required include but are not limited to:

- » Instillation of ocular pharmaceutical agents
- » Insertion, removal and manipulation of contact lenses
- » Assessment of blood pressure and pulse
- » Removal of foreign objects from the cornea
- » Simultaneous manipulation of lenses, instruments and therapeutic agents and devices
- » Reasonable facility of movement
- » Injections into the eye, lids or limbs

INTELLECTUAL-CONCEPTUAL, INTEGRATIVE AND QUANTITATIVE ABILITIES

Problem solving, a most critical skill, is essential for optometric students and must be performed quickly, especially in emergency situations. In order to be an effective problem solver, the student must be able to accurately and efficiently utilize such abilities as measurement, calculation, reasoning, analysis, judgment, investigation, memory, numerical recognition and synthesis. Examples of these abilities include being able to:

- » Determine appropriate questions to be asked and clinical tests to be performed
- » Identify and analyze significant findings from history, examination, and other test data
- » Demonstrate good judgment and provide a reasonable assessment, diagnosis and management of patients
- » Retain, recall and obtain information in an efficient manner
- » Identify and communicate the limits of one's knowledge and skill

BEHAVIORAL AND SOCIAL ATTRIBUTES

The student must possess the necessary behavioral and social attributes for the study and practice of optometry. Examples of such attributes include:

- » Satisfactory emotional health required for full utilization of one's intellectual ability
- » High ethical standards and integrity
- » An empathy with patients and concern for their welfare
- » Commitment to the optometric profession and its standards
- » Effective interpersonal relationships with patients, peers and instructors
- » Professional demeanor
- » Effective functioning under varying degrees of stress and workload
- » Adaptability to changing environments and uncertainties
- » Positive acceptance of suggestions and constructive criticism

Candidates with questions or concerns about how their own conditions or disabilities might affect their ability to meet these functional guidelines are encouraged to meet with an optometry school counselor prior to submitting an application.

IX. THE OPTOMETRY CURRICULUM

Students must successfully complete a four-year accredited degree program at a school or college of optometry to earn the OD degree.

The sequence of course work varies from one program to another, but some general characteristics are shared by all. In the first and second year of the professional program, course work is concentrated in the basic health sciences (anatomy, physiology, pathology, biochemistry, pharmacology, and public health), optics, and vision science. Students begin their clinical experience in a clinical simulation laboratory, with classmates serving as patients, and then proceed to clinical training with real patients. This training includes taking case histories, performing examinations, learning diagnostic techniques, and discussing treatment services.

In the third year, students spend part of their time in the classroom and part of their time in the clinic examining patients.

Fourth-year students continue their clinical training, which may include off-campus clinical externship rotations. Sites for rotation are available in the United States and abroad. Clinic settings include military facilities, VA hospitals, public health service hospitals, and various specialty and private practices. The lengths of the external rotations vary from eight to 16 weeks.

After successfully completing the fourth year, students graduate with an OD degree. To ensure a better understanding of the different educational programs, contact the specific schools or colleges of interest for curricular details.



Students graduating from schools and colleges of optometry have access to numerous resources that provide optometry practice (placement) opportunities. Students may obtain information from individual schools and colleges of optometry, state optometry associations, and the Optometry Career Center, which is housed at the AOA office in St. Louis, Mo., (www.aoa.org).

X. BECOMING LICENSED TO PRACTICE OPTOMETRY

Optometrists need to be licensed by the board of optometry in each state where they wish to practice optometry. Licensing assures that optometrists have met established standards of knowledge and are able to provide patient care. All states either accept or require passage of Parts I and II of the National Board examinations offered by the National Board of Examiners in Optometry (NBEO).

Part I (Applied Basic Science) tests epidemiology, patient's history, presenting symptoms and signs, clinical testing, diagnosis and pathophysiology knowledge obtained from the first two years of optometric study. Part II (Patient Assessment and Management) tests knowledge of clinical science through patient simulations.

Each state has its own set of regulations governing the practice of optometry, and many states also require an optometrist to take an examination that tests the applicant's knowledge of the laws of that state.

Student candidates in the final year of graduation at an accredited institution are eligible to take the Part III examination. While most student candidates will be taking this examination before they officially graduate, an individual candidate's official score report from the Part III examination will not be released until the National Board receives notification from the candidate's institution that the candidate has graduated and after the final graduation exercises of all the institutions accredited by the Accreditation Council on Optometric Education in the summer.

Periodic renewal of a license to practice optometry is required, depending on the state. Requirements for re-licensure can be fulfilled through continuing education or other modes.

Postgraduate Programs

Residencies

Residencies in the profession of optometry are optional and not required either for licensure or for the establishment of a specialty practice. The four-year OD degree encompasses all areas in which optometrists are licensed to practice. After a student receives the OD degree, residencies are typically one year in duration and the resident receives a salary during this course of clinical training. Most often, residencies are located within hospitals, VA facilities, outpatient clinics, or the clinical facilities of the various colleges and schools of optometry. Residencies vary within areas of emphasis and typically are identified by specific areas in the profession or at a location in which the area is emphasized. (See [VI. Optometry Areas of Emphasis](#))



Graduate Degree Programs

Graduate programs are not required to be licensed to practice optometry. In fact, these programs usually are research-oriented and are for the individual interested in delving further into the “whys” and “hows” of the visual system.

A master’s degree can be sought by someone who has an OD degree or who is simultaneously working on the OD degree. This individual usually plans to practice optometry but also wishes to be grounded in the basics of research to do some clinical research within his or her practice.

A PhD degree is most often sought by someone intending to go into full-time research and/or teaching. For those possessing a PhD, opportunities exist not only to teach and do research at a college or university but to engage in research within the corporate and government sectors. Individuals can enter these programs with or without an OD degree. Some choose to work on both the OD and the PhD at the same time, taking approximately six to seven years to complete both degrees.

Graduate degree programs at schools and colleges of optometry are identified by different names, but all emphasize and explore some aspect of vision and the visual and ocular system.

XI. ADMISSION REQUIREMENTS

Because each optometry school may have slightly different admissions criteria, it is strongly recommended that applicants contact all the schools and colleges to which they are interested in applying. Each school can provide information on specific application deadlines, additional policies and procedures, class size, grade point average (GPA), Optometry Admissions Test (OAT) averages, international requirements, and tuition and fees considerations. A complete listing of the schools and colleges of optometry is provided by ASCO at www.opted.org.

No valid ranking of optometry schools exists. The best advice to a candidate is to obtain information from the individual schools, talk to recent graduates, visit selected schools, and ask pointed questions of faculty and students.

Candidates should be most concerned with the academic rigor of a program, the clinical experience offered, and the availability of faculty and support services. Of course, the cost of the program, availability of financial aid, and the location and environment of the college can be contributing factors in deciding which program is best suited to the candidate.

In general, colleges of optometry admit students who have demonstrated strong academic commitment and who exhibit the potential to excel in deductive reasoning, interpersonal communication, and empathy. Optometry schools are looking for well-rounded candidates who have achieved not only in the classroom but also in other areas. Leadership ability, a disposition to serve others, and a work ethic characterized by dedication and persistence are just a few of the qualities that impress most admission committees.



OptomCAS

Optometry's centralized application service (OptomCAS) launched in July 2009. OptomCAS allows optometry school applicants to use a single web-based application and one set of materials to apply to multiple schools and colleges of optometry. Applicants who apply through OptomCAS submit a completed web-based application comprised of biographical data, colleges and universities attended, academic course history, letters of recommendation, work experience, extracurricular activities, honors, and a personal essay. It is the applicant's responsibility to read and follow specific instructions for OptomCAS and the schools and colleges of optometry. More information can be found on the OptomCAS website at www.optomcas.org.

A student's academic evaluation is based on overall GPA, science GPA, college attended, degree progress, and course load difficulty. A bachelor's degree is not required by some optometry schools but is strongly preferred. Most students major in the natural sciences in college (e.g., biology, chemistry) because the prerequisites for optometry school are science intensive. However, prospective students can major in any degree discipline as long as they complete all of the prerequisite courses for optometry.

Listed below are the common prerequisite courses for most optometry schools:

- » General biology with labs,
- » General chemistry with labs,
- » Organic chemistry/biochemistry with labs,
- » General physics with labs,
- » Microbiology with labs,
- » Calculus,
- » Psychology,
- » Statistics,
- » English,
- » Social science, and
- » Other humanities.

Most schools consider an applicant's exposure to optometry to be of vital importance. Each applicant should become acquainted with at least one optometrist and if possible gain some firsthand experience to see what optometrists do on a daily basis. Most schools require personal interviews for admission, and experience/exposure to the field is often a topic for discussion.

Optometry Admission Test (OAT)

The OAT is sponsored by ASCO for applicants seeking admission to an optometry program. The 23 schools and colleges of optometry in the United States and Puerto Rico and the University of Waterloo, Canada, require applicants to take the OAT.

The OAT is a standardized examination designed to measure general academic ability and comprehension of scientific information. It consists of four subtests: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry), Reading Comprehension, Physics, and Quantitative Reasoning. The OAT is scored on a 200-to 400-point scale in increments of 10. The national average for the test is generally between 300 and 310.

At least one year of college education, which should include courses in biology, general chemistry, organic chemistry, and physics, is required prior to taking the OAT. Most students, however, elect to complete two or more years of college prior to taking the exam.

The OAT exam is computerized, and examinees are allowed to take the OAT an unlimited number of times, but must wait at least 90 days between testing dates. Applicants who have three or more attempts must apply for permission to test again, and from that point forward may retest only once per twelve-month period. Scores from the four most recent attempts and the total number of attempts will be reported.

There is a fee to take the exam. You can register to take the OAT test online by going to the ASCO website at www.opted.org and clicking on **Optometry Admission Test**.



XII. FINANCING AN OPTOMETRIC EDUCATION

Students who are considering a career as an optometrist may be concerned that they do not have sufficient personal resources to cover all of the educational costs. The cost of attendance generally includes tuition, fees, books, equipment and supplies, and living expenses such as rent, groceries, insurance, and transportation. The majority of students finance their education by a combination of personal and family contributions, grants and scholarships, low- and high-interest loans, and work-study opportunities.

As the overall costs of optometric education continue to increase, it is important that prospective optometry students begin to investigate potential financial aid sources as early as possible. Because outside employment during optometry school is a limited option for the majority of students, and university sources of funds are also often limited, accepted applicants should contact their school's financial aid office early to explore their options and understand the school's financial aid policies and procedures.

Sources of Financial Aid

Accepted applicants should be aware of loans, scholarships, grants, and work-study, which provide the majority of aid to optometry students.

Loans, which are the primary source of financial aid for optometry students, must be repaid after graduation. Scholarships and grants, which are merit-based or need-based, do not require the recipient to repay the award. Work-study gives students the opportunity to work part-time. In addition, there are state contract programs, which pay a portion of a student's tuition, and U.S. Armed Forces' scholarship programs, which require a service commitment following graduation.

The following list presents an overview of the most commonly used federal sources of assistance. Applicants are cautioned that requirements for the various loan programs may change or programs may be eliminated based on actions of the government.



Loan Programs

- » Federal Perkins loan,
- » Federal Direct Loan Unsubsidized,
- » U.S. Department of Health & Human Services (DHHS) Loans for Disadvantaged Students (LDS),
- » DHHS Health Professions Student Loan (HPSL),
- » Federal Graduate PLUS loans,
- » Private alternative loans, and
- » Institutional loan programs.

Scholarship Programs

- » DHHS Scholarships for Disadvantaged Students (SDS),
- » State contracts,
- » Military Health Professions Scholarship, and
- » Institutional scholarship programs.

Applying for Financial Aid

The federal government and the optometry schools sponsor the majority of financial aid money available to optometry students. The applicant should begin by contacting the optometry schools he/she would like to attend. They will provide the applicant with information on the programs they offer as well as forms and deadline dates. The following list identifies the forms and information generally required.

1. **Free Application for Federal Student Aid (FAFSA)**

This is the most important form because the information from it is used to calculate the applicant's expected family contribution and to determine eligibility for federal sources of financial aid. The FAFSA asks for information about the applicant, the applicant's spouse, and the applicant's parents. Although an applicant may be financially independent from his/her parents, parents may still need to fill out sections of the FAFSA because certain financial aid programs require that this information be considered. This form is submitted online at www.fafsa.ed.gov. There is no processing fee for the FAFSA.

2. **Institutional Application**

In addition to the FAFSA, optometry schools may require an institutional form, which is returned directly to the school. Schools do not charge processing fees for their financial aid forms.

3. **Tax Returns**

Students can use the IRS Data Retrieval Tool on the FAFSA to upload income tax data. Parental tax form copies may be requested for DHHS programs.

4. **Certifications**

Students receiving funds, especially from federal sources, must attest to certain eligibility requirements. For example, the student will need to vouch that funds were used only for educational purposes, that the student is not in default on a loan or does not owe a refund on a grant, and that the student is in compliance with Selective Service registration requirements.

Managing Educational Indebtedness

The majority of optometry students borrow to pay for the cost of their education. Borrowing means the student has the benefit of using someone else's money now in exchange for paying it back with interest at a later date. Students are legally obligated to repay their loans. Defaulting on a student loan has financial and legal consequences that can have negative personal and professional effects. The vast majority of optometry graduates repay their loans either on time or early. The financial aid office at a specific college can provide information on management of a student's debt.

Resources:

American Optometric Association, <http://www.aoa.org/> April 2015.

American Optometric Association. *2014 Survey of Optometric Practice*. St. Louis, MO.

U.S. Department of Labor, Bureau of Labor Statistics. *Occupational Outlook Handbook, Edition 2016-2017*. Washington, DC.





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Association of Schools and Colleges of Optometry

Profile of Applicants to OD Degree Programs for Fall 2014 Entering Class

School	First-Year Tuition Plus Fees*	Total # OptomCAS Applicants	# OptomCAS Applicants who Completed Supp App/Pd. Supp Fee	# Applied Residents/Non-Res/Total	# Admitted Residents/Non-Res/Total	#Male/#Female Applicants	Avg GPA All Applicants/ Admitted Applicants	Last Test Date Accepted	AA Avg OAT All Applicants	AA Avg OAT Admitted Applicants	TS Avg OAT All Applicants	TS Avg OAT Admitted Applicants
ALABAMA University of Alabama at Birmingham, School of Optometry	\$26,083 In-State, \$38,560** Non Res merit scholarship, \$54,460 Non-Res	366	291	26/265/291	16/87/103	88/203	3.35/3.61	April 1	305	323	296	317
ARIZONA Midwestern Univ., AZ College of Optometry	\$40,980	669	669	NA/NA/669	NA/NA/143	217/452	3.19/3.39	April 1	310	323	304	319
CALIFORNIA Southern Calif. College of Optometry at Marshall B. Ketchum University	\$36,065	631	581	280/301/581	121/48/169	151/430	3.28/3.48	March 1	317	333	313	332
CALIFORNIA Univ. of Calif., Berkeley-School of Optometry	\$32,279 Res/\$44,525 Non-Res***	256	224	168/88/256	68/14/82	55/201	3.20/3.40****	December 1	330	348	323	349
CALIFORNIA Western University of Health Sciences, College of Optometry	\$35,060	837	565	293/544/837	120/68/188	226/611	3.20/3.32	May 1	311	324	305	321
FLORIDA Nova Southeastern Univ., College of Optometry	\$28,210 In-State/\$31,800 Out-of-State	1,006	718	136/582/718	53/133/186	214/504	3.62/3.42	April 1	300	324	294	321
ILLINOIS Illinois College of Optometry	\$36,464	1177	682	94/1083/1177	57/321/378	346/831	3.29/3.43	February 15	314	324	308	321
INDIANA Indiana University, School of Optometry	\$25,040 Res \$37,576 Non-Res	553	344	57/287/344	41/106/147	101/243	3.40/3.58	Feb 28	317	327	310	323
MASSACHUSETTS MCPHS University, School of Optometry	\$41,902	655	Not Required	41/614/655	24/140/164	189/466	NA/3.18	May 1	NA	296	NA	287
MASSACHUSETTS New England College of Optometry	\$39,512	840	776	42/798/840	18/315/333	224/616	3.28/3.39	March 31	316	330	311	327
MICHIGAN Michigan College of Optometry at Ferris State University	\$25,461 Res/\$38,212 Non-Res	292	292	88/204/292	43/11/54	192/100	3.25/3.59	February 15	304	322	295	315

*These are the tuition and fees figures that are reported directly to ASCO, but are subject to change. Applicants are strongly encouraged to speak to each institution they are applying to about available scholarship and financial aid opportunities. Mandatory billable fees do not include books, supplies or instruments.

**Most UAB non-resident students qualify for a merit scholarship decreasing non-resident tuition significantly.

***Out-of-state students are eligible for in-state residency following one full year of residency in Calif. (for UC Berkeley), New York (for SUNY Optometry), and in Ohio (for OSU).

****Biology/Chem/Physics GPA as calculated by OptomCAS

NA= not available For OAT average scores, AA= Academic Average and TS = Total Science

Association of Schools and Colleges of Optometry

Profile of Applicants to OD Degree Programs for Fall 2014 Entering Class

School	First-Year Tuition Plus Fees*	Total # OptomCAS Applicants	# OptomCAS Applicants who Completed Supp App/Pd. Supp Fee	# Applied Residents/Non-Res/Total	# Admitted Residents/Non-Res/Total	#Male/#Female Applicants	Avg GPA All Applicants/ Admitted Applicants	Last Test Date Accepted	AA Avg OAT All Applicants	AA Avg OAT Admitted Applicants	TS Avg OAT All Applicants	TS Avg OAT Admitted Applicants
MISSOURI Univ. of Missouri at St. Louis, Coll. of Optometry	\$22,013 Res \$37,779 Non-Res	403	329	40/363/403	23/83/106	137/266	3.33/3.52	February 1	291	322	284	315
NEW YORK State Univ. of New York, State Coll. of Optometry	\$ 24,590 In-State \$44,250*** Out-of-State	614	487	127/487/614	58/126/184	168/446	3.51/3.54	February 28	320	345	316	349
OKLAHOMA Northeastern State University, Oklahoma College of Optometry	\$16,626 Res \$31,731 Non-Res	277	198	41/236/277	23/22/45	100/177	3.36/3.54	February 1	306	314	295	302
OHIO The Ohio State Univ., College of Optometry	\$24,408/\$53,463***	582	328	73/509/582	47/58/105	191/391	3.31/3.56	March 31	313	328	307	325
OREGON Pacific University, College of Optometry	\$35,826	576	405	30/375/405	16/149/165	150/255	3.32/3.51	February 1	320	330	310	330
PENNSYLVANIA Pennsylvania College of Opt. at Salus University	\$37,195	1032	NA	85/947/1032	54/331/385	307/725	3.22/3.40	June 1	300	310	290	310
PUERTO RICO Inter American University, School of Optometry	\$26,831	335	285	80/255/335	NA	88/247	2.90/3.87	May 1	305	300	303	287
TENNESSEE Southern College of Optometry	\$19,925/\$31,425	787	737	46/741/787	27/214/241	279/508	3.32/3.53	March 1	312	330	304	324
TEXAS Univ. of the Incarnate Word, Rosenberg School of Optometry	\$34,420	674	644	194/480/674	81/79/160	198/476	3.18/3.43	May 31	298	317	289	312
TEXAS University of Houston, College of Optometry	\$23,600 Res/\$42,100 Non-Res	618	464	170/448/618	84/52/136	200/418	3.59/3.52	March 31	314	335	308	333

*These are the tuition and fees figures that are reported directly to ASCO, but are subject to change. Applicants are strongly encouraged to speak to each institution they are applying to about available scholarship and financial aid opportunities. Mandatory billable fees do not include books, supplies or instruments.

***Out-of-state students are eligible for in-state residency following one full year of residency in Calif. (for UC Berkeley), New York (for SUNY Optometry), and in Ohio (for OSU).

NA= Not Available

For OAT average scores, AA= Academic Average and TS = Total Science

Association of Schools and Colleges of Optometry

Profile of Applicants to OD Degree Programs for Fall 2014 Entering Class

School	Bachelor's Degree Required?	% Applicants with Bachelor's Degree	% Applicants Admitted w/Bachelor's Degree	# Applicants In-State	# Applicants Out-of-State (Domestic)	# Applicants from Foreign Country	# States Represented
ALABAMA University of Alabama at Birmingham, School of Optometry	Strongly Preferred	N/A	95.0%	26	249	16	40
ARIZONA Midwestern Univ., AZ College of Optometry	Yes	92% (8% Not Reported)	95% (5% Not Reported)	31	579	59	47
CALIFORNIA Southern Calif. College of Optometry at Marshall B. Ketchum University	Yes	100.0%	100.0%	280	246	55	41
CALIFORNIA Univ. of Calif., Berkeley-School of Optometry	Yes	NA	100.0%	168	77	11	27
CALIFORNIA Western University of Health Sciences, College of Optometry	No	69.0%	84.0%	293	459	85	44
FLORIDA Nova Southeastern Univ., College of Optometry	No	96.0%	94.0%	136	509	73	47
ILLINOIS Illinois College of Optometry	Preferred	98.0%	97.0%	94	924	159	46
INDIANA Indiana University, School of Optometry	No	NA	97.0%	57	NA	NA	NA
MASSACHUSETTS MCPHS University, School of Optometry	No	NA	91.0%	41	559	55	42
MASSACHUSETTS New England College of Optometry	No	94.0%	94.0%	42	638	160	41
MICHIGAN Michigan College of Optometry at Ferris State University	Preferred	94.8%	85.2%	88	173	31	34

*These are the tuition and fees figures that are reported directly to ASCO, but are subject to change. Applicants are strongly encouraged to speak to each institution they are applying to about available scholarship and financial aid opportunities. Mandatory billable fees do not include books, supplies or instruments.

Association of Schools and Colleges of Optometry

Profile of Applicants to OD Degree Programs for Fall 2014 Entering Class

School	Bachelor's Degree Required?	% Applicants with Bachelor's Degree	% Applicants Admitted w/Bachelor's Degree	# Applicants In-State	# Applicants Out-of-State (Domestic)	# Applicants from Foreign Country	# States Represented
MISSOURI Univ. of Missouri at St. Louis, Coll. of Optometry	Recommended	90.1%	92.5%	40	345	18	43
NEW YORK State Univ. of New York, State Coll. of Optometry	No	NA	97.0%	127	406	81	34
OKLAHOMA Northeastern State University, Oklahoma College of Optometry	Preferred	97.0%	96.0%	41	221	15	41
OHIO The Ohio State Univ., College of Optometry	No	91.2%	92.4%	73	468	41	47
OREGON Pacific University, College of Optometry	No	97.0%	95.0%	30	308	67	46
PENNSYLVANIA Pennsylvania College of Opt. at Salus University	No-Traditional, Yes-Scholars	97.0%	98.0%	85	826	121	47
PUERTO RICO Inter American University, School of Optometry	No	95.0%	93.0%	NA	NA	NA	22
TENNESSEE Southern College of Optometry	Strongly Preferred	98.0%	99.0%	46	698	43	46
TEXAS Univ. of the Incarnate Word, Rosenberg School of Optometry	No, Preferred	93.8%	100.0%	194	446	34	46
TEXAS University of Houston, College of Optometry	Yes	NA	100.0%	170	414	34	44

*These are the tuition and fees figures that are reported directly to ASCO, but are subject to change. Applicants are strongly encouraged to speak to each institution they are applying to about available scholarship and financial aid opportunities. Mandatory billable fees do not include books, supplies or instruments.

NA= Not Available

For OAT average scores, AA= Academic Average and TS = Total Science



Pharmacy



General Description:

Pharmacists are essential healthcare professionals, who enhance patient care and promote wellness. When pharmacists are involved in patient care, outcomes improve and costs decline. Current pharmacy graduates receive a minimum of six years of rigorous professional education, leading to the Doctor of Pharmacy degree. Pharmacy is a diverse and rewarding career, with opportunities for patient care, scientific research and innovation. In short, pharmacists help people live healthier, better lives.

What are some common daily activities/experiences?

While responsibilities vary among the different areas of pharmacy practice, the bottom line is that pharmacists help patients get well. Pharmacist responsibilities include a range of care for patients, from dispensing medications to monitoring patient health and progress to maximize their response to the medication. Pharmacists also educate consumers and patients on the use of prescriptions and over-the-counter medications, and advise physicians, nurses, and other health care professionals on drug decisions. Pharmacists also provide expertise about the composition of drugs, including their chemical, biological, and physical properties and their manufacture and use. Pharmacists ensure drug purity and strength and make sure that drugs do not interact in a harmful way. They are the drug experts ultimately concerned about their patients' health and wellness.

Pharmacists are increasingly becoming involved in patient care. Pharmacists are increasingly stepping in to fill the void of primary health care professionals, especially in integrated health care systems, physicians are now identifying patient goals and communicating them to pharmacists, who then develop the appropriate treatment plans. Pharmacists working for national chains provide immunizations, conduct screenings for a variety of health conditions, counsel patients about the growing number of new medications, and provide basic medical advice.

What are 3-5 personal characteristics important for happiness and success in your profession?

- Commitment to care
- Critical thinking
- Problem-solving, creativity
- Ethical reasoning, integrity
- Collaborator
- Interpersonal skills
- Communication skills
- Self-awareness
- Team player

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- What makes you interested in pharmacy? (advisors can correct misconceptions like pharmacists don't touch people, never deal with blood, etc.)
- How comfortable are you with change? How well can you adapt to change, based on the changing roles of Healthcare Professionals over time?
- Are you comfortable working in a team environment?
- What attributes (other than a strong math/science background) do you have that you can bring to the pharmacy profession that could help to advance healthcare?

NAAHP Fact Sheet for Health Professions Advisors Pharmacy

Preparing for Admission:

- **Academic:**
 - The undergraduate pre-requisites vary significantly from one institution to the next. Due to the variations in admission requirements and procedures among the colleges and schools of pharmacy, it is advisable to research different pharmacy programs. Visit the pharmacy school web sites for course requirements. School specific information is also available on the PharmCAS site and in the AACP annual publication, "Pharmacy School Admission Requirements" (PSAR).
 - Common/core
 - General Chemistry I & II, Organic Chemistry I & II
 - General Biology I & II, Anatomy and Physiology, Microbiology
 - Physics
 - Calculus
 - English I & II
 - Public Speaking
 - Additional (that are generally subject to individual schools, but frequent enough)
 - Psychology
 - Behavioral statistics
 - For specifics by program, see <http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Pages/default.aspx>
- **Standardized Test(s):**
 - The Pharmacy College Admission Test (PCAT) is constructed specifically for pharmacy colleges. It measures general academic ability and scientific knowledge necessary for the commencement of pharmaceutical education. www.pcatweb.info
- **Experience/Exposure:**
 - Pharmacy colleges encourage or require applicants to have volunteer or paid experience working with patients in a pharmacy or health-related setting (hospital, nursing home, etc.). Ongoing work or volunteer experience in a pharmacy setting may be an important factor in the admissions process. If you are unable to gain work or volunteer experience directly related to pharmacy, contact your selected pharmacy school admission offices to determine what other experiences they might accept that will adequately demonstrate your knowledge of the profession.
- **Letters of Recommendation:**
 - Many pharmacy degree programs require 1-4 letters. Some may require you to submit letters from a pharmacist, professor or academic advisor. If letters are required, select individuals who know you well and can speak to your maturity, dependability, dedication, compassion, communication-skills, leadership and any hands-on experience in the field. Your selected pharmacy schools may require your evaluators to use a school-specific evaluation form in lieu or in addition to the letter from the evaluator. Pharmacy schools generally require evaluators to submit and sign letters on the evaluator's official letterhead. Review the admission requirements of each pharmacy school for instructions.
- **Resources for researching schools:**
 - PharmD School Information Pages: <http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Pages/PharmDSchoolInformation.aspx>

The Admissions Cycle:

- CAS(es): Pharmacy College Application Service (**PharmCAS**), www.pharmcas.org
 - Application opens: July

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Pharmacy

- Application deadlines: ranges by program from November through March
- Application system closes: PharmCAS stops accepting materials in April
- Number of schools participating: 126 of the 138 pharmacy programs
- Fees: \$150 for the first designation, \$55 for each additional designation
- Fee waivers: 532 Fee waivers to those with financial need with waiver deadline of September 4. Fee waiver expires in 45 business days if it is not applied to the application
- Letters of rec logistics: Send up to four references to PharmCAS which will disseminate to colleges. Letters must be sent directly to PharmCAS by evaluator, either electronically or hard copy, or to the program, if required.
- Standardized test logistics: Send PCAT, TOEFL, & TSE scores to PharmCAS, if required. (PCAT not required by all pharmacy schools).
- Transcripts: Send official transcripts to PharmCAS. Policies for Int'l transcripts vary.
- Background checks and drug screening may be required of accepted applicants.
- Instruction manual and FAQ: <https://portal.pharmcas.org/pharmcasHelpPages/>
- Contact information: 617-612-2050, TTY: 617-612-2060, info@pharmcas.org
- PharmCAS Facebook: www.facebook.com/PharmCAS
- PharmCAS Twitter: www.twitter.com/PharmCAS

The Admissions Process:

- Approximate dates of interviews, offers: October - April
 - Advisor portal: <https://portal.pharmcas.org/advisors16/index.cgi>
- Total number of applicants in most recent cycle: 16,454 in PharmCAS
- Average # of applications per student: 4.3
- Total number of first year students (through CAS and all if known): Estimated number for Fall 2015 12,700 in CAS and 15,790 for all
- Profile of 2015 entering class
 - GPAs
 - Science 3.21
 - Non-Science 3.56
 - Math 3.28
 - Cumulative 3.34
 - 53rd percentile = Composite PCAT
 - 60.5% = Female / 38.5% = Male / 1% declined to state
 - 15.4% = Underrepresented Minorities
 - 89.2% = U.S. Citizens
- Total number of students: 63,400 students enrolled in professional programs (PharmD) and 4,400 students pursuing graduate study

Learn More about the Profession

Training & Career Opportunities:

- Number of years: four year doctoral program
- Degree attained: Doctor of Pharmacy (Pharm D)
- Total number of graduates in most recent academic year: In 2014-15, 13,994 first professional degrees in pharmacy were awarded: 61.6 percent to females and 39.4 percent to males.
- Data on employment of recent graduates, if available: Graduating student surveys available on the www.aacp.org website.

Key Resources for Students

- Pharmacy Careers: www.aacp.org/pharmacycareers
- Pharmacy is Right for Me: www.pharmacyforme.org/

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Pharmacy

Key Resources for Advisors

- Pharmacy School Admissions Requirements:
<http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Pages/default.aspx>
- Tuition and application trends:
<http://www.aacp.org/resources/research/institutionalresearch/Pages/TrendData.aspx>

Social Media

- Pharmacy is Right for Me Twitter: <https://twitter.com/Pharm4Me>
- Pharmacy is Right for Me on Facebook: <https://www.facebook.com/Pharm4Me>
- Pharmacy is Right for Me on Instagram : @pharm4me
- PharmCAS on Facebook: <https://www.facebook.com/PharmCAS>
- PharmCAS on Twitter: <https://twitter.com/PharmCAS>
- AACP on Facebook: <https://www.facebook.com/pages/American-Association-of-Colleges-of-Pharmacy/29859084035>
- AACP on Twitter: <https://twitter.com/aacpharmacy>
- AACP on YouTube: <https://www.youtube.com/user/AACPVideo>

Advisory Council Professional Association Partner Information

- **American Association of Colleges of Pharmacy (AACP)**, www.aacp.org
- **Mission**
Founded in 1900, the American Association of Colleges of Pharmacy (AACP) is the national organization representing pharmacy education in the United States. The mission of AACP is to lead and partner with our members in advancing pharmacy education, research, scholarship, practice and service to improve societal health.
- **Size of Organization:** AACP has 30 staff members
- **Number of Member Institutions:** AACP is composed of all accredited colleges and schools with pharmacy degree programs accredited by the Accreditation Council for Pharmacy Education, including more than 6,600 faculty, 63,400 students enrolled in professional programs (PharmD) and 4,400 individuals pursuing graduate study.
- **New Institutional Members in Last Two Years:**
 - Chapman University
 - University of Texas at Tyler
 - Larkin Health Sciences Institute
 - Binghamton University
 - Medical University of South Carolina College of Pharmacy
 - University of South Carolina College of Pharmacy

Advisory Council Contact Information

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Date updated: 08/15/16

For more information on many health professions, we recommend the NAAHP publication, *Health Professions Admission Guide: Strategies for Success*, available on the NAAHP website.



www.aacp.org/pharmacycareers

Career Information Clearinghouse

This brochure was sponsored and prepared in conjunction with the Career Information Clearinghouse, a group of pharmacy organizations with a common interest of ensuring a strong future for the pharmacy profession. For additional information about a career in pharmacy, contact AACCP or any of the following CIC Members:

Academy of Managed Care Pharmacy
www.amcp.org

American Association of Pharmaceutical Scientists
www.aaps.org

American College of Apothecaries
www.americancollegeofapothecaries.com

American Pharmacists Association
www.pharmacist.com

American Society of Consultant Pharmacists
www.ascp.org

American Society of Health-System Pharmacists
www.ashp.org

National Association of Boards of Pharmacy
www.nabp.org

National Association of Chain Drug Stores
www.nacds.org

National Community Pharmacists Association
www.ncpanet.org

Pharmaceutical Research and Manufacturers of America
www.phrma.org



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Prescription FOR A REWARDING CAREER



Why pharmacy?

While it varies by pharmacy practice area, recent pharmacy graduates can earn top salaries right out of college! Pharmacy is a career that offers great benefits, flexible work schedules, outstanding growth opportunities, profit sharing and much more.

If you enjoy working with people, excel in science and would like a rewarding healthcare career, pharmacy is for you!

Outstanding opportunities.

There is a need for pharmacists in a wide variety of occupational settings.

Excellent earning potential.

Pharmacy is one of the most financially rewarding careers.

A well-rounded career.

Pharmacy is an exciting blend of science, healthcare, direct patient contact, computer technology and business.

A vital part of the healthcare system.

Pharmacists play an integral role in improving patients' health through the medicine and information they provide.

A trusted profession.

Pharmacists are consistently ranked as one of the most highly trusted professionals because of the care and service they provide.*

*According to data by Wirthlin Worldwide and Gallup International

There are many career options in pharmacy including:

- Academic pharmacy
- Community practice
- Government agencies
- Hospice and home care
- Hospital and institutional practice
- Long-term care or consulting pharmacy
- Managed care pharmacy
- Medical and scientific publishing
- Pharmaceutical industry
- Pharmaceutical sciences
- Trade or professional associations
- Uniformed (public health) services



The University of Louisiana at Monroe

Pharmacy Career Options

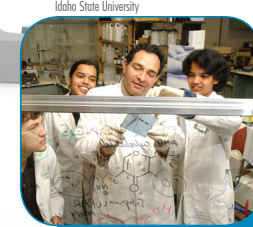
The Benefits of a Career in Pharmacy

Your Future in Pharmacy Begins with Education

A balanced and comprehensive high school and college education is an important first step in the pursuit of a professional degree in pharmacy, especially in the areas of math and science.

The Doctor of Pharmacy (Pharm.D.) degree program requires at least two years of pre-professional (undergraduate) study followed by four academic years of professional study. A growing number of first-year students enter a pharmacy program with three or four years of college experience.

The requirements for admission into a pharmacy program vary. Admission requirements for all U.S. pharmacy programs can be found at www.aacp.org/pharmacycareers.



Idaho State University

Pharmacists Help Patients Improve Their Health

Pharmacists' responsibilities include a range of care for patients, from dispensing medications to monitoring patient health and progress to maximize their response to the medication. Pharmacists also educate consumers and patients on the use of prescriptions and over-the-counter medications, and advise physicians, nurses and other healthcare professionals on medication decisions.

Pharmacists provide expertise about the composition of medications, including their chemical, biological and physical properties, as well as their manufacture and use. They ensure drug purity and strength and make sure that medications do not interact in a harmful way. Pharmacists are the medication experts ultimately concerned about their patients' health and wellness.



The University of Louisiana at Monroe

Take the first step toward an exciting career in pharmacy by visiting the American Association of Colleges of Pharmacy at www.aacp.org/pharmacycareers for links to all U.S. colleges and schools of pharmacy.

An Exciting Curriculum

The professional pharmacy curriculum is designed to educate pharmacists to:

- Counsel patients on the proper use of their medications;
- Promote the public health;
- Develop and manage medication distribution and control systems;
- Manage pharmacy practice; and
- Plan and perform ongoing evaluations to provide patients with the best drug therapy for their individual healthcare needs.



The University of New Mexico

PHARMACY - A Prescription for a Rewarding Career

Why Pharmacy?

- **A well-rounded career.** Pharmacy is an exciting blend of science, health care, direct patient contact, computer technology, and business.
- **A vital part of the health care system.** Pharmacists play a vital role in improving patient care through the medicine and information they provide.
- **Excellent earning potential.** Pharmacy is one of the most financially rewarding careers.
- **Outstanding opportunities.** There is an unprecedented demand for pharmacists in a wide variety of occupational settings.
- **A trusted profession.** Pharmacists are consistently ranked as one of the most highly trusted professionals because of the care and service they provide. **According to data by Gallup International*

Pharmacy Career Options

- Academic pharmacy
- Community pharmacy
- Government agencies
- Hospice and home care
- Hospital and institutional practice
- Long-term care or consulting pharmacy
- Managed care pharmacy
- Medical and scientific publishing
- The pharmaceutical industry
- Trade or professional associations
- Uniformed (public health) service

Pharmacists Help Patients Get Well

While responsibilities vary among the different areas of pharmacy practice, the bottom line is that pharmacists help patients get well. Pharmacist responsibilities include a range of care for patients, from dispensing medications to monitoring patient health and progress to maximize their response to the medication. Pharmacists also educate consumers and patients on the use of prescriptions and over-the-counter medications, and advise physicians, nurses, and other health care professionals on drug decisions. Pharmacists also provide expertise about the composition of drugs, including their chemical, biological, and physical properties and their manufacture and use. Pharmacists ensure drug purity and strength and make sure that drugs do not interact in a harmful way. They are the drug experts ultimately concerned about their patients' health and wellness.

Shortage of Pharmacists

The Department of Health and Human Services (HHS) released a report in 2000 titled "The Study of the Supply and Demand for Pharmacists" to determine to what extent a shortage of pharmacists exists. The report concludes that there is an increasing demand for pharmacists' service that is outpacing the current and future pharmacist supply. The report also states that factors causing the shortage are not likely to abate in the near future.

Your Future in Pharmacy Begins with Education

A balanced and comprehensive high school and college education is an important first step in the pursuit of a professional degree in pharmacy, especially in the areas of math and science. The Doctor of Pharmacy (Pharm.D.) degree program requires at least two years of pre-professional (undergraduate) study followed by four academic years of professional study. The majority of first-year students enter a pharmacy program with three or four years of college experience. The requirements for admission into a pharmacy program vary.

Don't delay...find out more today!

Visit the American Association of Colleges of Pharmacy web site for more information about career opportunities and links to all U.S. colleges and schools of pharmacy. <http://www.aacp.org>





Nursing Physician Assistant



General Description:

Though often working collaboratively, nurses do not simply "assist" physicians and other health care providers. Instead, they practice independently within their own defined scope of practice. Nursing roles range from direct patient care to case management, establishing nursing practice standards, developing quality assurance procedures, and directing complex nursing care systems.

What are some common daily activities/experiences?

- Assessing, managing, and orchestrating care
- Communicating with other healthcare team members to plan care
- Educating patients and families about disease trajectory, treatments, and side effects of medications
- Documenting care

What are 3-5 personal characteristics important for happiness and success in your profession?

- Ability to work under pressure
- Fulfillment of working with the team to prevent suffering
- Contribute to research
- Ability to set boundaries--work hard and play hard
- Commitment to lifelong learning

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- Am I willing to listen and be present with people when they are most vulnerable?
- Am I willing to advocate for patients and their families when they do not have a voice?
- Am I willing to communicate and work with a team to orchestrate the best care possible?
- Am I willing to commit to lifelong learning and engage in evidence-based practice?

Preparing for Admission:

Please note that on NursingCAS every single program posted has a "Program Homepage" in the "Program Materials" section (account required to access this section). On that homepage schools are encouraged to list program prerequisites, minimum GPA, academic background, standardized tests, required references, experience, etc. And have the option of inputting their requirements for custom questions, document uploads, pre-requisite coursework, references (called evaluations).

- **Resources for researching schools:**
 - AACN: <https://www.aacn.nche.edu/students/nursing-program-search>
 - Discover Nursing: <http://www.discovernursing.com/schools#no-filters>
 - NursingCAS: <https://nursingcas.liasoncas.com/applicant-ux/#/login>

The Admissions Cycle:

- CAS(es): Nursing Centralized Application Service (NursingCAS)
 - www.nursingcas.org
 - Application opens: August 2016

NAAHP Fact Sheet for Health Professions Advisors

Nursing

- Application can be submitted: deadlines vary per program
- Number of schools participating: 195
- Fees, fee waivers:
 - Undergraduate Level Programs: \$45 for the 1st school, \$30 each additional school.
 - Graduate Level Programs: \$65 for the 1st school, \$35 for each additional school.
 - NursingCAS does not yet offer a fee waiver program.
- Letters of rec logistics: Up to 6 references per program may be submitted through the Evaluator Portal. References must be attached to a specific designation in order for the schools to access it.
- Standardized test logistics: You can self-report to NursingCAS. Send official test scores directly to programs.
- Transcripts: If required, official transcripts should be mailed by schools directly to NursingCAS. Some programs allow applicants to upload unofficial transcripts or do not require any type of transcript to be submitted via NursingCAS. Visit the “Academic History” section of NursingCAS to determine your program’s specific transcript needs. This is also the case with transcript entry, programs decide if they will require applicants to input all of their college level coursework, pre-requisites only, or no coursework. The transcript entry requirements are also posted in the “Academic History” section.
- Contact information: (617)-612-2880 / nursingcasinfo@nursingcas.org
- AACN NursingCAS contact for advisors: Caroline Allen, callen@aacn.nche.edu / (202) 463-6930 x258

The Admissions Process:

- Approx dates of interviews, offers: varies by school and program
- Advisor Portal: Available in 2017
- Total number of applicants in most recent cycle (through CAS and/or all member programs if known): 112,138 applicants via NursingCAS and 554,339 complete applications received as reported by AACN member programs
- Total number of first year students (through CAS and all if known): N/A due to all the different program pathways
- Total number of students: 477,758 undergraduate and graduate students
- Total number of graduates in most recent academic year: 163,408
- Average # of applications per student: Data not available
- Test score and GPA averages and ranges, other data on applicants and accepted students (major, age, race/ethnicity, gender, whatever makes sense for the profession): Data not available, varies greatly per school and program

Learn More about the Profession

Training & Career Opportunities:

- Number of years: varies by career path
- Degree attained: Most common are BSN, MSN, DNP, and PhD, for a full listing of nursing degree types and descriptions visit <http://www.nursingcas.org/prepare-to-apply/glossary-of-nursing-degrees/>.
- Data on employment of recent graduates, if available:
 - For new baccalaureate prepared nurses
 - 56% were employed at graduation
 - 87% were employed 4-6 months after graduation

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors

Nursing

Key Resources for Students:

- [Guide](#) to Graduate Nursing Programs
- [Financial Aid](#) for Nursing Students
- [Career Advice](#) for Prospective Nursing Students
- [Accelerated Nursing Programs](#) for Non-Nursing Graduates

Key Resources for Advisors:

- Nursing Career [Facts](#)
- Pathway [Chart](#) to a Doctoral Degree in Nursing

Social Media:



Advisory Council Professional Association Partner Information

- **American Association of Colleges of Nursing**, www.aacn.nche.edu/
- **Mission**
The American Association of Colleges of Nursing (AACN), as the collective voice for academic nursing, AACN serves as the catalyst for excellence and innovation in nursing education, research, and practice.
- **Size of organization, Number of member institutions**
790 member schools of nursing employing more than 18,000 full-time faculty members
- **New institutional members in last two years:** For a full list of member institutions, visit <https://www.aacn.nche.edu/about-aacn/member-schools>.

Advisory Council Contact Information

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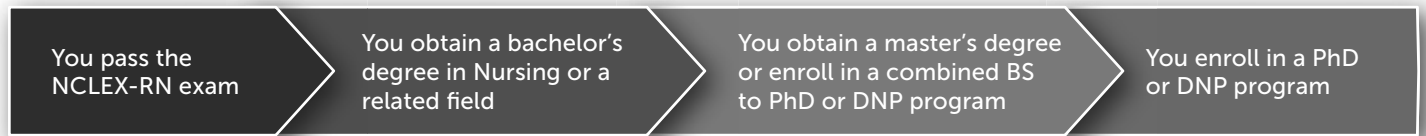
NAAHP liaison and contact information

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Date updated: 8/19/2016

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

PATHWAY TO A DOCTORAL DEGREE IN NURSING



1 You are not a nurse and are enrolled in a nursing program and expect licensure within 18 months and the awarding of a degree in nursing.

- Achieve the best GPA possible.
- Consider Specialty/Area.
- Get involved with a nurse faculty member.
- Work on a special project or independent study.
- Obtain letters of references.
- NCLEX review and evaluation
- GRE preparation
- Seek advisement for:
 - a. Masters with clinical focus
 - b. Masters without APRN focus
 - c. Masters to PhD or Master to DNP program



2 You are presently a nurse but do not have a bachelor's degree (associate degree or enrolled in an accelerated MS program that does not award the bachelors).

- Achieve the best GPA possible.
- Get involved with a nurse faculty member.
- Work on a special project or independent study.
- Obtain letters of references.
- In general, you must be an RN and hold at least one degree in nursing to apply to doctoral programs.

3 You are presently a nurse with a bachelor's degree in a health-related field (not nursing)

- Apply to a MS program in nursing.
- Apply to a combined MS to PhD or DNP program.
- Make sure ALL prerequisites are complete.

5 You are presently a nurse with a master's degree in a health-related field (not nursing).

- Apply to a PhD or DNP program accepting applications with non-nursing degrees.
- Clarify degree admission requirements.
- If you plan a career in academia, there may be limitations on your faculty role if the master's degree is not in nursing.

4 You are presently a nurse with a bachelor's degree in nursing.

- Apply to a MS or a combined MS to PhD or MS to DNP program.
- Consider GRE review.

6 You are presently a nurse with a master's degree in nursing.

- Apply to a post-masters PhD or DNP program.
- Seek advice regarding GPA and GRE admissions.



General Description:

PAs are medical providers who are licensed to diagnose and treat illness and disease, and to prescribe medication for patients, working in a variety of settings. Forbes and U.S. News & World Report consistently ranks PA as one of the top health care careers, with a median annual salary of \$98,000 and projected growth rate of 30% through 2024 (<http://www.bls.gov/>).

What are some common daily activities/experiences?

PAs are focused on patient care and may undertake educational, research, and administrative work. Studies show that in a primary care setting, PAs can provide nearly all of the clinical services a physician does, including taking medical histories, performing physical exams, ordering and interpreting laboratory tests, diagnosing and treating illnesses, counseling patients, setting fractures, and assisting in surgery.

What are 3-5 personal characteristics important for happiness and success in your profession?

- Intelligence, sound judgment, and intellectual honesty
- Excellent interpersonal skills
- Respect for yourself and others
- Ability to respond to emergencies in a calm and reasoned manner
- Commitment to patient's welfare

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- What distinguishes a PA from other health care providers, like a physician or nurse practitioner?
- How will the PA profession help me meet my career goals?
- Why do I think I will be an excellent health care provider? More specifically, an excellent physician assistant?

Preparing for Admission:

Each PA program sets its own prerequisite coursework requirements. It is best to review a program's website for all prerequisites requirements and substitutions, including academic coursework, patient care experience, testing, and more. A more general review of information can be conducted using the PAEA [program directory](#).

- **Academic:** academic prerequisites in science and non-science courses can include, but are not limited to:
 - Anatomy
 - Biology
 - Physiology
 - Chemistry
 - Organic chemistry
 - Biochemistry
 - Physics
 - Genetics
 - English, composition, technical writing
 - Psychology
 - Sociology, Humanities
 - College-level algebra or math
 - Statistics
- **Standardized tests:** there is no universally required standardized test for PA admissions. Some programs may require any of the GRE, MCAT, TOEFL, or other science-based testing

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Physician Assistant

- **Experience:** some programs may require shadowing, volunteer, paid, or any combination of direct patient care experience. Some programs will make recommendations on experience without requirements.
 - Hour requirements vary but can range from 0-4,000 hours
- **Evaluations:** while most PA programs require three evaluations, others may require less or more. Some programs, but not all, require evaluations from specific types of references, which can include:
 - PAs
 - Physicians (MD or DO)
 - Nurse practitioners (NP)
 - Professors with knowledge of applicant's academic abilities
 - Supervisors in a health area or other job setting
 - Academic advisors

Resources for researching schools:

- PA Program Directory: <http://directory.paeaonline.org/>
- PA Focus: <http://pafocus.org/>

The Admissions Cycle:

- CAS: Central Application Service for Physician Assistants (CASPA): <https://caspa.liaisoncas.com/applicant-ux/#/login>
 - **Application opens:** April 27, 2016
 - **Application can be submitted:** from open date until March 1, 2017, close date
 - **Deadlines:** there are nine deadline options in a CASPA cycle and they include June 15, July 15, August 1, September 1, October 1, November 1, December 1, January 15, and March 1.
 - **Number of schools participating:** 197 of 210 PAEA member programs and 19 developing PA programs
 - **Fees:** \$175 for first program, \$50 for each additional
 - **Fee waivers:** [CASPA Fee Assistance Program](#)
 - **Evaluation letter logistics:** up to five evaluations must be submitted electronically via CASPA. Two evaluations are required for an applicant to become complete. Check PA program requirements regarding references prior to listing any references on CASPA as they cannot be removed or replaced. PA programs do not prefer committee letters.
 - **Standardized test logistics:** official GRE scores can be submitted using individual program CASPA GRE codes (if applicable). If a PA program does not have a CASPA GRE code, please follow the instructions on their website for submitting GRE scores. TOEFL scores must be submitted directly to CASPA by request to ETS. Paper score copies are not accepted by CASPA.
 - **Transcripts:** all official transcript must be sent directly by the institution(s) to CASPA at the PO Box provided in the CASPA instructions & FAQ.
 - **Instruction manual and FAQ:** <http://help.unicas.com:8888/caspaHelpPages/frequently-asked-questions/index.html>
 - **Background checks:** through CASPA, PAEA partners with CertifiedBackground to provide background checks to programs choosing to participate through CASPA. Programs must opt in and they order background checks on the applicants they require them from. Not all applicants through CASPA will be required to obtain a background check. In most cases, applicants will be responsible for the background check fess.

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Physician Assistant

- Contact information: (617) 612-2080 - caspainfo@caspaonline.org
- CAS contact for advisors (if different): same.
- CASPA Facebook: <https://www.facebook.com/CASPAOnlineApp/?fref=ts>

The Admissions Process:

- **Advisor portal:** <https://uap.webadmit.org/session/new>
- **Approx. dates of interviews/offers:** information variable by PA program.
- **Total number of applicants in most recent cycle** (through CAS and/or all member programs if known): 25, 755 (*this is total of submitted applicants through CASPA*)
- **Average # of applications per student:** 7 designations
- **Total number of first year students** (through CAS and all if known): not available
- **Test score and GPA averages and ranges, other data on applicants and accepted students** (major, age, race/ethnicity, gender, whatever makes sense for the profession)
 - **Applicant Reports** (2014-2016 cycles):
<https://www.dropbox.com/s/3eutg5pv9kh27zt/2014-2016%20Applicant%20Data%20Comparison.pptx?dl=0>
 - **Matriculant Reports** (2012-2015 start classes):
<https://www.dropbox.com/s/ojxtexgusb1zmp3/1%29%202012-2015%20Matriculant%20Comparison%20Report.pptx?dl=0>
- **Total number of students:** not available

Learn More about the Profession

Training & Career Opportunities:

- **Number of years:** PA school averages approx. 27 months
- **Degree attained:** Master's degree (specific credentials vary by program)
- **Total number of graduates in most recent academic year:** not available but there were approx. 7,800 matriculants via CASPA in the 2015 start class.
- **Data on employment of recent graduates, if available:** www.aapa.org

Key Resources for Students

- PA Focus: <http://pafocus.org/>
- CASPA Applicant Portal: <https://caspa.liaisoncas.com/applicant-ux/#/login>
- CASPA Instructions & FAQ: <http://help.unicas.com:8888/caspaHelpPages/frequently-asked-questions/index.html>

Key Resources for Advisors

- The American Academy of Physician Assistants: <https://www.aapa.org/become-a-pa/>
- The National Commission of Certification of Physician Assistant: <http://www.nccpa.net/>
- The Accreditation Review Commission for Physician Assistants, <http://www.arc-pa.org/>

Social Media

- PA Focus Facebook: <https://www.facebook.com/PAFocus/?fref=ts>
- PA Focus Twitter: https://twitter.com/pa_focus

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors
Physician Assistant

Advisory Council Professional Association Partner Information

Physician Assistant Education Association, www.paeaonline.org

- **Mission:** PAEA serves as a resource for individuals and organizations from various professional sectors interested in the educational aspects of the PA profession. The Association is the organization primarily responsible for collecting, publishing, and disseminating information on the PA programs. PAEA provides effective representation to affiliated organizations involved in health education, health care policy, and the national certification of PA graduates. PAEA works to ensure quality PA education through the development and distribution of educational services and products specifically geared toward meeting the emerging needs of PA programs, the PA profession, and the health care industry.
- **Size of organization, Number of member institutions**
 - 30 employees
 - 207 voting member programs
- **New institutional members in last two years**
 - 37 total institutional members, over 10 new in the last two years

Advisory Council Contact Information

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Date updated: July 12, 2016

Physician Assistant Education



Since the first three PAs graduated from Duke University in 1967, the profession has grown dramatically. In 2009, there are 145 accredited PA programs in the United States, which together graduate more than 5,000 new PAs each year. Federal support has been critical to the development of the profession at several key points.

The continuing growth of the profession looks strong, with more than 20 new programs in the pipeline and a robust applicant pool that has grown by more than 10% each year. Challenges faced by PA programs include recruitment of qualified faculty, shortages of preceptors and clinical sites, and increasing the diversity of faculty and applicants.

PA EDUCATION AT A GLANCE

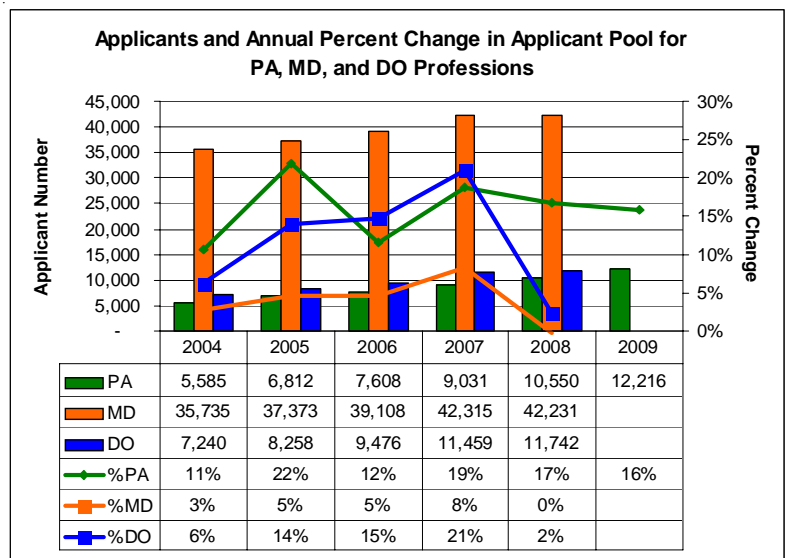
- PAs are educated as generalists in medicine; their flexibility allows them to practice in more than 60 medical and surgical specialties.
- The average PA program is 27 months long: one year of classroom study and 15 months of clinical rotations.
- Curriculum includes 400 hours of basic sciences and nearly 600 hours of clinical medicine
- More than 80% of programs award a master's degree.
- More than 80% of programs are housed at a university or college; 14% in academic health centers.

PA GRADUATES

- PAs are licensed health professionals who practice medicine as members of a team with their supervising physicians.
- PAs exercise autonomy in medical decision making and provide a broad range of medical and therapeutic services to diverse populations in rural and urban settings.
- More than one third of graduates practice in primary care.
- PAs practice in all 50 states and the District of Columbia, and in virtually all health care settings, including hospitals, physicians' offices, HMOs, nursing homes, public health agencies, and community clinics.

THE PA APPLICANT POOL

- Eighty percent of applicants have a baccalaureate degree, most commonly in biology
- Applicants average 3.7 years of health care experience
- Average overall undergraduate GPA is 3.25; average science GPA is 3.13
- Nearly one third of applicants are non-white (31%)
- Mean age of applicants is 26.9 years old
- Three quarters (74%) of applicants are female



The majority of applicants to PA programs apply through the Central Application Service for Physician Assistants (CASPA). Over the past five years, CASPA's applicant pool has grown by an average of more than 15% (see chart). The profession's rapid growth is expected to continue, driven by the projected shortage of physicians and other health care professionals, the growing demand for health care services from an aging population, and the continuing strong applicant pool. The Bureau of Labor Statistics projects a 27% increase in the number of PA jobs over the 10-year period, 2006-2016.

With its relatively short initial training time and the flexibility of generalist-trained PAs, the PA profession is well positioned to help fill projected shortages in the numbers of health care professionals.

PA FACTS

What Is a PA?

A physician assistant is a graduate of an accredited PA educational program who is nationally certified and authorized by the state to practice medicine with the supervision of a licensed physician. PAs are invaluable members of the healthcare team and work in concert with physicians to ensure the highest quality of care for patients.

To Become a Physician Assistant

ATTEND AN ACCREDITED PA PROGRAM...

- The typical entering student has a bachelor's degree and approximately four years of healthcare experience.
- The average program takes 27 months to complete.

...WITH CLASS/LAB INSTRUCTION

PA students take more than 400 hours in basic sciences (with more than 75 hours in pharmacology) plus approximately 175 hours in behavioral sciences and nearly 580 hours of clinical medicine. Subjects include:

- | | |
|--------------------------------|--------------------------|
| ■ Anatomy | ■ Physical diagnosis |
| ■ Pathology | ■ Differential diagnosis |
| ■ Pharmacology | ■ Pathophysiology |
| ■ Biochemistry | ■ Medical ethics |
| ■ Clinical laboratory sciences | ■ Behavioral sciences |
| ■ Microbiology | ■ Physiology |

...AND CLINICAL ROTATIONS

PAs participate in more than 2,000 hours of clinical rotations, with an emphasis on primary care in ambulatory clinics, physicians' offices and acute/long-term care facilities. Rotations include:

- | | |
|-------------------|-------------------------|
| ■ Family medicine | ■ Emergency medicine |
| ■ General surgery | ■ Obstetrics/gynecology |
| ■ Pediatrics | ■ Internal medicine |
| ■ Psychiatry | |

To Practice as a Physician Assistant

INDIVIDUALS MUST

- Pass a national PA certification exam administered by the National Commission on Certification of Physician Assistants (for graduates of accredited PA programs only).
- Obtain a state license

To Maintain Certification

PA's MUST

- Complete 100 hours of continuing medical education over a two-year cycle.
- Pass a recertification exam every six years.



Where Do PAs Practice?

More than 90,000 certified physician assistants work in virtually every medical and surgical setting across the country. More than one-third (39.4 percent) practice in hospital settings and close to 40 percent work in a group practice or solo physician office. The remaining PAs work in a variety of settings, including community health centers, freestanding surgical facilities, nursing homes, school- or college-based facilities, industrial settings and correctional institutions.

What Can a PA Legally Do?

Physicians may delegate to PAs medical duties that are within the physician's scope of practice, the PA's training and experience and that are allowed by law.

These duties include performing physical examinations, diagnosing and treating illnesses, ordering and interpreting lab tests, assisting in surgery, providing patient education and counseling, and making rounds in nursing homes and hospitals. All states, the District of Columbia, the Commonwealth of the Northern Mariana Islands, and Guam and the U.S. Virgin Islands authorize physicians to delegate prescriptive privileges to the PAs they supervise.

Why Was the Profession Created?

Recognizing that some residents of North Carolina had limited access to quality medical care, the chair of the Department of Medicine at the Duke University Medical Center established a program in 1965 to educate ex-military corpsmen to practice medicine with physician supervision. The educational model for PAs was based in part on his experience with the fast-track training of doctors during World War II. These first students had received extensive healthcare training during their military careers.

What About Reimbursement for Services Provided by PAs?

PAs offer great value to their employers by providing high quality medical and surgical care to patients for which most public and private third party payers reimburse. Services provided by PAs are billed under the PA's name or under the name of the supervising physician, depending on the policies of the individual payer. Most federal and state healthcare reform initiatives recognize and include PAs as vital members of the healthcare team.

And the Quality of PA Care?

Numerous studies have found that the quality of care that PAs provide is comparable to that of physicians. The congressional Office of Technology Assessment studied healthcare services provided by PAs and determined that "physician assistants provide health care that is indistinguishable in quality from care provided by physicians." Additionally, according to a study published in *The American Surgeon* in 2004, PAs "are a valuable adjunct in improving quality of patient care." And PAs provide quality of care comparable to physicians according to a 2009 Rand Report that confirmed the conclusions of two reviews of published studies. A nationwide study published in 2005 also found that, regardless of provider, Medicare patients are generally satisfied with the quality of health care they receive.



PA WORK SETTINGS

Source: AAPA 2010 Annual PA Census

Specialty Physician Groups	29.2%
Solo Physician Practices	11%
Other	10.1%
Certified Rural Health Clinics	2.7%
Federally Qualified and Community Health Centers	5.2%

PAs WORK IN VIRTUALLY EVERY AREA OF MEDICINE AND SURGERY

Source: AAPA 2010 Annual PA Census

General Surgery & Surgical Subspecialties	25.9%
Family Medicine	24.3%
Other	15.7%
General Internal Medicine & IM Subspecialties	15.1%
Emergency Medicine	10.9%
General Pediatrics & Pediatric Subspecialties	3.7%
Ob/Gyn	2.0%
Occupational Medicine	1.9%



The background is a light blue gradient with various medical icons and text. A stethoscope is visible on the left side. In the center, there are several hexagonal icons: a heart, a clipboard, a molecular structure, and a cross. The word "MEDICAL" is written in a sans-serif font in the upper right area. The main title is centered in a large, bold, black serif font.

Physical Therapy Occupational Therapy



General Description

Physical therapists are evidence-based, healthcare professionals who diagnose and treat individuals of all ages who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives. They offer cost-effective treatment that improves mobility and relieves pain, reduces the need for surgery and prescription drugs, and allows patients to participate in a recovery plan designed for their specific needs. In addition, physical therapist work with individuals to prevent the loss of mobility before it occurs by developing fitness and wellness-oriented programs for healthier and more active lifestyles. Physical therapists provide care for people in a variety of settings, including hospitals, private practices, outpatient clinics, home health agencies, schools, sports and fitness facilities, work settings, and nursing homes. State licensure is required in each state in which a physical therapist practices.

What are some common daily activities/experiences?

As essential participants in the health care delivery system, physical therapists assume leadership roles in rehabilitation, prevention, health maintenance, and programs that promote health, wellness, and fitness. Physical therapists also play important roles both in developing standards for physical therapy practice and in developing health care policy to ensure availability, accessibility, and optimal delivery of health care services.

As clinicians, physical therapists engage in an examination process that includes:

- Taking the patient's medical history,
- Reviewing the medications, test results, and notes from other healthcare providers,
- Conducting a systems review, and
- Performing tests and measures to identify potential and existing problems.

To establish diagnoses, prognoses, and plans of care, physical therapists perform evaluations, synthesizing the examination data and determining whether the problems to be addressed are within the physical therapy scope of practice. Physical therapists typically do the following:

- Diagnose patients' functions and movements by observing them stand, walk or perform activities/tasks, perform various tests and measures, and by listening to their concerns.
- Design individualized plans of care based on their medical expertise, best available research, the patients' unique situations and goals, and the expected outcomes of the plans.
- Use techniques such as exercises, hands-on therapy, and equipment to ease patients' pain, help them increase their mobility, prevent further pain or injury, and facilitate health and wellness.
- Evaluate a patients' progress, modify their plans of care, when necessary, to try new treatments.
- Educate patients and their families about what to expect and how best to cope with a recovery process.
- Develop and implement discharge plans.

A few of the health conditions commonly treated by physical therapists are as follows:

- Arthritis
- Back & Neck Pain
- Brain Injury
- Cancer-Related Complications
- Carpal Tunnel Syndrome
- Cerebral Palsy
- Chronic Pain
- Cystic Fibrosis
- Diabetes
- Fall Risk & Balance Issues
- Fibromyalgia
- Fractures & Multiple Trauma
- Incontinence
- Joint Injuries, including to Knee & Ankle
- Lymphedema
- Multiple Sclerosis
- Muscle Strains
- Obesity
- Osteoporosis
- Parkinson's Disease
- Pelvic Pain
- Plantar Fasciitis
- Post-Operative Rehabilitation
- Rotator Cuff Injuries
- Spinal Cord Injuries & Birth Defects
- Sports Injuries
- Wound & Burn Care



The practice of physical therapists varies by type of patient. For example, a patient experiencing loss of mobility due to stroke needs different care from that given to an athlete recovering from an injury. Some physical therapists specialize in one type of care, such as orthopedics or geriatrics. Many physical therapists also help to prevent loss of mobility by developing fitness and wellness programs to encourage healthier and more active lifestyles.

Physical therapists practice as part of a healthcare team, overseeing the work of physical therapist assistants and aides; and consulting with physicians, surgeons and other specialists. In addition, some physical therapists are educators, researchers, consultants, or healthcare administrators. They may practice in government agencies, healthcare industries, schools, and other public/private institutions.

What are 3-5 personal characteristics important for happiness and success in your profession?

- **Compassion.** Physical therapists are often drawn to the profession in part by a desire to help people. They often work with people who are in pain or have been through traumatic events and they must have empathy for their patients.
- **Detail-oriented.** Like other healthcare providers, physical therapists should have strong analytical and observational skills to diagnose a patient's problem, evaluate treatments, and provide safe, effective care.
- **Dexterity.** Physical therapists must use their hands to provide manual therapy and therapeutic exercises. They should feel comfortable touching and physically assisting patients.
- **Interpersonal skills.** Physical therapists spend a significant amount of time interacting with patients and other healthcare providers, and enjoy working with people from various and diverse backgrounds. They must be able to clearly explain treatment programs, motivate and listen to patients' concerns, and communicate with the healthcare team to provide effective therapy.
- **Physical stamina.** Physical therapists spend much of their time on their feet, moving as they work with patients. They should enjoy physical activity.
- **Resourcefulness.** Physical therapists customize treatment plans for patients. They must be flexible and able to adapt plans of care to meet the needs of each patient.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- Are you interested in how the human body works and moves?
- Do you want to interact directly with patients and their families or caregivers?
- Are you interested in a hands-on career?
- Are you an effective communicator?
- Do you have good interpersonal skills?
- Can you motivate people?
- Do you excel in science?

Preparing for Admission:

- **Academics:** Physical therapist education programs in the United States only offer the Doctor of Physical Therapy (DPT) degree to all new students who enroll. Most DPT education programs require applicants to earn a bachelor's degree prior to admission into the professional phase of the program. Other programs offer a 3+3 curricular format in which 3 years of specific pre-professional (undergraduate/pre-PT) courses must be taken before the student can advance into a 3-year professional DPT program. A few programs recruit all or a portion of students directly from high school into a guaranteed freshman admissions program. High school students accepted into these programs can automatically advance into the professional phase of the program pending the

NAAHP Fact Sheet for Health Professions Advisors

Physical Therapy

completion of specific undergraduate courses and any other stated contingencies (eg, minimum GPA). (View the [Physical Therapist \(PT\) Admissions Process](#) for more detailed information)

DPT programs may require preprofessional (pre-PT/undergraduate) science courses to be completed in a 4-year university/college within the 5-10 years prior to enrollment. Students should be prepared to identify the classes completed or planned that will fulfill the program's course requirements. Some programs only accept anatomy or physiology courses completed in a biology, neuroscience, anatomy, or integrated physiology department. Programs may not accept a combined anatomy and physiology (A&P) course or those completed in other departments, such as kinesiology. Visit the PTCAS directory to determine what type of anatomy and physiology courses are required for admission. See also the [Course Prerequisite Summary](#).

There is no preferred major to be eligible for admission to a DPT program. The most common undergraduate majors among accepted applicants include exercise science, biology, kinesiology, and psychology. In selecting a college major, students should consider how they will satisfactorily complete the prerequisite courses for the designated physical therapist programs in addition to the college/university's degree and major requirements. For additional information about college majors for the most recent applicant pool, review the [PTCAS Applicant Data Report](#) and the [PTCAS Course Prerequisite Summary](#):

- **Standardized Tests:** Most programs require the Graduate Record Examination (GRE) for admission and have established a PTCAS GRE Code for the reporting of scores. <http://www.ptcas.org/Tests/>
- **Experience/Exposure:** Many programs require applicants to have a certain number of volunteer or paid experiences working with patients under the supervision of a licensed physical therapist. The program may specify the settings and types of experiences required. Applicants may also be required to have a licensed physical therapist verify the hours. This experience may be an important factor in the admissions process. Students should respectfully contact physical therapy clinics, hospitals, long-term care facilities (eg, nursing homes), and other healthcare settings in the area to find observation opportunities. APTA cannot assist in these efforts. See also the [Physical Therapist Observation Hours](#).
- **Letters of Reference:** Many programs require 1-4 letters of letters of reference as part of the admissions process. Programs may require references from a particular individual, such as a physical therapist, science professor, or academic advisor. If references are required, select individuals who meet the program's requirements; know the student well; and can speak to maturity, dependability, dedication, compassion, communication skills, leadership, and any hands-on experience in the field. See also Reference [Requirements by Program Summary](#) and the [reference instructions](#).
- **Resources for researching schools:** PTCAS Directory, www.ptcas.org/DirectoryProgramsList/

The Admissions Cycle:

- CAS(es): Physical Therapist Centralized Application Service (PTCAS) www.ptcas.org
 - **Application opens:** early July 2016
 - **Application can be submitted:** July 2016-May 2017
 - **Number of schools participating:** 212
 - **Fees:** \$145 to apply to one program, \$45 for each additional
 - **Fee waivers:** A limited number of PTCAS application fee waivers are available. Waivers are granted to financially disadvantaged applicants on a first-come, first-serve basis. PTCAS will decide if applicants qualify for a fee waiver based on their income, or their parent's income,

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

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if claimed as a dependent, as reported on the most recent federal income tax return. No other documentation is accepted. Applicants who receive a fee waiver may apply to one DPT program in PTCAS for free. If they choose to apply to more than one program, they will pay a fee of \$45 for each additional designation.

- **Letters of reference logistics:** Applicants can request up to four letters of reference via PTCAS. PTCAS will automatically e-mail the evaluator once the reference request is saved on the application. Evaluators should watch for an e-mail from noreply@ptcas.org with the subject heading "PTCAS Reference Request". PTCAS will only accept electronic references in the 2016-2017 cycle and will not accept paper or uploaded references. Reference requirements vary by program. Visit the PTCAS directory for details. <http://www.ptcas.org/ProgramPrereqs/>
- **Standardized test logistics:** There is no GRE code for PTCAS. Instead, applicants must arrange for the Educational Testing Service (ETS) to send official GRE scores to the correct GRE code for each designated program. Most programs have a PTCAS GRE code that differs from the main university code. <http://www.ptcas.org/Tests/>
- **Transcripts:** Official US transcripts should be sent to PTCAS with a transcript matching form.
- **Instruction manual and FAQ:** <http://www.ptcas.org/ApplicationInstructions/Document/>
- **Contact information:** 617-612-2040, ptcasinfo@ptcas.org
- **CAS contact for advisors:** Libby Ross, director of academic services, APTA, libbyross@apta.org.
- **PTCAS on Facebook:** <https://www.facebook.com/PTCAS>
- **PTCAS on Twitter:** <http://twitter.com/PTCAS>
- **Advisor portal:**
 - <https://portal.ptcas.org/advisors16/index.cgi> (2015-2016 cycle)
 - <https://portal.ptcas.org/advisors17/index.cgi> (2016-2017 cycle)
- **Approximate dates of interviews, offers:** Varies by DPT program.

The Admissions Process:

- **Total number of applicants in most recent cycle:** 18,479 in PTCAS
- **Average # of applications per student:** 6.17 in PTCAS
- **Total number of first year students (through CAS and all if known):** ~10000
- **Test score and GPA averages and ranges, other data on applicants):** The 2015-2016 PTCAS Applicant Data Report will be available in November 2016.
- **Total number of students:** 28,514

Learn More about the Profession

Training & Career Opportunities

- **Number of years:** 3 years of graduate education.
- **Degree attained:** Doctor of Physical Therapy (DPT) degree
- **Total number of graduates in most recent academic year:** 8,806
- **Data on employment of recent graduates:** Not available

Key Resources for Prospective Students

- [APTA Information for Prospective Students:](#)

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Physical Therapy

- [Move Forward: Physical Therapy Brings Motion to Life](#)
- [Why I Chose a Career in Physical Therapy](#)” (video)

Key Resources for Health Professions Advisors

- Cultural Competence in Physical Therapy: www.apta.org/CulturalCompetence/

Social Media

- APTA on Facebook:
 - <http://www.facebook.com/APTAfans>
 - <https://www.facebook.com/MoveForwardPT>
- APTA on Twitter
 - <https://twitter.com/aptatweets>
 - <https://twitter.com/MoveForwardPT>

Advisory Council Professional Association Partner Information

- **American Physical Therapy Association (APTA), www.apta.org**
- **Mission:** The mission of the American Physical Therapy Association (APTA), the principal membership organization representing and promoting the profession of physical therapy, is to further the profession's role in the prevention, diagnosis, and treatment of movement dysfunctions and the enhancement of the physical health and functional abilities of members of the public.
- **Vision Statement:** Transforming society by optimizing movement to improve the human experience.
- **Size of organization:** The American Physical Therapy Association (APTA) is an individual membership professional organization representing more than 90,000 member physical therapists (PTs), physical therapist assistants (PTAs), and students of physical therapy. There are currently more than 180 staff members at APTA.
- **Number of member institutions:** There are currently 233 DPT education programs accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).
- **New institutional members in last two years:** See also the [CAPTE Directory](#).

- | | | |
|----------------------------------|-------------------------|--------------------------------------|
| ○ Adventist U of Health Sciences | ○ Emory & Henry College | ○ Trine U |
| ○ Alvernia U | ○ High Point U | ○ U of Arkansas for Medical Sciences |
| ○ Brenau U | ○ Indiana State U | ○ U of Mary Hardin-Baylor |
| ○ Briar Cliff U | ○ Kean U | ○ U of Mount Union |
| ○ Campbell U | ○ Mary Baldwin College | ○ West Coast U |
| ○ Concordia U-Saint Paul | ○ Methodist U | ○ William Carey U |
| ○ DeSales U | ○ Samford U | ○ Wingate U |
| | ○ South College | |

Advisory Council Contact Information

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University of Wyoming
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Date updated: 8/18/2016

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

**California State University, Long Beach
Department of Physical Therapy**

**Guidelines for Admission and Prerequisites
Doctor of Physical Therapy (DPT)**

Physical Therapy at CSULB is a full-time, competency based program designed to prepare each graduate to function as a physical therapist. Students who complete the degree and internship requirements are qualified to challenge the licensing examination provided by the Board of Medical Quality Assurance. Prior criminal convictions may limit licensure in California.

Application to the Program:

The student must, simultaneously, complete two separate online applications; one to the University through <csumentor.edu>. For the class of May 2013, applications are open from October 1 to December 30, 2012. For subsequent classes, beginning with the class of May, 2014, applications are open from October 1, to December 1, in the year previous to the desired program start date, and the second to the Physical Therapy Department through <ptcas.org>. Applications are open from July 5 to November 1 in the year previous to the desired program start date. The deadlines are strictly observed.

The Department admits 32-36 students per year to the Physical Therapy program. Admission to the University as a graduate student in physical therapy is on a competitive basis using the Selection Criteria described on page 2 of this brochure.

Requirements for Admission:

In addition to meeting the University's academic standards for admission, an applicant to the Physical Therapy Program should:

1. Hold, or be eligible to hold, an acceptable Bachelor's Degree in any field,
2. Have attained an overall grade point average of at least 3.0 (A=4.0) with at least 2.5 in the last 60 semester (90 quarter) units attempted,
3. Have been in good academic, professional, and clinical standing at the last institution and if applicable in the last entry-level physical therapist educational program attended,
4. Successfully have completed all prerequisite courses listed on page 2 of this brochure with a minimum of "C" and a minimum grade point average of 3.0 by the end of the fall semester prior to the year of admission to the program. Only 2 courses may be in progress during the fall semester of application,
5. Have earned a score of 4.0 or better on the Analytical Writing Component of the Graduate Record Examination (GRE) taken within the last 5 years.
6. Have knowledge of physical therapy through related paid/volunteer experience under the direct supervision of a licensed physical therapist in different areas of physical therapy e.g.

a. rehabilitation	b. geriatric
c. pediatric	d. acute/general hospital

 A hospital setting is strongly suggested. A minimum of 100 hours is required and up to 200 hours is recommended.
7. Complete and file an application to the program through ptcas.org which must include:

Revised 9-26-12

- a. official transcripts of all academic work attempted,
 - b. minimum of three (3) letters of recommendation, attesting to your potential for success as a physical therapist and/or your scholarly potential. One letter from each of the following:
 - physical therapist with whom you have had a professional association,
 - professor for a prerequisite course which you completed,
 - if previously employed, an employer,
 - If not previously employed, a physical therapist with whom you have had a professional association.
 - c. written statement of purpose reflecting your commitment to physical therapy,
 - d. documentation of related work experience,
 - e. official scores from the General Aptitude Section of the Graduate Record Examination taken within the last 5 years.
8. Submit to the department after acceptance into the program:
a completed Essential Functions document attesting that you can perform the essential functions required of physical therapy education and clinical practice.

Prerequisites to the DPT program:

Each course must be a semester in length or equivalent quarter units. One (1) semester unit is equivalent to 1.5 quarter unit (e.g. 4 semester units=6 quarter units).

All Biology, General Chemistry and General Physics courses must have a lab section. Human Anatomy and Human Physiology must be taken within five (5) years at the time of application.

No course may be repeated more than once and no more than 3 prerequisite courses may be repeated. CR/NC grades, correspondence courses, or independent study courses cannot be used for prerequisite requirements.

REQUIRED COURSE	SEMESTER UNITS	CSULB COURSE
Human Anatomy	4	Biol 208
General Biology I and II	4,4	Biol 211, 212
Human Physiology	4	Biol 207
Biostatistics	3	Biol 260 or Kines 483
General Chemistry I and II	4,4	Chem 11A and B
General Physics I and II	4,4	Physics 11A and B
General Psychology	3	Psy 100

If human anatomy and physiology are combined, the coursework must be a 2 semester, 8 unit, sequence.

General Microbiology may substitute for either General Biology I or 2.

Organic Chemistry, Biochemistry, or a combined Organic/Biochemistry course can substitute for General Chemistry II.

Selection Criteria:

The admission committee will primarily consider:

1. all college/university academic work completed including:
 - a. overall grade point average (GPA),
 - b. the GPA in all lower division prerequisite courses,
2. scores from the Graduate Record Examination.
3. letters of recommendation.

Revised 9-26-12



General Description:

Occupational Therapy is a health profession concerned with promoting health and well-being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in the occupations they want to, need to, or are expected to do, or by modifying the occupation or the environment to better support their occupational engagement.

What are some common daily activities/experiences?

Your life is made up of occupations—meaningful everyday activities. These occupations can include many roles, such as being a parent, a friend, a spouse, a tennis player, an artist, a cook, or a musician. We generally don't think about our daily occupations until we have trouble doing them. Everyone has an occupation—from the toddler whose occupations are playing and learning to develop important skills, to the older adult whose occupations are engaging with family and friends and managing his or her home. If you are recovering from an accident, injury, or disease, your valued occupations may be disrupted. Occupational therapy incorporates your valued occupations into the rehabilitation process, which improves your participation in these occupations, and assists you in returning to them.

What are 3-5 personal characteristics important for happiness and success in your profession?

A person interested in occupational therapy must be able to effectively communicate with others, actively adapt and think critically, as well as be an efficient and productive member of an interdisciplinary team serving patients at all levels of care. Successful practitioners are able to integrate philosophical and theoretical knowledge, values, beliefs and ethics in order to improve participation and quality of life for those individuals and populations with and without impairments and limitations. They typically demonstrate a strong knowledge of a person's psychological, physical, emotional, and social makeup, and can evaluate how a condition (or risk for a condition) is affecting the body and mind using a holistic perspective.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

When selecting an occupational therapy graduate program, students should carefully consider the program(s) that best match their personal and professional goals and choose programs that will help them achieve these goals, whether as a practitioner, manager, scientist, or teacher. For example, students who have a strong academic record in science and are interested in pursuing careers that include research, scholarship and leadership, are best matched to the OTD programs in research universities. Students who have demonstrated a strong interest in community service and have professional goals focused on direct service delivery may be best suited to a master's program. Each has an important role to play as the profession strives to address the growing need for occupational therapy.

Preparing for Admission:

- Individual OT programs will determine whether an applicant is eligible for admission and will notify applicants directly regarding all admission decisions. OT programs may not take all OTCAS application fields into consideration in the admission decision process. Admission policies and

NAAHP Fact Sheet for Health Professions Advisors
Occupational Therapy

prerequisites vary significantly by program and program delivery model; e.g., a 2.5 year master's graduate program will differ from the requirements for admission to a 3+2 master's format.

- Resources for researching schools: [AOTA: OT Program Formats & Admissions](#)

The Admissions Cycle:

- CAS(s):
 - [OTCAS: https://otcas.liasoncas.com/applicant-ux/#/login](https://otcas.liasoncas.com/applicant-ux/#/login)
 - [OTACAS: https://otacas.liasoncas.com/applicant-ux/#/login](https://otacas.liasoncas.com/applicant-ux/#/login)
 - Application opens: July 2016
 - Application can be submitted: July 2016 – June 2017
 - Number of schools participating:
 - Fees, fee waivers:
 - OTCAS: \$140 for the first program, \$60 for each additional program
 - OTACAS: \$50.00 for each additional program
 - Letters of recommendation logistics: References should come directly from the evaluator to OTCAS/OTACAS, unless otherwise instructed by your designated program. Evaluators can only submit references electronically.
 - Standardized test logistics: If required by program, GRE and TOEFL test scores must be entered on the application. Any other scores should be sent directly to the program.
 - Transcripts: Send official transcripts directly to OTCAS/OTACAS.
 - Instruction manual and FAQ:
 - [OTCAS FAQ](#)
 - [OTACAS FAQ](#)
 - Contact information: 617-612-2860 / otcasinfo@otcas.org
- OTCAS on [Facebook](#)
- OTCAS on [Twitter](#)

The Admissions Process:

- Approx dates of interviews, offers: 2-6 months prior to the first semester
- [Advisor portal](#)
- Total number of applicants in most recent cycle (through CAS): approx. 9,900
- Total number of first year students (through CAS and non-participating programs) 7,193 OT (2015), 6,562 OTA (2015). Data from OT Annual Data Report, 2015-16.
- Test score and GPA averages and ranges, other data on applicants and accepted students (major, age, race/ethnicity, gender, whatever makes sense for the profession):
- Total number of students: 10,048 undergraduate and 18,550 graduate students
- Total number of graduates in 2015:
 - 136 doctoral graduates (43% 5 year growth)
 - 5,875 master's graduates (34% 5 year growth)
 - 4,914 OTA graduates (70% 5 year growth)

Training & Career Opportunities:

- Number of years: OT: Masters (5-6 years); OTD (6-7 years); OTA: Associates (2-3 years)
- Degree attained: OT: MOT/ MS; OTD; OTA: AAS
- Data on employment of recent graduates, if available: 75-100% employed within 6 mths

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors
Occupational Therapy

Key Resources for Students:

- [OT Careers](#)

Key Resources for Advisors:

- [OT Education Programs](#)
- OT Annual Data Report, 2014-15
 - <http://www.aota.org/-/media/corporate/files/educationcareers/educators/2014-2015-annual-data-report.pdf>

Social Media:

- [AOTA on Facebook](#)
- [AOTA on Twitter](#)

Advisory Council Professional Association Partner Information

The **American Occupational Therapy Association (AOTA)** advances the quality, availability, use, and support of occupational therapy through standard-setting, advocacy, education, and research on behalf of its members and the public.

Size of organization, number of member institutions

AOTA is the nationally recognized professional association promoting and protecting the professional interests of more than 213,000 occupational therapy practitioners and students nationwide.

- As of September 2016, there were 511 entry-level educational programs:
 - 14 accredited doctoral entry-level occupational therapy (OT) programs
 - 155 accredited master's entry-level occupational therapy (OT) programs
 - 220 accredited associate occupational therapy assistant (OTA) programs
 - 122 candidate, developing, or applicant programs (26 doctorate, 42 master's, and 54 associate)

New institutional members

There has been an increase in the number of developing and applicant programs due to the increased demand for occupational therapy services. Since 2007 the number of graduate OT programs has increased by 60% (89 new programs) and the undergraduate OTA programs have grown by 98% (136 new programs).

Advisory Council Contact Information

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Date updated: 10/14/2016_

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.



Resources for students
from The American
Occupational Therapy Association

Your career in Occupational Therapy

Why I Chose Occupational Therapy

Current Students Share What Attracted Them to the Profession

■ Finding “a perfect fit” in health care

Melanie Barber, Occupational Therapy Student

Columbia University, New York, New York

When I was 16, my grandfather suffered a severe stroke and was sent to a rehabilitation center. At that time I had never heard of a profession called occupational therapy. Upon visiting my grandfather, I witnessed several health care professionals working to rehabilitate him. I have always wanted to pursue a profession in which I could help people, and I thought physical therapy would best complement my natural abilities. But then I met the occupational therapist. To this day I don't remember her name, but as I watched her work with my grandfather I realized that I had found what I was looking for. What I found was that occupational therapy addressed the vital importance of people's psychological and emotional well-being, as well as their physical needs. I was a psychology major in college, and I wanted to continue to use this knowledge. I wanted to be in a health care profession where I could spend quality time with my patients, and help them to improve their quality of life in all aspects. Occupational therapy was a perfect fit. I have found that occupational therapy is one of the most holistic health care professions, and I am proud to have chosen this as my career path. It is a profession that requires sensitivity, understanding, and compassion; all of the characteristics that I value tremendously. Occupational therapy is a career that is certain to contribute much to society and bring enormous self-fulfillment. A quote by Ralph Waldo Emerson expresses this perfectly: “To know even one life has breathed easier because you have lived; this is to have succeeded.”

■ Bridging education and medicine

Brandi Buchanan, Occupational Therapy Student

University of Southern California, Los Angeles, California

Although my first desired occupation was to become a librarian, I was quite young when I changed my mind and realized that I really wanted to be a teacher. And with a mother working in the medical field, I was also fascinated by medicine and opportunities to help others achieve optimum health. So through my mom, who was familiar with the profession of occupational therapy, I found a career that bridged education with medicine; a profession that could teach and educate others about the body as well as how to achieve health and wellness.

While completing several hundred volunteer hours in a variety of occupational therapy settings, including a leprosy hospital in South America, I came to the realization that becoming an occupational therapist was my calling.

Now, while nearing the completion of my clinical occupational therapy doctorate (OTD) in public policy and advocacy, and also working in a private pediatric clinic, the most difficult part of becoming a practicing occupational therapist is deciding which of the many avenues of occupational therapy that I want to pursue. I have already found the profession of occupational therapy to be fascinating, rewarding, and challenging, and filled with countless opportunities to serve one's community, one's country, and one's world.

■ Finding a path to a career along a friend's path to recovery

Erin Cokeh, Occupational Therapy Student

University of Southern California, Los Angeles, California

It seemed like any other regular day. I had come home from my part-time job as a physical therapist aide, and my teenage sister, Evadne, just came home from school. The phone rang, and I answered it. "Hello?" I said. The voice on the other side seemed to be a mixture of emotions—frightened, scared, disturbed. It was our next door neighbor, who went to the same high school as my sister. "Jennifer was hit by a car after school. We don't know if she's even alive. I just saw it happen and the ambulance took her away." Jennifer was Evadne's best friend, and a girl that I had been mentoring throughout her high school years. They were just about to finish their junior year. Because I am 5 years older than them, they often came to me for advice for just about everything. And now, Jennifer's life was held by just a string of hope.

Jennifer had been an honors student, pushed hard by her parents who wanted only the best for her. She was also a talented dancer who had taken classes since she was very young, and in high school, she was teaching younger children at a local dance studio. As I looked at her from the window of the intensive care unit, it was hard to believe that it was the same girl, now fighting for her life. Jennifer was in a very deep coma, and no one knew if she would ever come out of it. Her parents, relatives, and friends took turns around the clock, keeping watch over her in case she woke up. It was a miracle that she survived the accident at all; she had been walking across the street after school when a car did not stop for her at the crosswalk. At the impact Jennifer bounced off the windshield head first, but instead of landing on her head she landed on her backpack, which helped cushion her fall. Her hit to the head was from the secondary impact. Her parents had always wanted her to go to a good college and get a good job. Now, all they wanted for her was to survive and, if possible, have a normal life.

As an answer to many prayers, Jennifer woke up. She could barely talk or move because of an upper motor neuron injury as a result of her hitting her head against the pavement. Due to her brain surgery, the surgeons had to shave a portion of her long hair. What really impressed me was her family's determination for Jennifer to have as normal a life as possible, even if it meant bringing her trendy clothes for her to wear in the hospital, fixing her hair to make it look as though it was not shaved, and painting her fingernails, things that she would typically do before her accident.

I visited Jennifer often at the Children's Hospital in Los Angeles, and watched as the occupational therapist worked with her. They did such fun things to help her regain her motor skills, such as baking cookies, trying to walk her dog, who came to visit her at the hospital one day—things that she enjoyed. Working as a physical therapist's aide, I noticed a vast difference in motivation between the patients who had only physical therapy, who rarely did their exercises when told, and Jennifer, who enjoyed the activities that the occupational therapist planned for her. And Jennifer got better. Slowly, she regained her ability to walk and move in a functional way—initially not as well as she used to, but she was able to get around.

At this point in time, I had to be out of the country for 6 months, and when I came back Jennifer was walking normally again, and had started her senior year of high school. Despite all of this she was able to get into the University of California, Irvine, and is currently a full-time college student there. Her occupational therapist still guides her in activities that she keeps active in, and

dancing, an occupation that she had before she was injured, was a major part of her therapy and rehabilitation. It was something that she was motivated to do, and it helped her look forward to experimenting with different ways that she could move.

Seeing Jennifer go through this whole process, as painful as it was for herself and her family, made me more aware of how the role of an occupational therapist could be so important in one's life. Yes, Jennifer could not have survived the accident without the help of brain surgeons and good doctors, but it was the occupational therapist who helped her have a higher quality of life than anyone ever hoped for—one that is meaningful to her. This inspires me to know that I can make a difference in the lives of others, simply by caring for my patients and being aware of their needs and what is meaningful for them in their own lives.

■ Creativity, imagination, and “puzzle solving”

Stacy Landau, Occupational Therapy Student

Ithaca College, Ithaca, New York

I always knew that I wanted to have a career in a health-related profession, because I was extremely interested in medicine and I wanted to work in a profession that would enable me to work with other people on a daily basis. I decided to become an occupational therapist because I wanted to help people, and that is exactly what occupational therapists do: they assist people in becoming independent.

The profession of occupational therapy appealed to me because occupational therapists can work with clients of all ages and they can work in numerous settings, such as hospitals, schools, or private clinics. Occupational therapy also interested me because occupational therapists have the opportunity to be creative and imaginative in catering their therapeutic interventions to specific clients. I like to think of occupational therapists as puzzle solvers, because they assist clients in solving how to complete tasks that they may or may not have been able to do in the past.

My experiences in the field of occupational therapy, which include my education, fieldwork, and being an active member of the American Occupational Therapy Association, have been extremely rewarding, challenging, and enlightening, and I would definitely recommend the profession to anyone.

■ Direct involvement offers many rewards

Chrisha McGann, Occupational Therapy Student

University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma

I have always been attracted to the field of occupational therapy by the wide range of opportunities it encompasses. Through my work experience with adults with developmental disabilities, I have seen that occupational therapists can improve an individual's standard of living and allow one a greater level of independence and self worth. I have also seen and been a part of occupational therapists working with children with developmental disabilities by improving strength and functioning to achieve developmental milestones and their ability to just be kids. At the same time, the therapists are teaching parents ways to enhance their child's development and supporting them in their child's occupations.

Occupational therapy can also teach a person ways of adapting and being as independent as possible after a stroke, spinal cord injury, or traumatic brain injury, to name a few medical problems. In addition, I have seen persons with mental health issues and ineffective coping skills find the help they need through occupational therapy. Occupational therapy is a field that will allow me to help others learn how to help themselves through meaningful work and activity.

I like the direct involvement occupational therapists have with their clients, and I know that occupational therapy will offer me challenging and fulfilling work on a daily basis and throughout my career.

■ Therapy (and a career) with a difference

Lisa Griggs-Stapleton, Occupational Therapy Student

University of New Mexico, Albuquerque, New Mexico

While investigating careers in health care, I asked to observe an occupational therapy session. I was sold. I left the clinic thinking, “People get to have *fun* in therapy?!” The session wasn't like any other health care I had seen. I was used to the idea that most people don't like going to the therapist, but occupational therapy was different. People, especially children, enjoy the sessions and sometimes don't want to leave. Occupational therapists have the privilege of helping people learn or relearn how to connect with their environment and we get to have fun while we do it. I am grateful to be part of such a wonderful profession.

■ Family caregiving leads to professional inspiration

Jacquelyn Nichols, Occupational Therapy Assistant Student

Erie Community College, Williamsville, New York

Major inspiration for my becoming an occupational therapy assistant came from the interaction with many health care professionals. While caregiving for my dad, until his death, the networking of health care for daddy would leave my mouth hanging open at times. Having the knowledge of being able to affect the physical and mental well-being of a person, whether elderly or young, is truly special.

I made the choice that I wanted to have numerous opportunities to help people regain wellness and continue with a healthy and purposeful life. Occupational therapy treats the whole person and engages him or her in work, self-care, and play so that the deficit or disability can be at the best level possible. I have always liked the position of supporting and helping. The interaction of all the health care professionals that my father needed was absolutely special, and I want to be part of that network.

If you have specific questions about a career in occupational therapy, please contact educate@aota.org.

Visit www.aota.org for more information about the profession and the activities of the American Occupational Therapy Association.



The American Occupational Therapy Association

Occupational Therapy's Role in Diabetes Self-Management

Occupational therapy practitioners can play a strong role in diabetes education and self-management for individuals who are likely to develop the disease as well as those who are already diagnosed.

Diabetes is characterized by hyperglycemia (high blood glucose) resulting from the body's inability to use the sugar from food eaten for energy. It is a systemic disease that can affect the body on both an immediate and a long-term basis. The most prevalent acute complication is hypoglycemia or low blood glucose. Hypoglycemia is a potentially life threatening condition requiring immediate and appropriate treatment. When blood glucose levels are persistently high, a wide range of chronic complications can occur. These can include kidney disease, vision loss, heart disease, stroke, and neuropathy, among others. Many of these long-term complications can be barriers to performance of activities necessary to successfully self-manage diabetes. Diabetes is also frequently accompanied by depression and anxiety.



Occupational therapy practitioners are experts at analyzing the performance skills and patterns necessary for people to engage in their everyday activities (occupations). They can effectively educate and train persons at risk for or who currently have diabetes to modify current habits and routines and develop new ones to promote a healthier lifestyle and minimize disease progression. Occupational therapy practitioners can assist clients to develop simple, concrete, measurable, and achievable self-management goals consistent with the seven behaviors advocated by the American Association of Diabetes Educators (AADE). These AADE 7™ Self-Care Behaviors are: (1) healthy eating, (2) being active, (3) monitoring, (4) taking medications, (5) problem solving, (6) healthy coping, and (7) reducing risks.¹ Some behaviors, such as *healthy eating*, are self-explanatory, whereas others are more involved. For example, *monitoring* includes not only blood glucose testing but also tracking blood pressure, weight, foot health, and “steps walked” to ensure the person is getting enough physical activity. Similarly, *reducing risks* encompasses a diverse group of behaviors including, but not limited to, smoking cessation; foot self-inspections; maintenance of personal health records; and regular eye, foot, and dental exams, creating a need for clients to track and diligently attend appointments with their diabetes health care team.



According to AADE's disabilities position statement, occupational therapy practitioners are viewed as part of the diabetes self-care team.² Occupational therapy practitioners are knowledgeable about the impact of medical conditions on an individual's day-to-day and long-term functioning. Through their holistic approach they address the physical, cognitive, psychosocial, and sensory aspects inherent in the performance of everyday life activities. Occupational therapy practitioners develop a collaborative relationship with their clients to prioritize what they want and need to accomplish—which is critical in a disease requiring self-management 24 hours per day, 7 days per week. Occupational therapy practitioners can modify or adapt how their clients perform their desired self-care tasks to promote ease and success in achieving their goals in managing this disease.

What Can an OT Practitioner Do for a Person With Diabetes?

Occupational therapy practitioners can fill diverse roles when working with clients to prevent and manage diabetes, including those who have developed a disability. They can incorporate general diabetes information into their instruction or they can specialize by adapting information to a particular population (e.g., persons with vision loss or amputations) or to a particular topic (carbohydrate counting or physical exercise). By way of example, the occupational therapy practitioner can:

- Promote healthy food choices and safe cooking methods;
- Instruct in safe and appropriate ways to incorporate exercise and physical activity into daily routines;
- Provide techniques to organize and track medications;
- Instruct in the use of low-vision and nonvisual devices to draw up and measure insulin;
- Instruct and provide strategies to successfully use a talking blood glucose monitor or use any blood glucose monitor one handed;
- Incorporate protective techniques and compensate for peripheral sensory loss in activities that involve exposure to heat, cold, and sharp objects;
- Educate in techniques to structure time and simplify activities to cope with depression such as breaking down dietary changes and an exercise program into manageable steps and incorporating them into present daily routines.³

Who Can Benefit, and Where Are Such Services Provided?

Persons who can benefit from occupational therapy range from those who would like to implement a lifestyle that reduces the risk of diabetes to those who already have diabetes and complications that interfere with their ability to complete self-care activities and manage the disease. Clients of any age with diabetes can benefit from occupational therapy to address their specific self-care needs and preferences.

Occupational therapy can be provided in a wide range of settings, such as a client's home, an outpatient clinic, or a hospital. It can also be provided through a program that focuses on wellness and prevention or one that focuses on medical treatment and rehabilitation for complications resulting from diabetes. Sometimes occupational therapy is available in a more specialized setting such as a diabetes clinic or low vision program. Services can be provided on a one-to-one basis or within a group and, depending on the topic, can include oral instruction, demonstration, hands-on experiences, group activities, and role playing.

Conclusion

Occupational therapy focuses on lifestyle modification, health promotion, remediation of physical and visual impairments, and maximizing self-care independence, all of which are directly and adversely affected by diabetes and its complications. Occupational therapy practitioners focus on helping clients take charge of their diabetes as opposed to being controlled by it, so they can participate in everyday activities.

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Living Life To Its Fullest™
O C C U P A T I O N A L T H E R A P Y

Occupational therapy enables people of all ages live life to its fullest by helping them to promote health, make lifestyle or environmental changes, and prevent—or live better with—injury, illness, or disability. By looking at the whole picture—a client's psychological, physical, emotional, and social make-up—occupational therapy assists people to achieve their goals, function at the highest possible level, maintain or rebuild their independence, and participate in the everyday activities of life.





Veterinary Medicine



Vet School Admission 101



Give yourself the best chances of being admitted

We're sure you've already heard how competitive it is to get into veterinary school. Sure, it's competitive – but it's not impossible. If you've got good science and math skills and an interest in helping animals, follow your dream. Who better to help you than the people who've already been there?

Grades

Duh, you say. Of course you have to have good grades to be competitive. Although a 4.0 will certainly help you, it's not an absolute necessity.

Why are grades important? They can indicate your intelligence, your study habits, and your dedication and drive to succeed. Those are all qualities veterinary schools are looking for when they evaluate applicants. When a school sees an “A,” they think you studied hard, did well, and learned.

So, what if your grades are *good* but not *great*? Does that mean you've got no chance? No, it doesn't. Veterinary schools are looking for well-rounded students. They're looking for future leaders. You can make yourself a better candidate by getting good (or great) grades as well as experience and leadership skills.

Prerequisites

You could have a 4.0 GPA and still not get into veterinary school if you haven't completed the prerequisites required for admission. Make sure you know your prospective schools' requirements when you plan your undergraduate classes. Fortunately, most schools have similar requirements. For more information and links to U.S. veterinary colleges, visit the Association of American Veterinary Medical Colleges (AAVMC) website at www.aavmc.org.

That said, check out your school's undergraduate catalog for courses that aren't on the vet school prerequisite list but might be good courses to give you a “leg up” and better prepare you for the coursework you'll have in vet school. For example, consider taking upper-level anatomy & physiology, zoology, microbiology, animal science/animal production, nutrition, and histology courses, to name a few. It's possible that taking these courses as an undergrad can make the comparable vet school classes much less stressful for you because you've already got a good foundation in that subject.

Majors

You don't have to be a pre-vet major to get into vet school – you just need to get the prerequisite coursework completed and do well. We've seen vet students whose undergraduate majors were math, engineering, English, and many others. Once you're in vet school, the playing field is equal. It's important to enjoy your undergrad studies by picking a major that you are passionate about—not simply the “best one” for getting into vet school.

Experience

If you've been in 4-H, FFA or a similar group, that's great experience that should go on your veterinary school admission form. Similarly, working with animals in any way can be of value. For example, volunteering at shelters or rescues can provide animal handling experience that will help make you a better candidate.

It goes without saying that volunteering or working for a veterinarian is very important. Not only does it expose you to your potential career (so you know what you're getting into, so to speak), but it also might provide a good recommendation for you from the veterinarian.

Varied experience is also helpful. If you have the opportunity to work in a research lab or for veterinarians who work with different species, that's a bonus that can make you more appealing to a veterinary school admissions committee. Get as much experience as you can while you have the opportunity.

Leadership Skills

Leadership experience, such as holding an office in student government or other groups, is a big plus. Get involved in your pre-vet club, student government, fraternity/sorority, or other organization. If one of these doesn't exist, get some others together and start a club of your own!

Communication Skills

Because veterinarians' patients can't really talk and tell them what's wrong, people tend to think that communication skills are less important. That couldn't be more untrue. It's essential for veterinarians to have good communications skills so their clients can understand what's going on with their animals and do their parts to help resolve the problem. Coursework or extracurricular activities that improve your communication skills are definitely helpful...not to mention it can help you when it comes to the interview.

Most of us dread public speaking, but that's all the more reason to take a class or two. Becoming more comfortable speaking to larger audiences will come in handy later in life.

Letters of Recommendation

Get to know your professors. Sure, a professor can write a letter stating that you got an "A" in their class, but can they say anything else about you? A good letter of recommendation comes from a person who knows who you really are. You can get to know professors by attending office hours, volunteering in their research projects, or joining a club that they advise. Check with the vet schools you are applying to for their requirements of who they want the letters to come from—usually they want to hear not only from your professors, but also vets that you have worked with.

Standardized Tests

Standardized tests? Again? And you thought that was over when you finished high school! The Graduate Record Examination (GRE) is required by most veterinary schools, and some also require the Biology GRE. The Medical College Admission Test (MCAT) is also accepted by some schools in place of the GRE. Find out where you can take the exam and what preparation you need to succeed. For a listing of each accredited veterinary school's requirements, go to the AAVMC site at www.aavmc.org. More information can be found at <http://www.ets.org/gre/>.

Have fun!

All work and no play can actually make you a less desirable candidate. Not all of your courses and extracurricular activities should be 100% focused on meeting the admission requirements. Do the things you like, join the clubs you find fun, and enjoy your life.

What if you don't get in?

You're not alone, and it doesn't mean you don't have what it takes. Contact the admissions staff and request feedback on your application, then address the deficiencies and reapply next year.



Additional Health Professions

Health Administration

Public Health

Acupuncture

Audiology

Nutritionist/Dietitian



NAAHP Fact Sheet for Health Professions Advisors Health Administration

General Description:

Medical and health services managers, also known as healthcare executives or healthcare administrators, plan, direct, and coordinate the operation of hospitals, health systems, and other types of organizations. They have responsibility for facilities, services, programs, staff, budgets, relations with other organizations, and other management aspects, depending on the type and size of the organization. They also work in the public sector, for example, in health departments, or in the private sector, such as with pharmaceutical companies, health insurance providers, consulting firms, or companies that make medical supplies and equipment.

What are some common daily activities/experiences?

- Improve efficiency and quality of healthcare service delivery
- Keep up to date on new laws and regulations to ensure facility compliance
- Supervise assistant administrators and support staff
- Manage the facility finances, including patient fees and billing
- Create work schedules and coordinate staff
- Represent the facility at investor meetings or on governing boards
- Maintain and organize facility service records
- Communicate with medical staff and department heads

What are 3-5 personal characteristics important for happiness and success in your profession?

- *Analytical skills* — Medical and health services managers must be able to understand and follow current regulations and be able to adapt to new laws.
- *Communication skills* — Managers must be able to communicate effectively with other health professionals.
- *Detail-oriented* — Medical and health services managers must pay attention to detail, as they might be required to organize and maintain scheduling and billing information for very large facilities.
- *Interpersonal skills* — Medical and health services managers need to be able to discuss staffing problems and patient information with other professionals, such as physicians and health insurance representatives. They must be able to motivate and lead staff.
- *Problem-solving skills* — Managers are often responsible for finding creative solutions to staffing or other administrative problems.

Preparing for Admission:

- Prerequisite coursework
- Standardized Tests
- Experience/Exposure
- Letters of Recommendation
- Resources for researching schools : AUPHA Find a Program Search Engine:
<http://www.aupha.org/resourcecenter/futurestudents/find-a-program>

The Admissions Cycle:

- CAS(es): Healthcare Administration, Management & Policy Centralized Application Service (HAMPCAS), <http://www.hampcas.org/home>
 - Application opens: September 2017

- Application cycle closes: August 2018. Specific deadlines are available on the [HAMPCAS applicant calendar](#) and in the [HAMPCAS Directory of Schools](#).
- Number of schools participating: 45 of AUPHA's 132 graduate member programs participate in the service.
- Fees, fee waivers: Application processing fees are dependent on the number of designated programs/degrees selected by the applicant. The first designation is \$115.00 and each additional designation is \$40.00. HAMPCAS does not currently offer fee waivers.
- Letters of rec logistics: Applicants may designate a minimum of two and a maximum of five letters of recommendation. HAMPCAS provides a reference portal within the application in which electronic letters are accepted from recommenders.
- CAS contact for students: (617) 612-2882, HAMPCASinfo@HAMPCAS.org
- CAS contact for advisors: Jason Walker, (202) 804-4214, jwalker@aupha.org
- HAMPCAS on Facebook: <https://www.facebook.com/HAMPCAS>
- HAMPCAS on Twitter: <https://twitter.com/HAMPCAS>

The Admissions Process:

	2015-16 Cycle	2014-15 Cycle
Applicants	387	366
Applications	858	752
Accepted	204	152
Acceptance Rate	25%	20%
Gender Breakdown	67.6% women / 31.4% men	55.7% women / 44.3% men
Ethnicity Breakdown	39% white / 61% person of color	50% white / 50% person of color

- **Geographic Data:** Primarily the United States but also several every year from other countries, including India, Nigeria, China, Canada, Saudi Arabia
- **Majors generally include something the Health or Business arenas. These include:** Biology, Business Admin/Mgmt, Community Health, Economics, Health Science, Medicine, Pharmacy, Nursing, Political Science, Psychology, and Public Health

Learn More about the Profession

Training & Career Opportunities

- Number of years: Undergraduate 4; Graduate 6
- Degree(s) attained: MHA, MPH
- Total number of graduates in most recent academic year:

	Graduate Programs	Graduate Students	Undergraduate Programs	Undergraduate Students
2014	401	27,268	308	45,114
2015	414	28,152	315	46,140

Key Resources for Prospective Students

- Resources for Future Students on the AUPHA website: <http://www.aupha.org/resourcecenter/futurestudents>

NAAHP Fact Sheet for Health Professions Advisors

Health Administration

Social Media:

- AUPHA on Facebook: <https://www.facebook.com/aupha>
- AUPHA on Twitter: <https://twitter.com/aupha>

Advisory Council Professional Association Partner Information

Association of University Programs in Health Administration (AUPHA), www.aupha.org

- **Mission**
AUPHA fosters excellence and drives innovation in health management and policy education, and scholarship.
- **Size of organization, Number of member institutions**
 - 6 staff members
 - 84 Undergraduate Program Members
 - 139 Graduate Program Members
 - 7 Doctoral Program Members
 - 2500 faculty at member programs
 - 4 Affiliate Members
 - 140 Individual Members
- **New institutional members in last two years**
 - College of William & Mary
 - Concordia College
 - Concordia University – Portland
 - D’Youville University
 - Eastern Michigan University
 - Eastern Washington University
 - Edgewood College, School of Business
 - Florida Atlantic University
 - Florida Gulf Coast University
 - Florida International University
 - Georgetown university
 - Grand Valley University
 - Icahn School of Medicine at Mount Sinai
 - Jefferson College of Health Sciences
 - Lake Erie College of Osteopathic Medicine
 - Louisiana State University
 - Lourdes University
 - Metropolitan College of New York
 - Minnesota State University Moorhead
 - Regis University
 - Robert Morris University
 - Samford University
 - Stony Brook University
 - Temple University
 - Trinity University - Executive
 - University of Louisville
 - University of Nevada, Las Vegas
 - University of New Haven
 - University of Phoenix
 - University of Texas at Tyler
 - University of Virginia
 - Xavier University

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Date updated: December 2016

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.



General Description:

Public health professionals work in a variety of different environments including community health centers, local, state and federal health departments, large non-governmental organizations, private corporations, and international health organizations. Public health practitioners treat individuals and focus on preventing disease and injury, promoting healthy lifestyles, and educating entire populations. They implement educational programs, develop policies, administer services, conduct research, and regulate health systems to achieve these goals.

What are some common daily activities/experiences?

Public health professionals also confront complex global health issues, such as improving access to health care, controlling infectious disease, and reducing environmental hazards, violence, substance abuse, and injury. In the past century, public health initiatives have been responsible for increasing life expectancy by almost 30 years in the United States. The broader development and application of population-based prevention programs will continue improving health over the next decades.

What are 3-5 personal characteristics important for happiness and success in your profession?

Public health is an interdisciplinary profession, and successful public health practitioners incorporate leadership, effective communication, data collection, and program management to improve population and community health outcomes. Public health professionals use the necessary skills to tackle the most pressing health concerns at the community, national, and international level.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

Prospective students of public health should ensure that the institution where they are applying is CEPH-accredited. The Council on Education for Public Health (CEPH) is the nationally recognized accrediting body for both schools of public health and public health programs. (www.ceph.org). The Master of Public Health (MPH) degree is the most common graduate-level degree awarded by schools and programs of public health. The degree is suited for students interested in pursuing a professional career in public health. Common work environments include hospitals, consulting firms, international agencies, state and federal agencies, health departments, managed care organizations, community-based organizations, among others. Students with strong quantitative and research skills should consider an MS which is an academic degree oriented toward students wishing to seek a career in teaching or conducting research at a college or university or other settings.

Preparing for Admission:

- Prerequisite coursework
- Standardized Tests
- Experience/Exposure
- Letters of Recommendation
- Resources for researching schools: aspsh.org/program-finder

The Admissions Cycle:

- CAS(es): SOPHAS, <http://sophas.org/>
 - Application opens: August 18, 2016

NAAHP Fact Sheet for Health Professions Advisors Public Health

- Application can be submitted: if date is different from above – is there a date of first submission? N/A
- Application system closes: August 4, 2017
- Number of schools participating: 90 out of 106 accredited institutions. Not every institution uses SOPHAS for each program, but if a program is on SOPHAS, students may not apply through any other format. Institutions may choose to have a supplemental application in addition to the SOPHAS application. See sophas.org/program-finder for details about SOPHAS programs, or contact the institution directly.
- Fees: \$135 for first school/program selected, \$50 for each additional school/program selected
- Fee waivers: [SOPHAS Fee Waiver information](#)
- Letters of rec logistics: Letters should be sent electronically to SOPHAS
- Standardized test logistics: MCAT, GRE, and TOEFL scores can be submitted through SOPHAS; other scores should be sent directly to schools.
- Transcripts: Transcripts should be sent directly to SOPHAS in Watertown, MA – do not send any materials to ASPPH/Washington, DC
- Instruction manual and FAQ: <https://portal.sophas.org/sophasHelpPages/frequently-asked-questions/index.html>
- Contact information: (617) 612-2090, SOPHASinfo@sophas.org
- CAS contact for advisors: Guy Piotrowski (gpiotrowski@aspph.org) or Brittney Dunn (bdunn@liaisonedu.com)
- SOPHAS Facebook Page: <http://www.facebook.com/SOPHASapp>

The Admissions Process:

- Advisor portal: N/A
- Approx dates of interviews, offers: Varies; many programs do not require interviews
- Total number of applicants in most recent cycle (through CAS and/or all member programs if known):
- Average # of applications per student: 3
- Total number of first year students (through CAS and all if known): 18,166 in 2015
- Total number of students: 54,112 in 2015

Learn More about the Profession

Training & Career Opportunities

- Number of years: Varies; Masters programs: 1-3 years (generally), Doctoral: 4-7 years (generally)
- Degree attained: MPH, MS, MHA, DrPH, PhD and many other options, including joint degrees
- Total number of graduates in most recent academic year: 18,781 in 2015
- Data on employment of recent graduates, if available: N/A

Key Resources for Students,

- ASPPH [Public Health \(Discover\)](#)
- ASPPH [Public Health \(Study\)](#)

Key Resources for Advisors

- <http://www.aspph.org/public-health-advisors-toolbox/>

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors
Public Health

Social Media:

- ASPPH on Facebook: <https://www.facebook.com/aspph>
- ASPPH on Twitter: <https://twitter.com/ASPPHtweets>

Advisory Council Professional Association Partner Information

Mission

The **Association of School and Programs in Public Health** (ASPPH) promotes the efforts of schools and programs of public health to improve the health of every person through education, research, and policy. Based upon the belief that “*you’re only as healthy as the world you live in,*” ASPPH works with stakeholders to develop solutions to the most pressing health concerns and provides access to the ongoing initiatives of the schools and programs of public health.

- Size of organization, Number of member institutions: 35 staff, 102 Full members and 4 Associate members

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Date updated: 8/22/2016

Career Advice

Global Health Jobs: What You Need to Know©

By [Oliver Subasinghe](#) on 07 April 2009



Unified Health System staff train nurses in Recife, Brazil, in a program funded by the Inter-American Development Bank. Building local capacity is a key focus of many global health practitioners. Photo by: Willie Heinz/IDB

Afraid of needles? Most jobs in [global health](#) don't require a lab coat or medical degree. This growing field offers career paths ranging from the extremely technical to more generalist positions, from epidemiologist to social marketer.

Global health addresses issues that cut across multiple borders, such as the eradication of tuberculosis - unlike international health, which is seen as tackling problems that mainly affect two countries, such as a cholera outbreak in a border region. Unlike some economic development work, global health can result in nearly instantaneous results, experts say.

"In development, it's hard to see the changes you're making. But in some areas of health, you can actually see the changes year to year," one human resources expert said. "Other changes may take a generation or two."

In response to [growing health inequalities](#), public donors ramped up funding for global health to more than \$12.6 billion in 2006, according to the Organization for Economic Cooperation and Development. Additionally, private entities such as the [Bill & Melinda Gates Foundation](#) have contributed billions more towards health issues.

This expansion should translate into more career opportunities and resources to address [global health challenges](#) - from reproductive health to child survival, infectious diseases to HIV/AIDS, mental health and emergency medicine to nutrition, water and sanitation. Among the emerging issues donors are beginning to address is the treatment and prevention of chronic illnesses like heart disease.

The needed global health workforce may exceed 100,000 by 2020, a U.S. global health professor estimates. They will be working for a variety of international organizations such as the World Health Organization and Red Cross, government agencies such as the U.K.'s Department of International Development, nonprofits like [Path](#), Medecins Sans Frontieres and other emergency aid organizations, as well as companies such as [Pfizer Inc.](#), the drug maker.

Prerequisites

Often, positions in global health require a doctoral degree or a master's of public health (MPH), health administration (MHA), global health or health economics. Even candidates with a medical doctorate or nursing degree may need a master's that covers management, policy, social or economic topics in this multidisciplinary field.

For career switchers with a clinical background, a master's degree can bridge experiences in medical care and development, said a former doctor at the [Pan-American Health Organization](#) who holds a master's of public health.

The theoretical side of global health should also be coupled with some practical volunteer, fellowship or work experience in a resource-deprived community. For example, the U.S. Agency for International Development offers a [global health fellowship program](#) for U.S. citizens to gain practical experience in the field or at its headquarters. St. Louis University's School of Public Health [lists dozens of fellowship](#)

[programs](#) open to people from around the world. Volunteer organizations like Voluntary Service Overseas and the Peace Corps offer many opportunities to work on health-related issues in the field, either directly or indirectly.

Foreign language skills are key to many jobs in global health. Knowledge of Russian, Portuguese and French West African dialects are in demand by global health organizations, one industry expert said. For job seekers in the developing world, a strong command of English or other donor country languages are essential.

But before applying to graduate school or a fellowship, those interested in global health should pick a particular health issue they feel passionate about, recruiters suggest, and then decide on which career discipline would make the best fit.

Global health disciplines

The global health sector may be split into seven broad disciplines: researchers, clinicians, epidemiologists, program managers, program administrators, social marketers and health policy analysts. Along with an advanced degree and field experience, recruiters identified soft skills such as flexibility, cultural sensitivity and the ability to "read" people as important for most global health positions.

Researcher

For those with an interest in curing a neglected disease or finding a low-cost way to deliver AIDS drugs, a career in research may be the right path. As more funds are being devoted to diseases that mainly affect the developing world, such as malaria or leprosy, there is increasing opportunities to study and eradicate these health scourges as a medical researcher at academic institutions, foundations or drug makers.

Research opportunities exist even outside the laboratory, on issues such as health economics or health systems administration. A medical doctorate or postgraduate degree is usually needed for such work. If lab work or academia does not sound appealing, then research utilization - bringing research out of the classroom into the field - might be an alternative path. Academic institutions such as Tulane University Law School's [Payson Center for International Development](#), the [University of Washington's Department of Global Health](#) and [George Mason University's](#) College of Health and Human Services focus on this.

Epidemiologist

Epidemiologists prevent, monitor and respond to disease outbreaks, for instance by designing vaccination campaigns. On a near-daily basis, epidemiologists analyze disease patterns and investigate what started an outbreak. Someone with an interest in biology, statistics and frequent travel into the field may especially like this discipline. International organizations such as WHO and the Pan-American Health Organization are among the major employers of epidemiologists.

Clinician

This includes "traditional" medical professions such as doctor, nurse, midwife, psychologist and other health workers. However, direct contact with patients is rare, as global health programs tend to focus on health systems and management. Still, in some niches - including humanitarian aid and disaster response - there is a need for health workers to directly treat patients.

Program manager

Program managers oversee the design, evaluation, monitoring and implementation of global health programs in the field or at headquarters. This may involve running an immunization campaign, managing a refugee camp or building local health capacity in a developing country. A master's degree in health, business administration or international development is almost always required, along with foreign language skills and some previous work experience. Nonprofits and other global health organizations are increasingly hiring developing country nationals instead of expats for program manager positions, although the availability of well-trained and experienced candidates varies greatly depending on the country.

Organizations such as Engender, Care International, Chemonics International Inc., International Medical Corps, WYG International and others are periodically seeking to hire program managers.

Job seekers who wish to design health programs may find a medical or nursing degree a good first step, but they must have some experience working on a global health issue or international development.

Program assistant or administrator

These positions support programs in the field with "back office" work such as accounting, budgeting, recruiting, and grant proposal writing. While program assistants handle tasks related to a particular project or program, administrators tend to be focused on an entire organization. The most program administrator vacancies can be found in the nonprofit sector.

Program assistants and administrators may not require an advanced degree.

Social marketer or health educator

These global health disciplines involve the promotion of healthy behaviors in a culturally appropriate way. Many techniques in [social marketing](#) have been adapted from the private sector. Health education may involve capacity building efforts and the design and supply of health products to underserved communities.

Some employers require a background in the commercial sector, especially in marketing or raising the awareness of public health issues. Experience in developing countries is often mandatory.

Organizations that work on social marketing and health education initiatives include the [Academy for Educational Development](#), BroadReach Healthcare, Population Services International and Futures Group International.

Policy analyst

For those with an interest in the "big picture" of improving global health or in helping countries to improve health care, a position as policy analyst may be a good fit. These are usually higher-level positions for candidates with more experience, but there are opportunities for more junior analysts to conduct research on policy issues. An MPH or higher degree is always a prerequisite.

Policy work is usually done at government agencies, think tanks or donors such as the World Bank, [Rand Corp.](#) or Center for Strategic and International Studies.

The global health profession is constantly evolving and, as its scope of work expands, new disciplines emerge. Such career tracks may involve work on the environment, water and sanitation, for instance.

Several Web sites offer job listings and useful information on global health careers. [Devex](#) provides jobs, business opportunities and news, as well as listings of [top global health organizations](#). The Global Health Council provides extensive information on global health issues and jobs. Humanitarian aid consortium InterAction offers a fee-based online jobs board that includes positions in the emergency health field.

[Oliver Subasinghe](#) is a Devex international development correspondent in Washington, D.C. He previously served as a microfinance fellow for Kiva.org in Kenya and Uganda. During his tenure, he worked with Kiva's field partners to improve their operations and governance. He holds a bachelor's degree from Eckerd College and a master's in business from the College of William & Mary's Mason School of Business.



General Description:

Acupuncturists can create financially supportive careers with flexible work schedules that provide an opportunity for a more balanced lifestyle for both the practitioner and patient. Patients are viewed from a holistic perspective, taking into account their physical, mental, and emotional health. Acupuncturists are able to spend time developing a collaborative relationship with patients, assisting them in maintaining their health and promoting a consciousness of wellness. The settings in which practitioners work vary from a multi-disciplinary clinic with other health care professionals, to a hospital, to a private practice. Other career options are also available.

What are some common daily activities/experiences?

Although acupuncturists encounter a wide range of chronic and acute issues, they bring to bear skills that include not only acupuncture, but also *tui na* manual therapy, including cupping and moxa heat therapy, herbal medicine, energetic exercises such as *tai qi* and *qi gong*, and food therapy, all based on the unified principles of Traditional Chinese Medicine or other traditions, such as Korean, Japanese, or Five Element practice.

What are 3-5 personal characteristics important for happiness and success in your profession?

A key trait the aspiring acupuncturist should have is patience, patience to watch the patient's health issues resolve naturally, slowly, and non-heroically, with emphasis on the body's natural ability, properly stimulated, to heal itself. Patience is also needed to grow an acupuncture practice slowly and surely, realizing that it may take longer than more conventional practices to hit full stride. Dedication is needed to learn continuously about a knowledge-based practice that is 5,000 years old, multi-cultural, and whose richness in applications and adaptations are still being discovered.

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

The ancient Chinese medical cannon, the *Nei Jing*, states that "the inferior physician treats, the superior physician teaches." Students preparing to become an acupuncturist should ask if they like to teach, and if they have, or can develop that ability. There are two reasons for this. First, most Americans have not had acupuncture, know very little about it, and will need to be informed so they can choose to experience this form of medicine. Second, once they make that choice, they will need to be further educated on how this medicine specifically applies to their condition, what to expect, and how active participation and partnership can accelerate their progress.

Preparing for Admission:

- **Prerequisite coursework:** Varies by college. The national accrediting agency (ACAOM) prescribes minimum requirements, which are specified in ACAOM's *Accreditation Manual* under Standard 6 (Admissions). (See page 16). ACAOM's basic prerequisite is satisfactory completion of at least two academic years (60 semester credits/90 quarter credits) of education at the baccalaureate level that is appropriate preparation for graduate level work, or the equivalent (e.g., certification in a medical profession requiring at least the equivalent training of a registered nurse or a physician assistant), from an institution accredited by an agency recognized by the U.S. Secretary of Education. A number of CCAOM schools, however, exceed this minimum by requiring a baccalaureate degree.

NAAHP Fact Sheet for Health Professions Advisors

Acupuncture and Oriental Medicine

- **Standardized Tests:** no information provided
- **Experience/Exposure:** no information provided
- **Letters of Recommendation:** no information provided
- **Resources for researching schools:** CCAOM Member College U.S. Map – <http://www.ccaom.org/membermap.asp>

The Admissions Cycle:

- CAS(es): Acupuncture programs do not use a common application; applications are submitted to schools directly.

The Admissions Process:

- Total number of students: 7,771

Learn More about the Profession

Training & Career Opportunities

- Number of years: 3 or 4
- Degree(s) attained: Master of Science in Acupuncture (3 yrs.) or Master of Science in Oriental Medicine (4 yrs.). Advanced training at doctoral level is available with the Doctor of Acupuncture and Oriental Medicine (DAOM) degree. A First-Professional Doctorate Degree is being piloted at some acupuncture colleges.
- Data on employment of recent graduates, if available: Solo practice is the norm, but other practice settings include integrative medical practices and facilities (including hospitals), teaching, translating, publishing, research, or working with an herb or acupuncture supply company.

Key Resources for Students

- <http://www.ccaom.org/faqs.asp> and “Featured AOM Graduates” on CCAOM homepage (www.ccaom.org).

Key Resources for Advisors

- <http://www.ccaom.org/careers.asp>
- “**Choose a Fulfilling Career in Acupuncture & Oriental Medicine**” (free). This tri-fold pamphlet contains information about career opportunities in the field of acupuncture and Oriental medicine and may be ordered through Council’s national office.
- “**CCAOM: Educational Excellence in Acupuncture & Oriental Medicine**” (free), provides information about CCAOM and its work in promoting educational excellence in acupuncture and Oriental medicine and may be ordered through Council’s national office.

Social Media: N/A at this time.

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Acupuncture and Oriental Medicine

Advisory Council Professional Association Partner Information Council of Colleges of Acupuncture and Oriental Medicine, www.ccaom.org

- **Mission**
The mission of CCAOM is to support member institutions to deliver educational excellence and quality patient care.
- **Size of organization, Number of member institutions**
CCAOM's national office has two full-time employees and one part-time employee. The membership consists of 56 AOM colleges and programs in 21 states (excluding branch campuses).
- **New institutional members in last two years**
Two new member colleges have joined CCAOM in the last two years:
 - Woung University of Oriental Medicine (NV)
 - Golden State University (CA)

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Date updated: August 22, 2016



General Description:

Audiologists are licensed health-care professionals who provide patient-centered care in the prevention, identification, diagnosis, and evidence-based treatment of hearing, balance and other auditory disorders for people of all ages. Hearing and balance disorders are complex with medical, psychological, physical, social, educational, and employment implications. Treatment services require audiologists to have knowledge of existing and emerging technologies, as well as interpersonal skills to counsel and guide patients and their family members through the rehabilitative process. Audiologists provide professional and personalized services to minimize the negative impact of these disorders, leading to improved outcomes and quality of life.

Speech-language pathologists provide vital services across the lifespan to prevent, evaluate and treat disorders in speech, spoken and written language, social communication, cognition, voice, fluency, and swallowing. They work in healthcare, education, private practice, and community-based settings in collaboration with clients, families, and other professionals to improve the quality of life for children and adults with communication and swallowing disorders.

What are some common daily activities/experiences?

Common daily activities for **audiologists** include providing assessments, fitting and dispensing hearing technology, counseling, consulting and collaborating with others and preparing diagnostic and treatment reports. Some audiologists and hearing scientists also spend part of their day engaged in teaching, research or administration. [Learn more](#) about the profession of audiology.

(<http://www.asha.org/Students/Audiology/>)

Common daily activities for **speech-language pathologists** include providing screenings, assessments, treatment and counseling, consulting and collaborating with others and preparing diagnostic and treatment reports. Some speech-language pathologists and speech-language scientists also spend part of their day engaged in teaching, research or administration. [Learn more](#) about the profession of speech-language pathology. (<http://www.asha.org/Students/Speech-Language-Pathology>)

What are 3-5 personal characteristics important for happiness and success in your profession?

Success in the professions of audiology and speech-language pathology requires:

- An interest in working with people to prevent or alleviate communication disorders
- The ability to care about, empathize and collaborate with others
- An inquisitive mind, and the ability to use state of the art science and technology in the context of evidence-based practice

What are 3-5 key questions students should be asking themselves as they prepare for your profession?

- What inspired you to consider a career in communication sciences and disorders? Perhaps a friend or loved one has a hearing, balance, communication or swallowing disorder or you are drawn to the science of the professions.
- What are your professional goals? There are many career options (clinician, educator, scientist, administrator) and work settings (health care, schools, private practice, research institutions) available in audiology, speech-language pathology, and the speech-language and hearing sciences so having a

NAAHP Fact Sheet for Health Professions Advisors

Audiology & Speech-Language Pathology

sense of one's personal and professional goals can impact where a student chooses to study and what degrees will be necessary.

Preparing for Admission:

- For academic preparation, see [Planning Your Education in Audiology and Speech-Language Pathology](#).
- The [Graduate Record Examination \(GRE\)](#) may be required for admission to graduate degree programs in audiology and speech-language pathology. Not all institutions require an examination for admission.
- Resources for researching schools: EdFind, an online search tool, identifies degree programs in Audiology and Speech-Language Pathology: <http://www.asha.org/edfind>

The Admissions Cycle:

- Applications can be submitted directly to institutions
- CAS: The Communication Sciences and Disorders Centralized Application Service (CSDCAS) is owned and administered by the Council of Academic Programs in Communication Sciences and Disorders (CAPCSD).
 - <http://www.capcsd.org/csdcas-student-page/>
 - Application opens: August 2
- CSDCAS [Facebook](#) Page: <http://www.facebook.com/CSDCASApp>
- CSDCAS [Twitter](#) Feed: <https://twitter.com/CSDCASApp>

The Admissions Process:

The below data on admissions and enrollment are from the Communication Sciences and Disorders (CSD) Education: 2014–2015 Academic Year conducted by the Council of Academic Programs in Communication Sciences and Disorders & American Speech-Language-Hearing Association. Retrieved from www.capcsd.org and www.asha.org.

Data was based on an overall response rate of 92% (287 of 312) of the institutions completing the CSD Education Survey. No extrapolation was conducted.

Applications Received (total number of applications across institutions; not number of individual applicants)

- 6,017 entry-level clinical doctoral in audiology
- 65,510 master's in speech-language pathology
- 162 post entry-level clinical doctoral in audiology
- 92 post entry-level clinical doctoral in speech-language pathology
- 612 research doctoral in audiology, speech-language pathology and/or speech and hearing sciences

Newly Enrolled:

- 784 newly enrolled students in entry-level clinical doctoral in audiology
- 8,063 newly enrolled students in master's in speech-language pathology

GPA Averages: applicants who were offered admission

- 3.25-3.97 GPA mean range of students offered admission to clinical entry-level doctoral in audiology
- 3.25-3.98 GPA mean range of students offered admission to Speech-Language Pathology Master's

Total Enrollment:

- 2,793 entry-level clinical doctoral in audiology

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors

Audiology & Speech-Language Pathology

- 16,731 master's in speech-language pathology

Learn More about the Profession

Training & Career Opportunities:

There are over 300 colleges and universities offering undergraduate and graduate CSD degree programs in the United States. Preparation to become an audiologist entails earning an entry-level clinical doctoral degree with a major emphasis in audiology [e.g., the Doctor of Audiology (Au.D.) degree]. The master's degree is required to practice as a speech-language pathologist. A PhD is most often required for faculty-researcher careers.

Audiology

- Number of years: The time-to-degree is 3 or 4 years of full time study.
- Degree attained: Doctor of Audiology (Au.D.)
- 2014-2015 AY: 623 clinical entry-level doctoral degrees in audiology were granted (CSD Education Survey)
- Healthcare setting (including private practice) is the primary first employment setting among recent audiology graduates

Speech-Language Pathology

- Number of years: The time-to-degree is 2 years of full time study.
- Degree attained: Master's degree
- 2014-2015 AY: 7,539 master's degrees in speech-language pathology were granted (CSD Education Survey)
- School setting (pre-K-12) is the primary first employment setting among recent graduates

Data on workforce supply and demand:

ASHA-Certified Audiologists

- 74% are employed in health care settings
- 30% are employed in full- or part-time private practice
- National ratio: 4.0 audiologists for every 100,000 residents
- Much faster than average growth through 2024:
 - 3,800 additional audiologist needed
 - 29% increase in job openings

ASHA-Certified SLPs

- 53% are employed in school settings
- 39% are employed in health care settings
- National ratio: 46.6 SLPs for every 100,000 residents
- Much faster than average growth through 2024
 - 28,900 additional speech-language pathologists needed
 - 21% increase in job openings

Key Resources for Students:

- ASHA information for prospective students: <http://www.asha.org/students/>
- Planning Your Education: <http://www.asha.org/Students/Planning-Your-Education-in-CSD/>
- EdFind (search for graduate programs): <http://www.asha.org/edfind/>

For more information on many health professions, we recommend the NAAHP publication, Health Professions Admission Guide: Strategies for Success, available on the NAAHP website.

NAAHP Fact Sheet for Health Professions Advisors Audiology & Speech-Language Pathology

Key Resources for Advisors:

- **Audiology and Speech-Language Pathology Career Brochures**
[Click here](#) to order free copies of:
 - Make a Difference, Make a Change, general brochure
 - Make a Difference, Make a Change with a Career as a School-Based Speech-Language Pathologist
 - Make a Difference, Make a Change with a Career in Health Care
 - Make a Difference, Make a Change with a Career as a College Professor in Communication Sciences and Disorders

Advisory Council Professional Association Partner Information

The **American Speech-Language-Hearing Association (ASHA)** is the national professional, scientific, and credentialing association for 186,000 members and affiliates who are audiologists; speech-language pathologists; speech, language, and hearing scientists; audiology and speech-language pathology support personnel; and students.

ASHA Mission

Empowering and supporting audiologists, speech-language pathologists, and speech, language, and hearing scientists through:

- Advancing science
- Setting standards
- Fostering excellence in professional practice, and
- Advocating for members and those they serve

ASHA Vision

Making effective communication, a human right, accessible and achievable for all.

Size of organization, Number of member institutions: 186,000 members and affiliates

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Date updated: 8/30/2016

For more information on many health professions, we recommend the NAAHP publication, [Health Professions Admission Guide: Strategies for Success](#), available on the NAAHP website.



How to Become a Nutritionist/Dietitian



Job Description

Nutritionists and Dietitians create food plans and nutrition programs, and they oversee meal preparation as well as the serving of meals. They treat illnesses by promoting healthy eating habits and suggest ways to modify a diet for a healthy lifestyle. Some specialize and become a sports nutritionist, clinical dietitian, public health nutritionist, management dietitians or consultant.

Work Environment

Nutritionists work indoors near kitchens and food preparation areas. Some may manage food service systems for hospitals, nursing care facilities, schools, and other institutions. Some work weekends and holidays while others work early morning or late evening shifts. Nutritionists work in close contact with patients who may be demanding, critically ill and terminal, or have mental health issues. Computer knowledge is required for tasks such as planning menus, creating special recipes, tracking progress, maintaining inventory, and billing clients if working in private practice or consulting.

Career Outlook

The California job outlook for Nutritionists over the next decade is excellent, and the field is expected to grow on average of 9.6% - 19.6% over the next 5 years. The Bureau of Labor Statistics also expects an average national growth rate of 7.4% - 13.3% with 62,038 jobs available throughout the U.S by 2016.

Factors that affect demand are population growth, aging, and increasing concern about health and diet. Career demand is expected to be good in hospitals, nursing home facilities, community health programs, nutrition research, and with government food service control programs. In private industry, jobs are expected to increase in catering, restaurants, medical supply, and employer-sponsored fitness programs.

Income

Income varies depending on location and the size and type of the employer. In the U.S., a Nutritionist's salary ranges from entry-level (\$4,000/month) to experienced (\$6,000/month).

Education Requirements

Bachelor's Degree and Master's Degree programs in Nutritional Science are designed to prepare students to work in professional dietetic careers. Students study the physiological and biochemical principles underlying human nutrition and the dietary changes and metabolic understanding of the disease process.

Relevant undergraduate courses include Biochemistry, Chemistry, Microbiology, Physiology, Diet Therapy, Food Quality, Human Nutrition, Nutrition and Disease, Personnel

How to Become a Nutritionist/Dietitian

Management, Purchasing and Preparation, Special Dietary Needs of the Young, Elderly, and Ill, Business, Math, Statistics, Computer Science, and Psychology. Professional programs provide specializations in areas such as administration, education, research, and clinical and community dietetics. Also, a professional Dietetic program's admission may be limited to students who have successfully completed lower division courses in food and nutrition. Once accepted in a program, students attend lectures on menu planning, meal preparation, and food nutrition. Dietetic programs must be approved by the American Dietetics Association's Commission on Accreditation for Dietetics Education to qualify for internships or certification as a Registered Dietitian.

Bachelor degree programs in dietetics or nutrition, which include an internship program, prepare graduates for membership into the American Dietetic Association (ADA). Dietitian programs are often designed to provide coursework requirements for admission into a six-month to twelve-month internship program after completing the required coursework for the Bachelor's degree.

California Masters Programs:

University of Southern California

Master of Science in Nutrition, Healthspan, and Longevity

California State University, Chico

California State University, Long Beach

California State University, Northridge

California Polytechnic State University

Loma Linda University: School of Public Health

Loma Linda University: Dept of Nutrition

Pepperdine University

San Diego State University

San Jose State University

University of California at Berkeley: Graduate Program in Nutrition

University of California at Berkeley: Public Health Nutrition

University of California, Davis

How to Become a Nutritionist/Dietitian

Licensing & Certification

Licensure, certification and registration requirements vary by state. Licensing is not required in California. However, job applicants with specialized training, an advanced degree, and certification beyond the state's minimum requirements will find the best job opportunities.

Voluntary certification is available from:
The American Dietetic Association (ADA)
120 S. Riverside Plaza, Suite 2000
Chicago, IL 60606-6995
www.eatright.org
membership@eatright.org
800-877-1600

The Commission on Dietetic Registration of the American Dietetic Association provides the Registered Dietitian credential to individuals who pass an exam after completing academic coursework and a supervised internship. To maintain the status as a Registered Dietitian, professionals must complete a minimum of 75 credit hours in approved continuing education classes every 5 years.

Special Consideration

Nutritionists may work in kitchens that are hot and steamy, and they may be on their feet for most of the day. They may also work in close contact with patients who are demanding, critically ill or terminal. If working as a consultant or in private practice, a professional will need skills and knowledge to build a business.

Sources of Additional Information

American Dietetic Association (ADA)
www.eatright.org
800-877-1600

American Health Care Association (AHCA)
www.ahca.org
202-842-4444

Association of Schools of Allied Health Professions (ASAHP)
www.aahp.org
202-293-4848

School Nutrition Association (SNA)
www.schoolnutrition.org
703-739-3900

The background is a light blue collage of medical-related elements. It includes a magnifying glass on the left, a stethoscope at the bottom, and several hexagonal icons: a heart, a clipboard, a molecular structure, and a pill. Faint text like 'MEDICAL' and 'Healthy Care' is visible in the background.

Health Professions Resources

Roundtable Discussion for Advising Undocumented Pre-Health Students

Presented by:

Amanda Taylor, M.Ed.,
Assistant Director & Pre-Health Advisor
Pomona College



&

Elba Muñoz, M.A.,
Assistant Director, PPC
Keck Graduate Institute



I. Defining DACA and Undocumented

- A. Undocumented: not U.S. citizens, U.S. nationals, or “eligible noncitizens”
 - 1. Not the same as an international student
- B. DACA: has received deferred action under the Deferred Action for Childhood Arrivals
 - 1. Eligible for work authorization and SSN
- C. Undocumented and DACAmented individuals represent many races and ethnicities

II. Key Issues & Best Practices

A. DACA Fees

- 1. Can be prohibitive
- 2. Individuals may not be eligible or may not want to apply

B. Admissions

- 1. Identifying on the CAS/application
- 2. DACA and undocumented friendly schools
 - a) <https://www.pomona.edu/administration/pre-health/explore/undocumented-and-documented-student-resources/medical-schools-open-undocumented-and-daca-applicants>

C. Financial Aid

- 1. Not eligible for federal aid; may be eligible for state or college financial aid
 - a) In-state tuition map
 - (1) http://unitedwedream.org/wp-content/uploads/2014/05/DEEP_TuitionAidMap_June2015.pdf
- 2. Can file FAFSA
 - a) For CA, also need to file DREAM application
- 3. Financial Aid and Undocumented Students FAQ
 - a) <https://studentaid.ed.gov/sa/sites/default/files/financial-aid-and-undocumented-students.pdf>

D. Internships

- 1. DACA eligible if receive work authorization, otherwise look into institutional or outside aid to support intern or volunteer opportunities

Roundtable Discussion for Advising Undocumented Pre-Health Students

E. Testing

1. For MCAT can contact AAMC for a Proxy ID if do not have SSN; ID presented must have been issued by a government agency

F. Political Climate

1. Policies can change at any time
2. Students may be supporting or concerned about family members

G. Disclosure

1. You may not know a student's status - do not ask

H. Residency/Employment

1. Ability to secure employment following graduate program
2. PHD Residency Program Guide for DACA
 - a) <http://www.phdreamers.org/resources/residency-program-guide-to-considering-candidates-with-daca/>
3. PHD Residency Program Guide for undocumented
 - a) <http://www.phdreamers.org/resources/residence-for-undocumented-medical-students/>
4. PHD Career Pathway Chart
 - a) <http://www.phdreamers.org/resources/pathways-chart/>

I. Giving Support

1. Awareness, sensitivity, and resourcefulness
2. Top 10 Ways to Support Undocumented Students
 - a) http://www.e4fc.org/images/E4FC_EducatorTop10.pdf
3. PHD Medical School FAQ
 - a) <http://www.phdreamers.org/wp-content/uploads/2013/05/PHD-MedSchoolFAQ-ver.2.pdf>

III. Resources

- A. Pomona College Pre-Health Advising: Undocumented & DACAmented Student Resources
 1. <https://www.pomona.edu/administration/pre-health/explore/undocumented-and-dacamented-student-resources>
- B. United We Dream
 1. <http://unitedwedream.org/>
- C. Dream Educational Empowerment Program (DEEP)
 1. <https://unitedwedream.org/about/projects/education-deep/>
- D. Pre-Health Dreamers
 1. <http://www.phdreamers.org/>
- E. Act on a Dream
 1. <http://www.actonadream.org/resources/medical-school/>
- F. Educators for Fair Consideration
 1. <http://e4fc.org/>
- G. U.S. Dept. of Education Resource List
 1. <https://www.pomona.edu/sites/default/files/u.s-dept.-of-education-resource-list.pdf>

Medical School Policies on Deferred Action for Childhood Arrivals (DACA)

2017

In 2012, the Obama administration granted temporary relief from deportation for certain unauthorized immigrants who entered the United States as children, known as Deferred Action for Childhood Arrivals (DACA). To date, more than 640,000 individuals have applied for DACA status, which confers lawful U.S. presence, a social security number, and work authorization, allowing for participation in medical residency training. Though still a small percentage of total applicants, the AAMC recorded an 8-fold increase in 2014 medical school applicants that identified a DACA status. Below is a partial list of medical schools that have reported willingness to consider DACA applicants.

United States

State	Medical School Name	Accepts DACA	DACA Details
AL	University of Alabama School of Medicine		
AL	University of South Alabama College of Medicine		
AZ	University of Arizona College of Medicine		
AZ	University of Arizona College of Medicine-Phoenix		
AR	University of Arkansas for Medical Sciences College of Medicine		
CA	California Northstate University School of Medicine		
CA	Keck School of Medicine of the University of Southern California	✔	
CA	Loma Linda University School of Medicine	✔	
CA	Stanford University School of Medicine	✔	
CA	University of California, Davis, School of Medicine	✔	
CA	University of California, Irvine, School of Medicine	✔	Must have EAD
CA	University of California, Los Angeles David Geffen School of Medicine	✔	
CA	University of California, Riverside, School of Medicine	✔	
CA	University of California, San Diego School of Medicine	✔	http://meded.ucsd.edu/index.cfm/asa/admissions/application_process/
CA	University of California, San Francisco, School of Medicine	✔	
CO	University of Colorado School of Medicine		
CT	Frank H. Netter MD School of Medicine at Quinnipiac University		
CT	University of Connecticut School of Medicine	✔	
CT	Yale School of Medicine	✔	
DC	Georgetown University School of Medicine	✔	
DC	George Washington University School of Medicine and Health Sciences		
DC	Howard University College of Medicine	✔	
FL	Florida Atlantic University Charles E. Schmidt College of Medicine		
FL	Florida International University Herbert Wertheim College of Medicine		
FL	Florida State University College of Medicine	✔	
FL	University of Central Florida College of Medicine		
FL	University of Florida College of Medicine		
FL	University of Miami Leonard M. Miller School of Medicine	✔	
FL	USF Health Morsani College of Medicine		
GA	Emory University School of Medicine	✔	No financial aid available for students with DACA status at this time.
GA	Medical College of Georgia at Augusta University		
GA	Mercer University School of Medicine		
GA	Morehouse School of Medicine		
HI	University of Hawaii, John A. Burns School of Medicine	✔	

United States

State	Medical School Name	Accepts DACA	DACA Details
IL	Chicago Medical School at Rosalind Franklin University of Medicine & Science		
IL	Loyola University Chicago Stritch School of Medicine		http://ssom.luc.edu/daca/
IL	Northwestern University The Feinberg School of Medicine		
IL	Rush Medical College of Rush University Medical Center		
IL	Southern Illinois University School of Medicine		
IL	University of Chicago Division of the Biological Sciences The Pritzker School of Medicine		
IL	University of Illinois College of Medicine		
IN	Indiana University School of Medicine		
IA	University of Iowa Roy J. and Lucille A. Carver College of Medicine		
KS	University of Kansas School of Medicine		
KY	University of Kentucky College of Medicine		Applicants holding DACA status may be considered for admission but are not eligible for federal loans or institutional scholarship to fund their medical education at UKCOM. These individuals should plan to secure private funding prior to applying.
KY	University of Louisville School of Medicine		http://louisville.edu/medicine/admissions/policies/residency-requirements
LA	Louisiana State University School of Medicine in New Orleans		
LA	Louisiana State University School of Medicine in Shreveport		
LA	Tulane University School of Medicine		
MD	Johns Hopkins University School of Medicine		
MD	Uniformed Services University of the Health Sciences F. Edward Hebert School of Medicine		
MD	University of Maryland School of Medicine		
MA	Boston University School of Medicine		
MA	Harvard Medical School		
MA	Tufts University School of Medicine		
MA	University of Massachusetts Medical School		In state and out of state DACA applicants may apply. http://www.umassmed.edu/som/admissions/application-process/selection-criteria/
MI	Central Michigan University College of Medicine		
MI	Michigan State University College of Human Medicine		
MI	Oakland University William Beaumont School of Medicine		
MI	University of Michigan Medical School		https://medicine.umich.edu/medschool/education/md-program/md-admissions/requirements
MI	Wayne State University School of Medicine		
MI	Western Michigan University Homer Stryker M.D. School of Medicine		
MN	Mayo Medical School		
MN	University of Minnesota Medical School		Please contact the Office of Admissions if you are a Minnesota resident with DACA designation.
MS	University of Mississippi School of Medicine		


United States

State	Medical School Name	Accepts DACA	DACA Details
MO	Saint Louis University School of Medicine	✓	
MO	University of Missouri-Columbia School of Medicine		
MO	University of Missouri-Kansas City School of Medicine		
MO	Washington University in St. Louis School of Medicine	✓	http://mdadmissions.wustl.edu
NE	Creighton University School of Medicine		
NE	University of Nebraska College of Medicine		
NV	University of Nevada School of Medicine	✓	
NH	Geisel School of Medicine at Dartmouth	✓	
NJ	Cooper Medical School of Rowan University		
NJ	Rutgers New Jersey Medical School	✓	
NJ	Rutgers, Robert Wood Johnson Medical School	✓	
NM	University of New Mexico School of Medicine	✓	
NY	Albany Medical College		
NY	Albert Einstein College of Medicine	✓	
NY	City University of New York School of Medicine	✓	
NY	Columbia University College of Physicians and Surgeons	✓	N/A
NY	Hofstra Northwell School of Medicine at Hofstra University		
NY	Icahn School of Medicine at Mount Sinai	✓	
NY	Jacobs School of Medicine and Biomedical Sciences at the University at Buffalo		
NY	New York Medical College	✓	https://www.nymc.edu/Academics/SchoolOfMedicine/Admissions/SpecialSituations.html
NY	New York University School of Medicine		
NY	State University of New York Downstate Medical Center College of Medicine	✓	Admissions preference is given to US citizens and permanent residents
NY	State University of New York Upstate Medical University	✓	
NY	Stony Brook University School of Medicine	✓	
NY	University of Rochester School of Medicine and Dentistry		
NY	Weill Cornell Medicine	✓	
NC	Duke University School of Medicine	✓	
NC	The Brody School of Medicine at East Carolina University		
NC	University of North Carolina at Chapel Hill School of Medicine	✓	
NC	Wake Forest School of Medicine of Wake Forest Baptist Medical Center		
ND	University of North Dakota School of Medicine and Health Sciences		
OH	Case Western Reserve University School of Medicine		
OH	Northeast Ohio Medical University		
OH	Ohio State University College of Medicine	✓	
OH	The University of Toledo College of Medicine		
OH	University of Cincinnati College of Medicine		
OH	Wright State University Boonshoft School of Medicine		
OK	University of Oklahoma College of Medicine		
OR	Oregon Health & Science University School of Medicine	✓	

United States

State	Medical School Name	Accepts DACA	DACA Details
PA	Drexel University College of Medicine		
PA	Lewis Katz School of Medicine at Temple University		
PA	Pennsylvania State University College of Medicine	✔	
PA	Raymond and Ruth Perelman School of Medicine at the University of Pennsylvania	✔	
PA	Sidney Kimmel Medical College at Thomas Jefferson University	✔	
PA	The Commonwealth Medical College		
PA	University of Pittsburgh School of Medicine	✔	Students with DACA status are considered an International applicant
PR	Ponce Health Sciences University School of Medicine		
PR	San Juan Bautista School of Medicine	✔	
PR	Universidad Central del Caribe School of Medicine		
PR	University of Puerto Rico School of Medicine		
RI	The Warren Alpert Medical School of Brown University	✔	
SC	Medical University of South Carolina College of Medicine	✔	
SC	University of South Carolina School of Medicine		
SC	University of South Carolina School of Medicine - Greenville		
SD	Sanford School of Medicine The University of South Dakota	✔	Case by Case consideration
TN	East Tennessee State University James H. Quillen College of Medicine		
TN	Meharry Medical College	✔	
TN	University of Tennessee Health Science Center College of Medicine		
TN	Vanderbilt University School of Medicine	✔	There is no difference with our admissions process for DACA applicants.
TX	Baylor College of Medicine		
TX	McGovern Medical School at the University of Texas Health Science Center at Houston		
TX	Texas A&M Health Science Center College of Medicine		
TX	Texas Tech University Health Sciences Center Paul L. Foster School of Medicine		
TX	Texas Tech University Health Sciences Center School of Medicine		
TX	The University of Texas School of Medicine at San Antonio		
TX	University of Texas at Austin Dell Medical School		
TX	University of Texas Medical Branch School of Medicine		
TX	University of Texas Rio Grande Valley School of Medicine		
TX	University of Texas Southwestern Medical Center at Dallas Southwestern Medical School		
UT	University of Utah School of Medicine	✔	
VT	University of Vermont College of Medicine	✔	
VA	Eastern Virginia Medical School		
VA	University of Virginia School of Medicine	✔	
VA	Virginia Commonwealth University School of Medicine		
VA	Virginia Tech Carilion School of Medicine		
WA	University of Washington School of Medicine	✔	Washington state residents with DACA status are considered for the MD program.

United States

State	Medical School Name	Accepts DACA	DACA Details
WV	Marshall University Joan C. Edwards School of Medicine		
WV	West Virginia University School of Medicine		N/A
WI	Medical College of Wisconsin		MCW welcomes all applicants and will evaluate applications according to its standard admissions criteria: http://www.mcw.edu/Medical-School/Admissions/Milwaukee-Campus/Apply-MCW-Milwaukee.htm
WI	University of Wisconsin School of Medicine and Public Health		

Canada

State	Medical School Name	Accepts DACA	DACA Details
AB	University of Alberta Faculty of Medicine and Dentistry		
AB	University of Calgary Cumming School of Medicine		
BC	University of British Columbia Faculty of Medicine		
MB	University of Manitoba Faculty of Medicine		
NL	Memorial University of Newfoundland Faculty of Medicine		
NS	Dalhousie University Faculty of Medicine		
ON	McMaster University Michael G. DeGroot School of Medicine		
ON	Northern Ontario School of Medicine		
ON	Queen's University Faculty of Health Sciences		
ON	The University of Western Ontario - Schulich School of Medicine & Dentistry		
ON	University of Ottawa Faculty of Medicine		
ON	University of Toronto Faculty of Medicine		
QC	Faculty of Medicine Université Laval		
QC	McGill University Faculty of Medicine		
QC	Université de Montréal Faculty of Medicine		
QC	Université de Sherbrooke Faculty of Medicine		
SK	University of Saskatchewan College of Medicine		

Financial Aid Options for Undocumented Graduate Students in California

1. **Private loans** -Students have been able to successfully take out private loans, however, most banks will require a citizen or permanent resident individual to co-sign the loan. It's been tough for students to find someone to co-sign loans because the sum is so large for an individual to take the responsibility in case the student defaults on the loan.

Below are the banks we know have given loans to undocumented students

- Sallie Mae
- Discover Bank

2. **Scholarships/Fellowships**: There are some many scholarships available to graduate undocumented students. Denisse Rojas co-authored a guide for Educators for Fair Consideration, a non-profit in San Francisco that holistically supports undocumented students:

www.e4fc.org/resources/scholarshiplists.html

The guide contains a lengthy list of scholarships and fellowships open to undocumented graduate students. The list includes scholarships/fellowships for students generally attending graduate school (including professional schools) and then the list is divided by field of study.

Two great scholarships/fellowships open to Deferred Action for Childhood Arrivals (DACA) recipients is:

Paul & Daisy Soros Fellowship (www.pdsoros.org; open to students pursuing any graduate degree and will finance in full two years of graduate study)
Usually due Nov. 1

Ford Foundation Diversity Fellowship Programs
(<http://sites.nationalacademies.org/dga/fordfellowships>; various fellowships for individuals pursuing graduate study)
Deadlines vary, mid-November

3. **Individual fundraising**: A popular crowd funding website has been [gofundme.com](http://www.gofundme.com)

4. **Loan Repayment Program**: The Health Professions Education Foundation, a statewide foundation, has a loan repayment programs for health professionals (www.oshpd.ca.gov/HPEF/applications.html) and is open to DACA recipients. The program repays your commercial or government loans (from \$4,000 to \$105,000) in exchange for services in a medically underserved area in California.

Eligible professions include: various allied health professions, Licensed Vocational Nurse, Bachelor's of Science Nursing, Nurse Practitioners, Dentists, Dental Hygienists, Certified Nurse Midwives, Physician Assistants, and Physicians.

Example program for Physicians:

Steven M. Thompson Physician Corps Loan Repayment (www.oshpd.ca.gov/HPEF/STLRP.html): is open to DACA recipients. It will repay up to \$105,000 in educational loans (commercial or government loans) in exchange for three years of services in a medically underserved area in California. Open to Osteopathic and Allopathic physicians.

5. **Institutional Loans:** Some schools have institutional loans they award students. For example, UCSF has created a small loan for their first undocumented medical student; they expressed this was an option for other UC medical schools.

6. **Institutional Scholarships:** Some UC schools have generous scholarships open to undocumented students, and others do not. It varies greatly school by school. For school-specific scholarships, please see the list of fellowships in the E4FC Graduate Guide above!

7. **CA Dream Act:** Individuals applying to public schools in California must fill out the California Dream Act (<https://dream.csac.ca.gov>) the year they intend to matriculate in a graduate program. This will allow schools to evaluate prospective students' financial need since individuals are not eligible to fill out FAFSA. The California Dream Act also allows public schools to provide private funding through scholarships/grants to students; however, the amount varies greatly by school.

8. **Dream Loan Program (SB1210):** A new state bill was recently signed into law 9/28/2014 by Governor Brown that establishes a state loan program for eligible undocumented students. However, this program is NOT open to graduate students in case you receive inquiries about this! The program allows students to take loans in the amount of \$4,000/semester of no more than \$20,000 in total.

Funding Opportunities Available to AB 540 Students

General Scholarships & Fellowships Not Specific to Field of Study

Point Foundation: College Scholarships for LGBT Students
www.pointfoundation.org/point-apply/apply-now/

CSU Chancellor's Doctoral Incentive Program
<http://www.calstate.edu/hr/cdip/apply/>

Educators for Fair Consideration (E4FC) New American Scholars Program
<http://e4fc.org/scholarsprogram.html>

California Strawberry Scholarships
www.californiastrawberries.com/scholarships

Student Advocates for Higher Education (SAHE)
<http://www.sahesjsu.org/scholarship/>

Bay Area Gardener's Foundation
<http://www.baagsf.org/>

Davis-Putter Scholarship Fund
<http://www.davisputter.org/>

Congressional Hispanic Caucus Institute
<http://www.chci.org>

Manos de Esperanza (Hands of Hope)
www.manosdeesperanza.org/

MALDEF's DREAM Act Student Activist Scholarship
<http://www.maldef.org/leadership/scholarships/>

Atlas Shrugged Essay Contest
<http://essaycontest.avrandidnovels.com/AtlasShrugged.aspx?theme=blue>

Adsum Education Foundation Scholarship
<http://www.adsumsb.org/application.html>

Ford Foundation Postdoctoral Fellowship Program
<http://sites.nationalacademies.org/PGA/FordFellowships/index.htm>

Ford Foundation Predoctoral Fellowship Program
<http://sites.nationalacademies.org/PGA/FordFellowships/index.htm>

Hispanic Scholarship Fund-General College Scholarships
<http://hsf.net/en/scholarships/programs/general-college-scholarships>

CustomMade Scholarship
<http://www.custommade.com/scholarships/>

Field of Study-Specific Scholarships & Fellowships

BUSINESS

David C. Lizárraga Fellowship
<http://telacu.com/telacu-education-foundation/graduate-school-support/david-c-lizarraga-fellowship/>

Denny's Hungry for Education Scholarship
<http://www.hacu.net/hacu/scholarships.asp>

HUMANITIES, ARTS, AND SOCIAL SCIENCES

Hayek Fund- Career Development Grants
<http://www.theihs.org/hayek-fund>

Hispanic Community Affairs Council Scholarship Fund
<http://hcaac-ac.org/scholarship/>

Humane Studies Fellowship
<http://www.theihs.org/humane-studies-fellowships>

DPDF Student Fellowship Competition
<http://www.ssrc.org/fellowships/dpdf-fellowship/#eligibility>

Jack Kent Cooke Foundation Fellowship Award
<http://www.jkcf.org/scholarships/graduate-scholarships/jack-kent-cooke-dissertation-fellowship-award/>

La Unidad Latina Foundation Scholarship
<http://www.lulfoundation.org>

NASW Foundation Awards
<http://www.naswfoundation.org/geosnell.asp>

CCNMA: Latino Journalists of California Scholarship
<http://www.ccnma.org/>

Asian American Journalists Association
<http://www.aajafs.org/scholarship/>

Byron Hanke Fellowship
<http://www.cairf.org/scholarships/hanke.aspx>

Phi Delta Kappa International Graduate Fellowships
<https://pdkintl.org/programs-resources/scholarships-awards/graduate-fellowships/>

Jack Kent Cooke Foundation Graduate Arts Award
<http://www.jkcf.org/scholarships/graduate-scholarships/graduate-arts-award/>

Kate Neal Memorial Fellowship
<https://faa.illinois.edu/alumni-friends/kate-neal-kinley-memorial-fellowship>

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (INCLUDES HEALTH AND MEDICINE)

LMSA-National Scholarship for U.S. Medical Students -MED
<http://lmsa.net/resources/scholarships>

Oliver Goldsmith, M.D. Scholarship MED
<http://community.kp.org/be-informed/program/oliver-goldsmith-scholarship-program>

eQuality Scholarship Collaborative MED
<http://www.equalityscholarship.org>

David C. Lizárraga Fellowship ENGINEER
<https://telacu.com/telacu-education-foundation/graduate-school-support/david-c-lizarraga-fellowship/>

Kaiser Permanente Northern California Medical Student Scholarship MED
<http://residency.kp.org/ncal/scholarships/index.html>

The Pisacano Scholars Leadership Program MED
<http://www.pisacano.org>

CANFIT Scholarship HEALTH/NUTRITION/etc
<http://canfit.org/scholarships/>

Chinese Medical Society Scholarships MED
<http://chineseamericanmedicalsociety.cloverpad.org/Default.aspx?pageId=1070535>

Great Minds in Stem Henaac Awards GENERAL
<http://www.greatmindsinstem.org/college/henaac-scholarship-application-guidelines>

SHPE Foundation Scholarship Program
<http://shpe.org/scholarships>

Jane Delano Student Nurse Scholarship
<http://www.fedcross.org/support/get-involved/scholarships>

Fresno County Medical Society Scholarship Foundation
<http://www.fmms.org/Programs/AffiliatedOrganizations/ScholarshipFoundation.aspx>

Tylenol Future Care Scholarship
<https://www.tylenol.com/news/scholarship>

SALEF Health Careers Scholarships
http://www.salef.org/#!_awards-and-scholarship-banquet

Sierra Sacramento Valley Medical Society
<http://www.ssvms.org/Programs/MedicalStudentsScholarshipFund.aspx>

Stan Beck Fellowship
<http://www.entSOC.org/about/awards-honors>

Amelia Earhart Fellowship
<http://www.zonta.org/WhatWeDo/InternationalPrograms/AmeliaEarhartFellowship.aspx>

LAW

Donald W. Banner Diversity Scholarship for Law Students
<https://bannerwitcoff.com/about-us/faq/>

Raza Lawyers Association- Central Valley Chapter Hon. Mario G. Olmos Memorial Scholarship Application
<http://larazalaw.com/events/banquet.html>

Japanese American Bar Association Educational Foundation Scholarship Association
<http://www.jabaonline.org/scholarships/>

MALDEF Law School Scholarship Program
http://maldef.org/leadership/scholarships/law_school_scholarship_program/

Humane Studies Fellowship
<http://www.thehhs.org/humane-studies-fellowships>

Maggio Immigrants' Rights Fellowship
<http://www.maggiofellowship.org/application.html>

Virginia S. Mueller Scholarship
<http://www.womenlawyersofsacramento.org/>

Fredrikson & Byron Foundation Minority Scholarship Program
http://www.fredlaw.com/our_firm/diversity/minority_scholarship/

DRI Law Student Diversity Scholarship

<https://www.dri.org/About>

Dominican Bar Association Scholarship
<http://www.dominicanbarassociation.org/>

Byron Hanke Fellowship
<http://www.cairf.org/scholarships/hanke.aspx>

California Bar Foundation—Diversity Scholarship
<http://www.calbarfoundation.org/11-diversity-scholarship.html>

Latham & Watkins-Diversity Scholars Program
<http://www.lw.com/AboutUs/Diversity>

Women Lawyers of Sacramento: WLS Scholarship
<http://www.womenlawyersofsacramento.org/>

Wallace (Wally) R. David Memorial Scholarship Fund
<http://www.oohba.org/scholarships>

American Bar Association
http://www.americanbar.org/groups/young_lawyers/awards_scholarships/haiku_contest_for_law_students.html

The Richard Linn American Inn of Court Mark T. Banner Scholarship
<http://www.linninn.org/Pages/scholarship.shtml>

School-Specific Scholarships & Fellowships

CALIFORNIA STATE UNIVERSITIES

Graduate Equity Fellowship
http://www.sjsu.edu/gradstudies/student_funding/graduate_equity_fellowship/index.html

CIRM Bridges to Stem Cell Research Awards
<http://biology.sfsu.edu/faculty-pages/cirm-bridges-stem-cell-research-awards>

UNIVERSITY OF CALIFORNIA SCHOOLS

UC Mexus-CONACYT Doctoral Fellowship for Mexican Nationals
http://ucmexus.ucr.edu/funding/prospective-fellows-info/doctoral_prospective.html

UC BERKELEY:

Albert Newman Fellowship for Visually Impaired Students
<http://grad.berkeley.edu/news/funding/newman-fellowship/>

Bancroft Library Studies Award

<http://www.lib.berkeley.edu/librarians/bancroft-library/fellowships-and-awards>

Bay Area Water Quality Fellowship
<http://grad.berkeley.edu/news/funding/water-quality-fellowship/>

Mellon/ACLS Dissertation Completion Fellowships
<https://www.acls.org/programs/dcf/>

UC DAVIS:

Townsend Dissertation Fellowships
<http://townsendcenter.berkeley.edu/funding/townsend-dissertation-fellowships>

UC Davis Travel Awards
<http://gradstudies.ucdavis.edu/ssupport/internal-travel.html>

UC SAN FRANCISCO:

Fletcher Jones Fellowship
<http://graduate.ucsf.edu/jones-fellowship>

Matilda Edlund Scholarship
<http://graduate.ucsf.edu/edlund-scholarship>

Ralph Kellogg Endowed Chancellor's Fellowship
<http://graduate.ucsf.edu/kellogg-fellowship>

Rosenberg-Hill Graduate Research Fellowship
<https://graduate.ucsf.edu/rosenberg-hill-fellowship>

UCL LOS ANGELES:

Charles F. Scott Fellowship
<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

David Geffen Medical Scholarship
<http://medschool.ucla.edu/davidgeffenmedicalscholarships>

Dr. Ursula Mandel Scholarship
<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

Eugene V. Cota-Robles Fellowship
<http://www.gdnet.ucla.edu/asis/entsup/cotarobles.htm>

Gordon Hein Memorial Scholarship
<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

Graduate Opportunity Fellowship Program (GOFPP)
Karein Der Avedisian Memorial Endowment Fund
<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>
Kasper and Siroon Hovannisian Fellowship

<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

Steven J. Sackler Scholarship

<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

Will Rogers Memorial

<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

UCLA Faculty Women's Club Scholarship

<http://www.grad.ucla.edu/asis/entsup/fellgrnt.htm>

Applying as an International Applicant

Do U.S. medical schools ever accept international students?

The short answer is yes, but it's not easy. Some U.S. medical schools accept and matriculate a small number of international applicants into their programs. In 2014, 62 schools indicated in the [Medical School Admission Requirements](#) that they would accept applications from international applicants. You can research an individual medical school's admissions policies on its website or within the "Application Deadlines and Requirements" section in the Medical School Admission Requirements.

In 2014, 1,901 foreign applicants applied to M.D.-granting programs in the United States and 409 of those applicants were accepted. Of those accepted, 300 matriculated into medical school.

Is the application process different for international students?

Primary Application

Most U.S. medical schools use the [American Medical School Application Service \(AMCAS®\)](#) to facilitate and streamline the application process. Although you will use AMCAS to apply, the service does not accept foreign transcripts (or translated/evaluated transcripts) and they will not be verified. Instead, when completing your application, you are welcome to add courses taken at foreign institutions with the understanding that these courses won't be verified, and an AMCAS grade point average (GPA) will not be calculated. However, individual medical schools may ask you for your transcript through their secondary application.

Randee Reid, admissions and residency officer at University of North Carolina School of Medicine adds, "Curriculum systems are different from overseas schools, and it is very helpful to medical schools to evaluate your progress in a program in a U.S. accredited four-year institution. If taking the prerequisite course work as a non-degree seeking student, the prospective applicant will need 30 credit hours or more in order to evaluate progress. The course work should be completed before applying to medical schools."

MORE INFORMATION

Medical School Admission Requirements:
www.aamc.org/msar

AMCAS: www.aamc.org/amcas

MCAT exam: www.aamc.org/mcat

Transcripts

International applicants who completed courses at an international school should follow the instructions provided on the AMCAS website for entering course work and requesting transcripts. If any of the courses were taken at a foreign institution, but credit was granted through an accredited U.S. or Canadian school and the courses appear on that official transcript, then that U.S. or Canadian transcript would be required. AMCAS will verify and include those courses in the AMCAS GPA. For instance, a course may have been taken through a study-abroad program sponsored by an American school, but hosted in a foreign country.

Citizenship/Visa Status

Be sure to clearly and accurately identify your citizenship and visa (if applicable) status on your AMCAS and secondary applications.

Language Proficiency

Within the AMCAS application, you will be able to indicate the languages you speak and your proficiency in each.

What options will I have for financial aid?

Only U.S. citizens and permanent residents are eligible for federal aid, which includes Direct Stafford, Direct PLUS, and Perkins Loans. In most cases, international students will need to secure private loans or institutional loans if offered by the medical school. In some cases, medical schools require applicants to prove they have sufficient financial resources to pay for all four years of medical school, or will require applicants to have the full amount in an escrow account.

Where can I take the MCAT® Exam?

Most U.S. medical schools require the [Medical College Admission Test \(MCAT®\)](#) for admission. The exam is administered several times a year in numerous U.S. locations and in some locations abroad. For a complete list of countries and specific testing locations, visit the MCAT website.

Please note that the exam is always administered in English regardless of the country in which you test. The name you use to register for and take the exam must be in English, and it must appear exactly as it does on your government-issued I.D.

Summer Opportunities for Disadvantaged and Minority Students

Summer Opportunities for Disadvantaged and Minority Students NAAHP RESOURCE

There are also numerous comprehensive sites to search for listings such as:

- aamc.org/summerprograms
- explorehealthcareers.org/en/careers/programs
- nsf.gov/crssprgm/reu/index.jsp

Associations Supporting Students of Diversity

Many of the associations listed elsewhere on this site support students from all backgrounds and the goal of diversifying the health professions. Listed below are those whose main mission is to do so.

- [Student National Medical Association](#)
- [Latino Medical Student Association](#)
- [Association of American Indian Physicians](#)
- [American Medical Women's Association](#)
- [Asian Pacific American Medical Student Association](#)
- [Association of Native American Medical Students](#)
- [LGBT Committee in AMSA](#)
- [Minority Health Committee in AMSA](#)
- National Network of Latin American Medical Students
- [National Association of Medical Minority Educators](#)
- [For premed students of color](#)
- Society of American Indian Dentists

You can also search for other associations at the following sites:

- [Office of Minority Health](#) (Federal site)
- [Health and Human Services](#) (Searchable database of organizations nationwide)
- [Association of Minority Health Professions Schools](#) (Listed by their Foundation)

Clinical Experiences

Alaska Center for Rural Health and Health Workforce

[Rural Immersion Institute of the North \(RIIN\)](#)

Program Dates: July 12 - August 2, 2017

Deadline to Apply: November 1, 2016

Atlantis Project Fellowship

[Hospital Shadowing in Europe - 2017](#)

Program Dates: Varying Dates Throughout Summer 2017

Deadline to Apply: Rolling Admission

Baylor College of Medicine

[SMART Program](#)

Program Dates: May 29-July 28

Deadline to Apply: January 10, 2017

Summer Opportunities for Disadvantaged and Minority Students

[Collegiate Science & Technology Entry Program \(C-Step\)](#)

Must be a New York state Resident to be eligible.

Committee on Institutional Cooperation

[Summer Research Opportunities Program \(SROP\) - 2017](#)

Program Dates: Varying Dates Throughout Summer 2017

Deadline to Apply: February 10, 2017

COPE Health Scholars

[Summer Pre-Med Scholar](#)

Program Dates:

- Session 1: May 30 - July 29, 2017
- Session 2: June 19 - August 18, 2017
- Session 3: June 26 - August 25, 2017

Deadline to Apply: Rolling Admission

Cornell Graduate School

[ACCESS Summer Internship Program | Undergraduate Research](#)

Program Dates: June 5 - August 11, 2017

Deadline to Apply: February 1, 2017

Cornell

[Travelers Summer Research Fellowship Program](#)

Program Dates: June 19 - August 4, 2017

Deadline to Apply: February 1, 2017

Dana-Farber/Harvard Cancer Center

[CURE Program 2017](#)

Program Dates:

- Undergraduates: May 22 - August 11, 2017
- High School: June 19 - August 11, 2017

Deadline to Apply: February 17, 2017

Des Moines University

[Health P.A.S.S.](#)

Program Dates: June 3-23, 2017

Deadline to Apply: February 15, 2017

Duke University

[Duke University Summer Biomedical Sciences Institute](#)

Program Dates: June 10 - July 21, 2017

Deadline to Apply: March 1, 2017

Frontier Nursing University

[Courier Program Summer Service-Learning Internship](#)

Program Dates: June 2 - July 29, 2017

Deadline to Apply: February 9, 2017 at 5:30 PM EST

Georgetown University Medical Center

[Georgetown Summer Medical Institute \(GSMI\)](#)

Program Dates: June 19-July 28, 2017

Summer Opportunities for Disadvantaged and Minority Students

Deadline to Apply:

June 1, 2017 (Undergraduate, graduate, or post bacc students)

June 15, 2017 (remediating medical students)

Health Career Connection

[Summer 2017 Internship Program](#)

Program Dates: Varying Dates Throughout Summer 2017

Deadline to Apply: December 7, 2016

Health Sciences Diversity at Virginia Commonwealth University

[Allied Health Career Exploration](#)

Program Dates: June 5-16, 2017

Deadline to Apply: April 3, 2017

Illinois College of Optometry

[Focus on Your Future Summer Program](#)

Program Dates: June 26-30, 2017

Deadline to Apply: March 30, 2017

Keck Graduate Institute

[Summer Upper-Level Undergraduate Courses](#)

Program Dates: Varying Dates Throughout Summer 2017

Deadline to Apply: June 15, 2017

Marquette University

[Summer Science Enrichment Program](#)

Program Dates: Varying Dates Throughout Summer 2017

Deadline to Apply: April 1, 2017

Massachusetts General Hospital

[Summer Research Trainee Program \(SRTP\)](#)

Program Dates: June 5 - August 3, 2017

Deadline to Apply: January 23, 2017

Michigan State University

[Veterinary Medicine - Enrichment Summer Program](#)

Program Dates: June 4-23, 2017

Deadline to Apply: March 15, 2017

New York College of Podiatric Medicine

[Pre-Health Student Internship Program](#)

Program Dates:

- Session 1: July 25-28, 2017
- Session 2: August 8-11, 2017

Deadline to Apply: June 1, 2017

New York Presbyterian Hospital

[Summer Mental Health Practicum](#)

Program Dates: Varying Dates Throughout Summer 2017

Deadline to Apply: March 31, 2017

Summer Opportunities for Disadvantaged and Minority Students

Ohio State University

[Improving Diversity in Optometric Careers \(I-DOC\)](#)

Program Dates: July 10 - 12, 2017

Deadline to Apply: April 1, 2017

Ohio University

[Summer Scholars](#)

Program Dates: May 22 - June 23, 2017

Deadline to Apply: March 1, 2017

Ohio State University

[SUCCESS Program](#)

Program Dates: May 22 - July 29, 2017

Deadline to Apply: January 7, 2017

Oregon Health and Science University

[Undergraduate Summer Research Program](#)

Program Dates: Varying Dates Throughout
Summer 2017

Deadline to Apply: March 1, 2017

Rutgers - Robert Wood Johnson Medical
School

[Summer Clinical Internship Program](#)

Program Dates: June 6 - July 14, 2017

Deadline to Apply: April 15, 2017

Rutgers University

[Project L/Earn 2017](#)

Program Dates: May 30 - August 4, 2017
2017

Deadline to Apply: February 6, 2017

Rutgers University

[Gateway to Dentistry 2017](#)

Program Dates: May 31 - June 9, 2017

Deadline to Apply: October 11, 2016

Uganda Village Project

[Uganda Village Project](#)

Program Dates:

- June 14-August13, 2017 (Team Members)
- June 11-August13, 2017 (Team Leaders)

Deadline to Apply:

- International Intern Application Deadline:
Wednesday, February 1, 2017
 - Ugandan Intern Application Deadline:
Sunday, January 15, 2017
-

UCLA

[UCLA Pre-medical/Pre-dental Enrichment Program
\(UCLA PREP\)](#)

Program Dates: June 19-July 21, 2017

Deadline to Apply:

Summer Opportunities for Disadvantaged and Minority Students

Early Admission - February 1, 2017

Regular Admission - March 1, 2017

University of California, San Francisco

[Summer Research Training Program \(S RTP\)](#)

Program Dates: May 30-August 2, 2017

Deadline to Apply: February 1, 2017

University of California, Berkley

[Opto-Camp](#)

Program Dates: July 10-14, 2017

Deadline to Apply: TBA - Application Opens
February 1, 2017

University of Connecticut

[Summer Research Fellowship Program](#)

Program Dates: May 31-July 28, 2017

Deadline to Apply: March 1, 2017

University of Illinois at Chicago

[Summer Pharmacy Institute](#)

Program Dates: June 5-9, 2017

Deadline to Apply: April 3, 2017

University of Massachusetts

[Summer Enrichment Program \(SEP\)](#)

Program Dates: May 28-June 23, 2017

Deadline to Apply: March 10, 2017

University of South Carolina

[APEX](#)

Program Dates: June 4-8, 2017

Deadline to Apply: First Come First Serve

[Camp Specifics](#)

Deadline to Apply: First Come First Serve

[PACES](#)

Program Dates: July 23-27, 2017

Deadline to Apply: Last week in July.

[Program Specifics](#)

Deadline to Apply: First Come First Serve

University of Vermont

[Summer Medical Prep Program](#)

Program Dates: June 19-July 14, 2017

Deadline to Apply: June 5, 2017

University of Minnesota

[Summer Institute in Biostatistics \(SIBS\)](#)

Program Dates: June 11-July 21, 2017

Deadline to Apply: March 1, 2017

Virginia Commonwealth University

[Summer Academic Enrichment Program](#)

Summer Opportunities for Disadvantaged and Minority Students

Program Dates: May 23-June 30, 2017

Deadline to Apply: February 1, 2017

Wesleyan University

[Summer and Post Bac Opportunities in the Health](#)

[Professions](#)

Program Dates: Locations Vary

Deadline to Apply: Deadlines Vary

Youth Health Equality Model of Practice
(YHEMOP)

[Health Equity Fellows Program](#)

Program Dates: June 5-28, 2017

Deadline to Apply: February 15, 2017

RESEARCH

Albert Einstein College of Medicine

[Summer Undergraduate Research Program](#)

Program Dates: June 5-July 27, 2017

Deadline to Apply: February 1, 2017

Biophysical Society

[Summer Research Program in Biophysics](#)

Program Dates: May 9-July 29, 2017

Deadline to Apply: February 15, 2017

Bridging the Gap

[Summer Fellowship](#)

Program Dates: June-August 2017

Deadline to Apply: Opening Spring 2017

Boston University

[Summer Undergraduate Research Fellowship](#)

Program Dates: Early June - Early August

Deadline to Apply: March 1, 2017

Caltech

[Summer Undergraduate Research Fellowships
\(SURF\)](#)

Program Dates: (Start Date) June 14,
2017

Deadline to Apply: February 22, 2017

Christian Brothers University

[Minority Health and Health Disparities International
Research Training \(MHIRT\)](#)

Deadline to Apply: December 30, 2016

Cornell University

[Travelers Summer Research Fellowship Program](#)

Program Dates: June 19-August 4, 2017

Deadline to Apply: February 1, 2017

Summer Opportunities for Disadvantaged and Minority Students

Cornell University

[Gateways to The Laboratory Summer Program](#)

Program Dates: June 5-August 8, 2017

Deadline to Apply: February 1, 2017

Fred Hutch Cancer Research Center

[Summer Undergraduate Research Program](#)

Program Dates: June 12-August 11, 2017

Deadline to Apply: January 13, 2017

Harvard University

[Summer Internships in Biological Sciences in Public Health](#)

Program Dates: June 11–August 5, 2017

Deadline to Apply: February 15, 2017

The Leadership Alliance

[Summer Research - Early Identification Program \(SR-EIP\)](#)

Deadline to Apply: February 1, 2017

Massachusetts Institute of Technology

[MIT Summer Research Program](#)

Program Dates: June 4 – August 12, 2017

Deadline to Apply: February 4, 2017



Help to Build a Culture of Health

As the nation's largest philanthropy focused on improving health and health care, the Robert Wood Johnson Foundation is striving to build a national Culture of Health (www.cultureofhealth.org) that will enable all to live longer, healthier lives now and for generations to come. The *Summer Health Professions Education Program** (SHPEP) is part of this effort.

Aspiring health professionals are poised to be tomorrow's change leaders in helping build a Culture of Health in their communities and the nation. And to bring about meaningful change, health professionals must know how to learn and work together across disciplines. SHPEP exposes students to a range of health professions to help realize this vision.

* Formerly SMDEP (Summer Medical and Dental Education Program)



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www.shpep.org



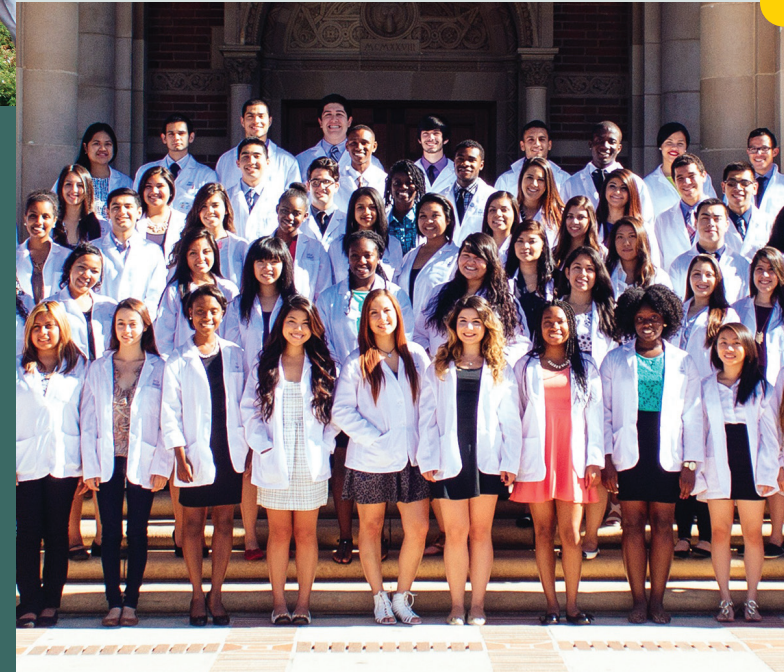
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SHPEP is a national program funded by the Robert Wood Johnson Foundation with direction and technical assistance provided by the Association of American Medical Colleges and the American Dental Education Association.



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SHPEP is a **FREE** six-week academic summer enrichment program for college freshmen and sophomore students who are interested in health professions such as medicine, dentistry, nursing, pharmacy or public health. SHPEP is offered at 13 participating universities. During the summer, students participate in the following activities:

- Academic enrichment in the basic sciences and math;
- Career development activities;
- Learning skills workshops and sessions;
- Exposure to clinical settings; and
- Workshops on financial planning and health policy.

To be eligible for SHPEP, an applicant must at the time of application:

- be a college freshman or sophomore;
- have an overall GPA of 2.5; and
- Be a U.S. citizen, a permanent resident, or an individual granted deferred action for childhood arrivals (DACA) status by the U.S. Citizenship and Immigration Services.

Other factors for consideration include that a student:

- identifies with a group that is racially/ ethnically underrepresented in the health professions;
- comes from an economically or educationally disadvantaged background; and
- has demonstrated an interest in issues affecting underserved populations.

Participating SHPEP Institutions

Columbia University

Howard University

Louisiana State University Health Sciences Center

Rutgers, The State University of New Jersey

University of Alabama at Birmingham

University of California – LA/Charles Drew University of Medicine and Science

University of Florida

University of Iowa

University of Louisville

University of Nebraska Medical Center

University of Texas Health Science Center at Houston

University of Washington

Western University of Health Sciences

Application Opens:
November 1, 2016

Application Deadline:
March 1, 2017

Contact Information:

To register and to obtain additional information, visit our website at www.shpep.org or call the national program office toll-free at **(866) 587-6337**.



A SAMPLING OF SUMMER AND GAP YEAR OPPORTUNITIES

Looking for something to do between graduation and medical, dental, or graduate school? These are some of the many opportunities available ranging in length from summer to one to two years. Certain opportunities may be directly related to medicine or healthcare, while others may be a chance to explore another side of working with people, such as teaching or community organizing. You may consider fellowships, internships, research, volunteering, part-time employment, etc. Whether you are looking to improve your candidacy to medical or dental school, experience something new before entering your program, or join the workforce to gain some real-world experience, there is an opportunity out there for you!

This is only a sample of the many opportunities available. If you wish to explore additional resources or learn more about what to do upon graduation before entering a graduate or professional program consider attending one of the many events put on by HPAO

<http://web.csulb.edu/colleges/cnsm/sas/hpao/workshops.html>

VOLUNTEER OPPORTUNITIES & INTERNSHIPS

American Cancer Society Internships (volunteer opportunities available with patient service programs)

The internship program at the American Cancer Society provides an opportunity for people to make a difference as they gain valuable hands-on experience in the non-profit sector and a greater understanding of the Society's mission.

<http://www.cancer.org/Involved/Volunteer/index?ssSourceSiteId=null>

American Public Health Association Internships (3 months- 1 year)

The American Public Health Association is the oldest, largest and most diverse organization of public health professionals in the world and has been working to improve public health since 1872. A variety of internships for undergrad and grad students are available.

<http://www.apha.org/professional-development/apha-internships-and-fellowships>

AYUDA International Dental Clinics

As a private non-profit humanitarian dental, medical and educational organization, AYUDA's mission is to be actively engaged in improving and sustaining the oral health of people in underserved areas of the world. By providing assistance through treatment, training and education, AYUDA helps promote health education and social betterment

<http://thedentalinsider.com/ayuda.php>

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

Cedars-Sinai Med Volunteer Program

The Independent Student (IS) Volunteer Program is designed for collegiate-aged students who are seeking a specific role in either a clinical or research experience. For students seeking an experience in a specialized field of medicine, this program allows you an opportunity to contact a specific physician and/or researcher to secure a volunteer position in their area of interest. This program is open throughout the year and is co-managed by Academic Affairs.

<http://www.cedars-sinai.edu/About-Us/Volunteer-Opportunities/Programs/Student-Programs/index.aspx>

Community Clinic Association of Los Angeles County

CCALAC serves and represents the interests of its free and community clinic Members. Our 47 Members operate over 140 sites in L.A. County. They provide quality primary care (including medical, dental and mental health services) for the uninsured and medically underserved populations.

<http://www.ccalac.org>

Cope Clinical Care Extender (CCE) Internship Program (Saint Francis Medical Center)

The Clinical Care Extender Internship features a clinically-focused experience that gives pre-health professionals unprecedented access to direct patient care. Clinical Care Extender Interns become valuable members of the patient care team alongside nurses, physicians and allied health professionals in clinical and administrative settings. Interns receive training to participate in basic patient care tasks such as bathing, changing and feeding patients as they rotate among the different departments within the hospital.

www.copehealthsolutions.org/clinical-internships/clinical-care-extender

COPE

COPE Health Solutions is a leading health care corporation based in Los Angeles, California. We partner with hospitals, health systems and other health care providers to help them achieve visionary, market relevant health care solutions.

www.copehealthsolutions.org

Homelessness Prevention Project

For the last three years *CORP* has committed itself to our Homeless Prevention Project (HOPE) with both staff and volunteer time. Located in Seattle's International District our office is an ideal outreach center to Seattle's homeless population. While our main goal is outreach to families in crisis our Homeless Prevention Project takes a proactive role by preventing the crisis of homelessness for families and individuals.

<http://www.corprecovery.org/page/page/2379537.htm>

Latino Community Health and Cancer Control Intern (Summer)

The Lombardi Cancer Center at Georgetown University is offering a ten-week summer paid internship program for undergraduate and graduate students. This is an excellent opportunity for bilingual (English/Spanish) students to gain hands-on experience implementing cancer prevention research for the Latino community.

<http://www.publichealthjobs.net/search/detail.cfm?jobID=7743>

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

National Institute of Health (NIH)

Research and training opportunities including summer internship programs, summer research fellowship programs, post-baccalaureate research opportunities, and graduate education programs.

<http://www.nih.gov/science/>

Operation Smile

At Operation Smile, our volunteers make a difference in the lives of children every day. And by helping others, they impact their own lives as well. We hope you'll be moved to help us make a difference in the lives of children. And join our world of compassion.

www.operationsmile.org/get_involved/

The Center for Patient Partnerships

Do you know aspiring health professionals taking time off before pursuing professional school who are looking for a transformative experience? For recent graduates who would benefit from additional direct patient contact and learning about social determinants of health, the Certificate Program in Consumer Health Advocacy at the University of Wisconsin-Madison's interdisciplinary Center for Patient Partnerships might offer just the experience to round out their resume. Students learn about patients' experiences in the health care system by providing health advocacy. Now our 12-credit certificate is available online. More information available at: <http://bit.ly/MSIUzY> (PDF)

www.patientpartnerships.org

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F: (608)265-4332

sdavis2@wisc.edu

The Saban Free Clinic (is the Los Angeles Free Clinic)

The Saban Free Clinic, in collaboration with strategic partners, serves as a medical home for the underserved and those who are most vulnerable by providing comprehensive, dependable and affordable quality health care in a caring environment.

<http://www.thesabanfreeclinic.org/>

UCLA Venice Dental Center

The School of Dentistry is committed to providing care to underserved populations. Since 1969, it has provided oral health care to underserved populations through its Venice Dental Center and by partnering with other hospitals, clinics, and centers in Venice, West Hollywood, Northeast San Fernando Valley and in downtown Los Angeles.

http://www.dentalpipeline.org/pipelineschools/ps_ucla.html

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

The UCLA Care Extender Internship Program

The Care Extender Program provides opportunities for volunteers to experience health care from a clinical perspective through patient contact and volunteer involvement. Care Extenders are trained to assist Medical Center staff, who, in turn, are able to share their personal experiences with their volunteers. Care Extenders gain an insiders' understanding of the operations of the hospital — an experience which helps them determine their specific course for future studies.

www.uclahealth.org/body.cfm?id=74

Venice Family Clinic

Venice Family Clinic provides more than 106,000 primary care, specialty care, mental health, dental, and health education visits annually. All services – including diagnosis, treatment, medications, follow-up care, and laboratory tests – are provided free of charge. Particular emphasis is placed on the needs of women, children, the homeless, and those with chronic diseases.

http://www.venicefamilyclinic.org/volunteers/?page_id=6

FELLOWSHIPS

Emerging Leaders Program (2 years)

The Emerging Leaders Program (ELP) is a competitive, two-year, paid, federal internship with the Department of Health and Human Services (DHHS). The program provides a unique opportunity to develop analytical and critical leadership skills in one of the largest federal agencies in the nation.

<http://hhsu.learning.hhs.gov/elp/>

Department of Health and Human Services (2 years)

Opportunities for College Graduates are intended to provide individuals who have graduated from an undergraduate or graduate program with an opportunity to integrate their education and experience into full-time employment with the Federal government. The Presidential Management Fellows Program (PMF), the HHS Emerging Leaders Program (PMF), and the Federal Career Intern Program (FCIP) are a few programs for graduates.

<http://www.hhs.gov/careers/pathways/students/index.html>

Office of Minority Health and Health Disparities- Various Fellowships (Varies)

The OMHD supports training opportunities for qualified students at all levels of their education. Many of the opportunities involve working with the Federal Government or the Center for Disease Control (CDC).

<http://www.cdc.gov/omhd/training.htm>

Presidential Management Fellows Program (1 year)

The purpose of the Program is to attract to the Federal service outstanding men and women from a variety of academic disciplines and career paths who have a clear interest in, and commitment to, excellence in the leadership and management of public policies and programs.

<http://www.pmf.gov/>

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

U.S. Schweitzer Fellows Programs (1 year)

The U.S. Schweitzer Fellows Programs provide community service fellowships for graduate students in health-related professional fields who are dedicated to addressing unmet health needs in local areas.

<http://www.schweitzerfellowship.org>

Princeton in Asia Fellowship Program

PiA offers yearlong, service-oriented fellowships in 18 Asian countries in the fields of education, international development (NGOs), environmental advocacy, journalism, law and business, with a majority of fellows working as English teachers at universities and high schools. PiA fellowships are open to graduates or graduating seniors from all accredited colleges and universities.

<http://piaweb.princeton.edu/for-applicants>

Japan Exchange and Teaching Programme (JET)

Each participant in the JET Programme brings their culture to a local community in Japan, helping the country to gain personal contact with peoples of other countries. Secondly, each JET participant will learn a great deal about Japan, its culture and its people. It is expected that JET participants will share what they learned with their family and friends upon returning home. Program requires relevant international experience. Include transcripts from study abroad and appropriate LOR's.

<http://www.jetprogramme.org/>

RESEARCH

A good way to get involved with research is to network with current and past professors or to get in touch with faculty members within various academic departments. There may be opportunities here at the University of Southern California or the departments may know of grant money available for temporary research positions in your field after graduation.

The Saban Research Institute (affiliated with Children's Hospital, Los Angeles)

The Saban Research Institute is one of the few freestanding research centers in the U.S. where scientific inquiry is combined with clinical care and is devoted exclusively to children.

<http://www.chla.org/saban>

National Science Foundation (NSF)

NSF supports a variety of science, engineering and education research in nearly every field.

<http://www.nsf.gov/news/overviews/>

Weill Cornell/Rockefeller/ Sloan-Kettering Gateways to the Laboratory Program

The program is highlighted by the NIH as one of the top ten summer programs for underrepresented and disadvantaged students. Every year, 15 students embark on a 10 week intensive journey of learning about the challenging and gratifying road of becoming a physician-scientist.

<http://www.weill.cornell.edu/mdphd/summerprogram/>

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

AAMC Graduate Research, Education, and Training (GREAT) Group (Summer)

The GREAT Group is an AAMC Group established quality education in the biomedical sciences. They have a link to Summer Undergraduate Research Programs (by school) at their website.

<https://www.aamc.org/members/great/>

Health Sciences Research Opportunities (Summer)

This website from Swarthmore College provides a list of links to summer research programs available to undergrads and recent grads in the U.S.

<http://www.swarthmore.edu/x8853.xml>

SERVICE OPPORTUNITIES

AmeriCorps:

1. AmeriCorps State and National (9-12 months)

The largest of AmeriCorps programs, AmeriCorps State and National provides funds to local and national organizations and agencies committed to using national service to address critical community needs in education, public safety, health and the environment. Members serve full- or part-time over a 9- to 12-month period.

<http://www.nationalservice.gov/programs/ameri-corps/ameri-corps-state-and-national>

2. AmeriCorps NCCC (10 months)

AmeriCorps NCCC (National Civilian Community Corps) is a full-time, team-based residential program for men and women age 18–24. Members live on one of five campuses, located in Denver, Colorado; Sacramento, California; Perry Point, Maryland; Vicksburg, MS; and Vinton, Iowa. AmeriCorps NCCC requires an intensive, 10-month commitment.

<http://www.nationalservice.gov/programs/ameri-corps/ameri-corps-nccc>

3. AmeriCorps VISTA (1 year)

AmeriCorps VISTA is the national service program designed specifically to fight poverty. VISTA members commit to serve full-time for a year at a nonprofit organization or local government agency, working to fight illiteracy, improve health services, create businesses, strengthen communities, and much more.

<http://www.americorps.gov/>

City Year (1 year)

City Year corps member serve full-time as tutors and mentors in schools, running after-school programs, leading and developing youth leadership programs, and vacation camps to make a difference in the lives of children and their communities.

<http://www.cityyear.org>

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

Citizen School (2 years)

The Citizen Schools National Teaching Fellowship is a service program offering a two-year, leadership development experience, including service as a team leader at a Citizen Schools campus, professional development with a partner organization in the community, and the opportunity for optional enrollment in a pioneering Master's program in out-of-school learning.

<http://www.citizenschools.org/>

Teach for America (2 years)

Teach For America aims to end educational inequity. TFA corps members serve in high-need schools for two-year commitments.

<http://www.teachforamerica.org>

Peace Corps (2 years)

Peace Corps Volunteers serve in 74 countries in Africa, Asia, the Caribbean, Central and South America, Europe, and the Middle East. Collaborating with local community members, volunteers work in areas like education, youth outreach and community development, health, and information technology.

<http://www.peacecorps.gov/>

OVERSEAS OPPORTUNITIES

This is just a small sample of overseas opportunities. These sites provide a great place to begin your search for information and postings regarding work, volunteer, and internship opportunities abroad.

AIESEC (Varies)

AIESEC is a global, non-political, independent, not-for-profit organization run by students and recent graduates. Its members are interested in world issues, leadership and management. AIESEC provides its members with an integrated development experience comprised of leadership opportunities, international internships and participation in a global learning environment.

<http://www.aiesec.org>

BUNAC (Varies)

BUNAC offers a range of work abroad, volunteer abroad, and teaching overseas programs to destinations such as Canada, Australia, New Zealand, Cambodia, South Africa, Ghana, China, and Peru.

<http://www.bunac.org/>

ChildVoice International (10-12 weeks in spring, summer, and fall)

ChildVoice International is quickly expanding in northern Uganda. Opportunities include, but are not limited to, adult and child education, psycho-social rehabilitation, community health, spiritual leadership and development, income generating projects, microfinance, art, physical and occupational therapy, administrative and organizational tasks, and agriculture.

www.childvoiceintl.org

PRE-HEALTH @ THE BEACH

Whitaker Health Professions Advising Office

Global Healing HEAL Internship (1-3 Months)

Health Education & Advocacy Liaisons (HEAL) internships give undergraduate and medical students the chance to work with physicians at the Roatan Volunteer Pediatric Clinic (RVPC) in Honduras.

<http://rvpc.globalhealing.org/volunteer/student-internship/>

Global Brigades (varies)

This organization seeks groups of passionate volunteers who mobilize toward positive social change. Global Brigades is the world's largest student-led global health and sustainable development organization. Since 2004, Global Brigades has mobilized thousands of university students and professionals through nine skill-based service programs to improve quality of life in under resourced communities.

<http://www.globalbrigades.org/>

Institute for Health Policy Solutions (IHPS)

The Institute for Health Policy Solutions (IHPS) is an independent, not-for-profit organization with the overarching goal of achieving affordable coverage by and for all Americans. They develop and analyze workable innovations to address health system problems. They focus on analysis and technical assistance toward implementation of Health Insurance Exchanges and related health reforms.

http://www.ihps.org/Employment_Interns.shtml

International Service Learning

As a socially responsible international educational NGO, ISL enlists medical and educational volunteer teams for the provision of services to under-served populations in Central and South America, Mexico, the Caribbean, and Africa.

<http://www.islonline.org/about/>

Peace Corps (2 years)

Peace Corps Volunteers serve in 74 countries in Africa, Asia, the Caribbean, Central and South America, Europe, and the Middle East. Collaborating with local community members, volunteers work in areas like education, youth outreach and community development, health, and information technology.

<http://www.peacecorps.gov/>

Considering a Postbaccalaureate Premedical Program

What is a postbaccalaureate premedical program?

The term “postbaccalaureate” describes programs that begin after an undergraduate degree and are designed specifically to support the transition from an undergraduate to a professional school, such as a medical school, as well as enhance an applicant’s competitiveness for admission. There are several types of programs available designed to address a particular need or deficiency, such as academic record enhancement, career change, MCAT® exam prep, as well as programs for underrepresented or disadvantaged students.

Will a postbaccalaureate program improve my chances of getting into medical school?

It depends on the strength of the program, whether the program has a linkage agreement with a medical school, and most important, how successfully you complete the program. If you do well, you’ll demonstrate successful completion of premedical requirements, as well as a continued commitment to your goal of a career in medicine. If you have the opportunity, take upper-level course work to show that you can handle advanced material. According to Grace M. Hershman, director of Postbaccalaureate Premedical Programs at Temple University, “Competition for admission to medical school is intense, so performing extremely well in an intense premedical postbaccalaureate program will demonstrate to medical school admissions committees that you are able to sustain a high-level of academic achievement.”

How do I find the program that’s best for me?

It’s a good idea to talk to your pre-health advisor or the admissions dean at the medical schools you’re interested in about whether a postbaccalaureate program would enhance your application. If you have a specific weakness, look for a program that specifically addresses it. There are programs available to enhance the various types of deficiencies many applicants face. You can search by program type in the AAMC’s free Postbaccalaureate Premedical Programs database at <https://services.aamc.org/postbac/>.

What are the financial considerations involved with this type of program?

Postbaccalaureate programs can be expensive and may require you to finance some or all of the tuition through loans. If you continue directly from the program to medical school and residency, be sure to remember that interest from these loans will continue to accrue throughout your education and residency and result in substantial education debt. Speak to the financial aid officer at your school or the institution you plan to attend to learn the full financial implications involved.

How long does it take to complete a program?

There are several different types of programs. Most range from one to three years depending on the type of degree awarded at the end of the program.

What degree will I get after I complete the program?

Degrees awarded vary from program to program. Some programs offer a certificate of completion while others offer a master’s degree. There are advantages to seeking programs that lead to a master’s degree, especially if you decide ultimately not to pursue medical school. The AAMC’s Postbaccalaureate Premedical Programs database reports on degree information for each program listed.

What are “affiliations” or “linkage agreements?”

When researching programs in the AAMC’s Postbaccalaureate Premedical Programs database, the “affiliations” row describes any health professions program or medical school that has a relationship with a postbaccalaureate program. Some profiles may mention a linkage agreement with an institution. In this case, there may be an agreement for conditional acceptance into a medical school based on the level of performance in the program.

MORE INFORMATION

FIRST fact sheet on postbaccalaureate programs:

https://www.aamc.org/services/first/first_factsheets/112310/postbacprograms.html

What it’s Like to Do a Postbaccalaureate Program:

<https://www.aamc.org/students/aspiring/experience/358536/postbaccprogram.html>



Composing a Letter of Evaluation that Captures The Applicant as an Individual

<p><i>Joe Workman, Ph.D.</i> Associate Professor of Chemistry, Chair, Pre-Medical Advisory Committee, Centre College</p>	<p><i>Thomas Oeltmann, Ph.D.</i> Associate Professor of Biological Science, Health Professions Advisor, Vanderbilt University</p>	<p><i>Carol Elam, Ed.D.</i> Professor of Behavioral Sciences, Assistant Dean for Admissions and Medical Education Research, University of Kentucky College of Medicine</p>
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This is a revised version of an article originally printed
in the March 2005 issue of *The Advisor*, Vol 25, 1 , pp.20-26.

One of the most daunting challenges to premedical advisors is writing the letter of evaluation for medical school applicants from their institutions. Letters provide information used by medical school admissions committees for both screening and selection decisions. In fact, medical school admissions officers responded overwhelmingly positively to a national survey gauging the importance of the advisors' letters, stressing that the premedical letter has influence on, and contributes to the committee assessment of candidates for admission.¹

In reading the letters written by advisors regarding the suitability of applicants for medical school, medical school admissions committee members are looking for useful, candid, and honest information that will allow them to make better selection decisions.² However, letters from some institutions are routinely categorized as being not very helpful in the admissions process.³ Letters of evaluation described as least helpful by admissions committee members at six medical schools across the southeastern United States had one or more of the following characteristics: a repetition of information from the application, unsubstantiated superlatives or vague generalities, description of a grade in one particular class (an indication that the letter writer had a limited relationship with the applicant), or inclusion of irrelevant information regarding such issues as the applicant's family connections or the applicant's religious beliefs.³

Klein (1995) concluded that both advisors and admissions committee members could be left feeling either satisfied or dissatisfied with both the effort it takes to write letters and final product itself.⁴ We believe that, most of the time, letters are helpful, leaving both the writer and the reader satisfied with the information provided. In those cases, the letters of evaluation contain important and unique information to help admissions committees know more about the personal characteristics, interpersonal qualities, classroom abilities, and

exposure to medicine of applicants.¹ Such informative letters help establish good working relationships between the premedical advisor and the medical school admissions committee, by building a sense of trust in their content and communication.

We contend that there is an art to writing letters of evaluation, and that some of the best approaches to letter writing can be learned. In this paper we will address two aspects of letter writing, obtaining the necessary information and crafting the language of the letter.

Getting to Know the Students

Where do advisors obtain information they use to write knowledgeable letters about their students' academic abilities, personality characteristics, relevant experiences, and overall suitability for a medical career? How do they come to know their students as unique individuals with unique qualities and circumstances? Ultimately, it is the applicant's responsibility to provide information about herself or himself to both faculty and the premedical advisor. However, settings for interactions are many. Most premedical advisors serve as academic counselors to premedical students. Premedical advisors holding faculty positions may teach aspiring medical students in their courses. Advisors with active research programs may employ students in their research laboratories. Some premedical advisors participate in study abroad programming and may come to know students in living and learning settings. Alternatively, premedical advisors may solicit comments from other faculty who know the applicant better.

Advisors may also learn about their students through review of data related to their academic performances. To understand the student's academic abilities, the advisor carefully examines the student's academic record in college, including course work taken and grades earned. In preparing to describe the applicant's academic aptitude and scholarship, it is helpful for the advisor to have knowledge of the student's classroom behaviors including work ethic, preparation, and attendance.^{1,3} Advisors usually have access to the student's performance on the Medical College Admission Test (MCAT). Some advisors even have access to the student's performance on college entrance examinations, such as the ACT or SAT. Through review of standardized scores prior to admission to the undergraduate program, grade point averages attained in college, and MCAT scores, advisors can determine whether the student's undergraduate performance is in keeping with his or her abilities as measured by standardized tests. Should student performance in the classroom fall short of the expected aptitude, advisors can often clarify unique circumstances or hardships faced that may have influenced the applicant's classroom performance in the letters they write.

Writing the Letter

Premedical advisors may work with applicants on their own, or with other faculty who comprise an advisory committee. The advisory committee members may come together to interview aspiring applicants to learn more about their accomplishments and personal qualities prior to contributing to the letter of evaluation. Within the premedical committee, individual faculty may each be asked to draft a separate letter on behalf of selected students. When the premedical advisor sits down to write the letter of evaluation on an individual applicant, he or she draws information from the previously outlined interactions and sources. The premedical advisor may be asked to draft a singular letter, representing the committee, or make summary comments, interpreting and synthesizing the separate letters written by individual faculty members. Medical school admissions committee members usually report that it is also helpful for the advisor to rank the applicant in categories and compare the student to past successful applicants.

Regardless of the authorship of the letter of evaluation, there are necessary topics that are deemed helpful by admissions committee members. Topics that should be incorporated in the letters include information addressing the personal characteristics (e.g., integrity, honesty, reliability, professionalism, determination, leadership, and motivation) and social skills (e.g., interpersonal and communication skills, ability to interact in groups and establish peer relationships, empathy, and altruism) of the applicant.³ Importantly, most admissions officers and admissions committee members value both positive and negative information on applicants as this combination typically gives them a realistic perspective of the applicant's strengths and weaknesses.⁵

Crafting the Language: Addressing Personal Characteristics and Social Skills

In thinking about the letter writing, it may be helpful to consider tips dispensed in composition classes that are aimed at assisting students in writing good narration and description. To demonstrate logical thinking in composition, students are taught to approach their subject matter objectively, analyzing the varied points of view, and working to convey insight and understanding.⁶ The same considerations apply in crafting the letter of evaluation. Information that faculty obtain by knowing, teaching, advising, and working with the applicant is more helpful than providing lists of the applicant's grades or activities that are readily available from the application materials. The analysis, insight, and understanding that advisors can supply in the letters that describe *who the applicant is as a person* receive great consideration by admissions committee members.

Some authors of letters of evaluation have stated that they are unsure of the types of information about the personalities of their students that should be included in the narrative. They have expressed difficulty in describing and interpreting student behaviors and attitudes. Because medical school admission committee members consider both positive and negative aspects of key personal qualities, social skills, and relevant experiences and abilities when selecting students who are suitable for entrance into the medical school, it is important to incorporate such information in the letters of evaluation.

Examples of narrative comments extracted from letters of evaluation that describe the strengths and weaknesses of applicants are provided as follows. While we offer these passages as descriptive samples of qualities of individual students, we do not presume or desire that these statements should be incorporated into others' letters verbatim. Rather, they serve as models of language that could be imitated in crafting the descriptive passages related to personal qualities of individual students. Samples of statements describing leadership, ability to work collaboratively, honesty and integrity, responsibility and dedication, motivation, empathy, communication skills, service to others, problem solving ability, exposure to the profession, and common sense and judgement are provided. General definitions of strengths and weaknesses regarding each quality are given, and passages are categorized accordingly. Note that statements may be appropriate for more than one category. Some of the statements are derived from summaries of faculty evaluations constructed by the premedical advisor; others are from individual professors. All have been modified to protect the identity of students and their institutions.

Leadership

Strengths (ability to direct, organize, and/or take charge):

“Leads by example and organizational skills, not by an assertive presence”.

“Vanessa knows exactly when to lead and when to let go; when to speak and when to listen; when to assume control and when to delegate authority. She negotiates this delicate balance between leading and listening better than almost any other student I have seen.”

“Melissa has excellent leadership ability. She has the ideas and the ability to convince others to act on them. She inspires respect and trust. She works well with others and is not abrasive or arrogant.”

“This year John was given a difficult task of being the Resident Assistant for both upper class women and freshmen men. He did an exceptional job. He was very compassionate to residents on his hall who had severe physical and emotional difficulties. He provided creative educational and social programming for the residents and truly went above and beyond the call of duty. He maintains his calm under pressure and responds appropriately to crisis situations.”

Weaknesses (concerns about passivity):

“Marianne is definitely a good follower. She does not have the assertiveness, the strength of character, or ego to be an effective leader. She fits smoothly into groups, quietly going about the business of doing what is requested from her.”

“Patricia can work well on a team, but I do not see her as a leader-she isn’t very aggressive and does not like to tell people what to do.”

“Peter will have more problems with interpersonal matters because he tends to be on the quiet side. He interacts with a lot of people, but he does not seem to contribute as much.”

“My impression is that Ellen, although not really a loner, is nevertheless comfortable working alone. She could work in a team, but I do not think she would seek its leadership.”

Ability To Work Collaboratively

Strengths (skill in bringing others together in a constructive manner):

“Stephanie works well with others. She is an outstanding and dedicated leader, or a cooperative group member. She has shown a real willingness to reach out and get involved in a variety of different settings and with all different kinds of people.”

“I owe him something of a debt. He was one of those rare students who function as catalysts for the entire class. His intellectual curiosity and willingness to participate set the tone for a whole term of "Introduction to Humanities" and made my life as a teacher much easier.”

“While performing well in my classes was important to him, he seemed equally dedicated to understanding the science beyond what was going to be on the exam. His presence in class was refreshing because he was always willing to answer difficult questions even if he looked foolish. He was very generous with his time when it came to assisting other students who were having difficulty with the material. There is usually a good atmosphere in the class when the top student is not competitive.”

“I look forward to Mike’s contributions to our group meetings. He takes the discussions very seriously. He listens first and then speaks only when he has something meaningful to contribute. As a result, his peers hang on every word and really seem to value his opinion.”

Weaknesses (concerns about social skills and/or control within a group):

“He seems not to be part of any group. He is able to reach decisions and take actions independent of others.”

“While Susie is active in a couple of organizations on campus, she normally goes her own way and does what she considers to be of interest to her and of importance to her.”

“He takes great pride in fastidious techniques that nearly always produce accurate and precise results. He works very well with other bright students. When paired with students less capable than he, though, he tends to dominate the group a bit.”

“Theresa has an abundance of self-confidence. Although this confidence is merited by her abilities, she has yet to master the skill of communicating her level of proficiency without alienating her colleagues.”

Honesty and Integrity

Strengths (high moral standards and values):

“She is an especially conscientious, and honest person. These qualities are so basic to her personality that she inspires an unusual amount of trust from others. Her integrity and honesty are of the highest order.”

“Unlike some students who participate in activities simply to broaden their resumes or to earn praise, Mike does everything with a purpose and the intention of making a difference with no desire for recognition.”

“As an RA in a freshman hall, Nick dealt with several delicate situations professionally, and with an easy, natural manner. He was able to enforce all college policies and regulations without alienating his peers and earned their respect and friendship in the process.”

“As a captain of the baseball team, he had to make decisions that pitted him between the coaches and his teammates. He was willing to make a decision that he believed was right, even though his teammates did not agree.”

Weaknesses (concerns about morality, deception, or reputation):

“You will notice from John’s transcript that he received an “F” grade in Organic Chemistry during the Spring of his sophomore year. This was the result of an unfortunate incident involving the university Honor Code. John has assured me that he will address the details surrounding this incident in his personal statement on the AMCAS application.”

“My concern regarding Ian’s integrity relates to a situation where he had the opportunity to take leadership and stem some poor attitudes that were being detrimental to our soccer team. Rather, he allowed them to continue and, in my opinion, silently encouraged them to continue. This situation illustrates my concern for Ian and is an area where he needs to mature.”

Responsibility and Dedication

Strengths (ability to be accountable and complete commitments as expected):

“Matt is obviously disciplined, perseverant, and thorough in his work. He is a very admirable student and one I could easily regard as a professional colleague.”

“Catherine is an extremely hard worker, is self-motivated, and self-reliant. She is aware of her duties and completes them. In terms of her perseverance and application, she is absolutely first rate.”

“He completes what he starts and works until he is done. He applies himself to the task at hand with a minimum of fuss. He has excellent work habits and self discipline.”

“Alan has been a paramedic for five years and carries this responsibility when he is not on the job. He keeps surgical gloves and a breathing aid in his backpack just in case his expertise is needed. He has impressed me with his stories of dealing with life-threatening situations as well as dealing personally with patients and their families. Alan has a very cool, calm disposition that will allow him to interact positively with his patients and colleagues.”

Weaknesses (concerns about priority setting, purposefulness):

“One must point out that his academic performance may reflect the added effort expended on organizing his rock band and performing at many social activities on campus; perhaps a sign of misplaced priorities.”

“Mary’s undergraduate performance reflects the undirected efforts of a potentially bright student. Since she has dedicated her efforts towards medical school, her grades have been more reflective of her ability.”

“He is committed to medical school, but he gets so involved in so many things as to be distracted from the main mission. His energies have not always been directed towards academic matters. He is capable of much better grades and it seems likely that, away from the distractions of undergraduate life, he will demonstrate this.”

“His decision to not engage me in a more formal conversation about his medical school application process is indicative of the too laid-back approach he has taken to his academic pursuits. He is a nice, pleasant individual with a great deal of academic potential who just does not rise to the high standards that he is capable of pursuing.”

Motivation

Strengths (ability to direct focus, manage time):

“Jane is extremely well adjusted and highly motivated. She maintains a positive outlook regardless of any situation. She is resilient and self-assured while still acknowledging how much she has to learn.”

“She has the ability to make tough decisions when it is necessary. She knows what has to be done to reach her goals and she is willing to back these decisions with work. Carey is highly motivated and takes responsibility for her own learning but seeks advice comfortably.”

“Since she is a single mother who puts in many hours a week working to support herself and her daughter, she is clearly juggling much more than the traditional student. The hardships she has overcome and the experiences she has had make her much more qualified for medicine than many students. I can only say that her achievements in the face of such opposition humble me.”

“I have recognized in Jason a constant search for a challenge. His high GPA is evidence of the way he approaches his academics. His grades are all the more remarkable when considering his extra-curricular activities. Jason is on three varsity sports teams, he is a beautiful glass blower and accomplished ceramicist.”

Weaknesses (lack of drive, questions regarding internal or external locus of control):

“I feel that Mr. Carter is not strongly motivated. Whatever the reason, his performance has definitely been lackluster. If he could take additional science courses and show improvement, no doubt I could raise my level of enthusiasm for him.”

“He has been planning on going to medical school since I have known him, but he has not been able to clearly explain why whenever I have asked him about it. He certainly has the intellectual ability to do well, just not a lot of passion.”

“Bill seemed to me to be an underachiever. He did tremendously well on the MCAT, but I do not know him well enough to say that his performance on standardized tests will translate into success in medical school. My major reservation is Bill’s lack of a strong work ethic. Perhaps he will mature rapidly in medical school in this regard.”

“Although Will’s GPA of 3.5 is solid, his performance in my class, in which he earned a B, was not as strong as our premed students that I recommend with greater enthusiasm. I am not aware of his involvement in extracurricular activities that might have placed a time constraint on him. The other reason that I do not recommend Will more enthusiastically is that I do not see the leadership potential or the level of maturity that I expect of premeds at his stage. Will often seems to be negative in his outlook. I have heard several times from colleagues that Will questions his instructors on missed exam questions, as if the instructor is at fault for his mistake.”

Empathy

Strengths (ability to understand others’ feelings or ideas):

“Mary has participated in a wide variety of campus activities but, for her, the most important has been her involvement with the Magdalene House, a half-way house for former prostitutes and substance abusers. She especially enjoys being a role model for these women and helping them to recover their self respect.”

“As hard as he worked for himself, he had a genuine concern for other students and tried to assist them whenever possible. I found his insights on the problems many students were having in my class to be very valuable for my efforts to improve my teaching.”

“Larry served as one of the student coordinators for four major campus blood drives. His initiative in preparation for the events was impressive. He and her partner handled every detail of the event. They recruited donors as well as volunteers to staff the drive. They also managed the publicity as well as the communication with the blood center staff. Even more impressive that the work leading up to the drive was the way Larry conducted himself during the event. Any moment not in class was spent at the drive making sure everything ran smoothly. With his easy manner, Larry managed to put donors at ease.”

“Jane really separates herself from the typical pre-med student in her personal characteristics. She has a quiet confidence that serves her well. She is a very good listener and sets people at ease. I admire her for her involvement as a rape-crisis volunteer. She seems ideally suited for this service because of her even temper and sympathetic nature. You cannot talk to Jane for any period of time without knowing she listened and understood your point of view. Her interest in medicine comes from a journey of self-discovery and introspection.”

Weaknesses (Lack of insight or care into the feelings of others):

“She’ll be at the top of her class in medical school, and somewhere along the way in the next 4-8 years, her hard-driving, sometimes tactless, approach to interacting with people will be tempered with appropriate restraint and empathy.”

Communication Skills

Strengths (ability to interact interpersonally):

“She is an outgoing person. She is at ease with her peers or elders and has no difficulty in communicating. She is never at a loss for words and always seems to be at ease.”

“Paul is very articulate, poised and able to adjust his style and methods of presentation to both his audience and for the specific purpose of the communication.”

“Billy is a very effective communicator. He speaks with clarity, maturity, and decisiveness. He is a ‘straight shooter’ who has learned tact.”

“Brian’s outstanding intellectual skills are matched by his written and oral communication abilities. Brian is one of the finest technical writers I have ever encountered. He has a style that is engaging without sacrificing scientific accuracy. His paper on the Diels-Alder reaction was clearly the best in the organic chemistry class. Brian did far more research than anyone else and effectively conveyed the

mechanism and synthetic aspects of this reaction. His oral presentation was similarly excellent. Brian is a poised speaker with a thorough understanding of how to use visual aids and how to pitch his talk to the level of his audience.”

Weaknesses (*exhibits behaviors that distract from interpersonal relations: extreme shyness, inability to sustain conversation, poor eye contact*):

“He is quiet and not at all outgoing. He is not easy to talk with and usually does not say much”.

“He is rather self-centered, if not boastful. His behaviors may range from too much confidence to approval seeking.”

“He was a good student, but what struck me the most was his unwillingness (inability?) to speak up in class. I always had the impression that he did not want to be in class. Even in lab he was quiet, although his lab partner was quite friendly and outgoing.”

Service To Others

Strengths (*demonstration of altruistic behaviors toward others*):

“Mary has a long history of volunteer work dating back to junior high school. Her dedication to service has only increased during her college years. Although Mary has participated in a wide variety of campus activities, the most important to her has been tutoring three afternoons a week at an inner-city middle school. She has been tutoring for the past two years and will continue throughout her senior year.”

“She is a mover and a shaker and gets things done. Last year she was in charge of the Humane Society and conducted a dog/cat food drive on campus and also worked with their employees to bring animals to campus for several hours.”

“Being a cook at the Union Mission every Friday night and Saturday morning has been an important part of Bob’s college life. As far as I know, he has not missed this weekend activity for the past two academic years. He certainly is enthusiastic about this activity and looks forward to creating new recipes during his senior year.”

“Hospital volunteer work has been a big part of Michelle’s college career. She spends six hours a week reading stories to patients or helping children with homework assignments at the children’s hospital.”

Weaknesses (*lack of altruistic activity*):

“Bob has not been heavily involved in volunteer activities during the school year. Most of his out of class time has been involved with his fraternity, in which he holds an elected office, and intramural sports.”

“Working to complete and honors thesis in molecular biology has consumed the majority of Sam’s out of classroom time. Because of his strong dedication to his research project, he has not been as involved in volunteer service projects as most of our other premed students. I do not see this as a weakness but rather a reflection of his interest.”

“Mr. Smith seems to have a weakness in demonstrated service to others. Although he has done some volunteer work at a VA hospital in his hometown, he has created the impression that he did not know what medical school is all about.”

Problem Solving Ability

Strengths (ability to approach problems in calculated manner):

“She has outstanding intellectual ability and her analytical skills are superb. Although she has double majored in engineering and math, she has used elective time effectively to pursue humanity courses in the College of Arts and Science.”

“The thing I found most refreshing about Mary is that she took full responsibility for her initial shortcomings and took the appropriate steps to overcome them. We had the typical 'I bombed your first exam, but want to know how to improve' conversation. The difference between Mary and most students with which I have that conversation is that Mary took my advice to heart and made the appropriate adjustments in her study habits. She showed up regularly at my office hours and came prepared with questions. She also asked for additional problems to make sure she was ready for the exams. She demonstrated the kind of resolve she will need to succeed in medical school.”

“Not only did Dan answer the vast majority of questions on every exam correctly, he did so incredibly clearly and succinctly, as if he had mulled over the question for hours and drafted the best response possible.”

“Before the research started I thought that I would have to spend a lot of time in the lab with Matt to make sure he was doing things correctly. It quickly became evident that he was able to work independently and make excellent decisions about the direction of the research. By the end of the summer Matt was in complete control of the research and already formulating future projects.”

Weaknesses (muddled thinking):

“In looking over her academic record, I feel a bit insecure with her ability to handle the rigors of medical school. Judging from her performance in my class, she seems to be able to memorize but cannot apply knowledge to new problems when taken out of context.”

“As a first term sophomore, Anne enrolled in my Human Animal class and earned a C+. Although she did write a very good disease paper for the class, her overall exam performance was consistently in the 'C' range. Her final exam actually fell into the 'D' range. Of the 30 students enrolled in this particular section of the course, I know that at least 6 of them are currently in medical school. Of these six, two earned a B+, two earned an A- and two earned an A. Anne's C+ seems especially uncompetitive given this comparison.”

“Sarah's academic performance in her other upper level science classes has been mediocre. It appears that Sarah was well-prepared as a freshman, but has faltered somewhat in the more advanced classes.”

“Lisa was able to grasp general concepts, but she had difficulty seeing the connections between the concepts and solving problems using them. She always gave the impression that she understood everything, but she never backed it up on exams. She never took my advice for improving her grade.”

Exposure To The Profession

Strengths (knowledge of and experience in the medical profession):

“Together with his work as an emergency medical technician at the university emergency department, Steve has had outstanding exposure to the field of medicine, including extensive patient contact. Steve has drawn blood, performed CPR, applied slings and casts, and taken vitals – experiences well beyond those of our typical premed students. I rate his sincerity of interest in and knowledge of medicine as truly superior.”

“As far as knowledge of the medical field, Joe has more experience than almost every other applicant I have encountered in my 10 years here. He worked for a year as a unit secretary at the university hospital and then six months after that as an emergency medical technician. He also did a six-week internship in a stroke rehabilitation clinic. He earned his EMT license while carrying a full course-load and playing soccer. Clearly his time-management skills are exceptional. When I have heard Joe speak about his experiences as an EMT, I have noted that he has a firm understanding of many different aspects of the medical profession. His sense of compassion and empathy are very strong. He has enjoyed the challenge of being part of a medical team and I know he is looking forward to leading that team when he becomes a physician.”

“While he was in France, Tony fell ill (as most students in this age group do after their week-long break from class) and we took him to see a French physician. Tony spent his time in the office comparing the facilities, the doctor's approach, and procedures to those that he had seen in the United States. Despite his weakened state caused by an advanced sinus infection, he nevertheless found the strength to ask his physician numerous questions about the profession and then to analyze the cultural differences between the two countries and their methods.”

“I met Rob when he was a prospective student on his first visit to our institution. He was interested in medicine so I asked him why he wanted to become a physician. Most high school students give very poor answers to that question, mostly due to immaturity and a lack of real knowledge. Rob, however, gave the best answer I had ever heard from a high school student. He was able to articulate motivation to become a physician based on a combination of experiences as a lifeguard and the scientific research he had done at the university cancer center.”

Weaknesses (lack of insight into the lives and responsibilities of physicians and/or the health care system):

“Although both of her parents are physicians, she has not been involved in any activity to gain additional exposure to the field of medicine. She has worked in her parent's office during the summer months, mostly doing clerical work.”

“In our interview with him we found that he lacked the warmth that characterizes the majority of our applicants. He had some difficulty conveying to us his reasons for becoming a physician. This summer he will volunteer in a hospital which may give him greater insights to his goal as well as exposing him to a service role that he has lacked.”

“Her interview with us was poor because she could not articulate good answers, nor was she able to explain her motivation for becoming a physician. She must put herself in a position where she can discover her reasons for wanting to become a physician.”

“Although I think she could successfully complete medical school, I feel that Ann is taken by the glamour of becoming a doctor — I really doubt that she fully appreciates the amount of work and dedication it will take to get there.”

Common Sense And Judgment

Strengths (level-headed practicality in decision-making):

“Her good common sense and fine judgment are beyond expectations for some one at this stage of intellectual development. Exceptionally mature, quietly self-confident but strong and decisive.”

“Very practical and down to earth. She uses good judgment and has no problems making decisions.”

“I was tremendously impressed at how he handled the aftermath to his horrible injury. David never blamed the quality of health care that he received and maintained his poise and good humor throughout his long hospital stays. He never asked for special accommodations from his professors and never pitied himself.”

“He is the most sought-after chemistry laboratory assistant because of his patience, his responsible attitude, and his communication skills.”

Weaknesses (Lack of ability to make day-to-day decisions):

“Tim does not seem to be decisive; he occasionally needs reassurance.”

“Sarah seeks advice when she feels she needs it, and takes it into consideration when making decisions. She is a very practical young woman but is sometimes hesitant in making hard decisions.”

“Bob’s record shows that he has made some inappropriate social decisions. He could be one of our very best students, but right now he is underachieving.”

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What's It Like to... Participate in Multiple Mini Interviews (MMIs)?

What is a Multiple Mini Interview or MMI?

The Multiple Mini Interview (MMI), developed by McMaster University, is an interview format that gauges an applicant's potential to successfully interact with patients and colleagues. The MMI is designed to measure communication skills, specifically verbal and nonverbal skills that cannot be measured using standardized written exams or by reviewing coursework transcripts. The MMI typically consists of six to 10 very short interviews that revolve around a specific scenario. (See examples of possible scenarios on next page.)

Why are admissions committees moving towards this format?

Based on the research, schools using the MMI format believe it produces a more reliable assessment of a candidate and limits interview biases due to the number of interactions. Because students interact with multiple interviewers in multiple assessments over the course of the MMI, opinions of a single interviewer are not over-emphasized. The MMI allows applicants multiple opportunities to showcase their skills throughout the interview, unlike the traditional one-on-one interview.

What is the format? How long does it take?

Typically, a series of six to 10 "mini" interviews is conducted over a period of nearly two hours. Each mini interview includes a two-minute prep period before engaging in a conversation that lasts between five to eight minutes. "The MMI benefits students in many ways that perhaps other formats do not. Not only does the student know the topic that will be discussed, but also has time to prepare a response before walking into the room, unlike other formats wherein questions can be asked on the spot from any subject area. Additionally, the student has the unique opportunity to make multiple first-time impressions. If one question is tough and the student does not feel he/she performed well, the next room is a new chance to do better without any previous bias," says Tara K. Cunningham, Ed.D., assistant dean of admissions and recruitment at the University of Arizona (UA) College of Medicine – Phoenix. An applicant who completed the MMI at the College of Medicine echoed Dr. Cunningham's belief saying, "I can definitely see the benefit of this format, as I feel some of my stations went very well and others did not, and it was nice to get a fresh start at each station."



What kind of topics are covered in the MMI?

As with any interview, the MMI is designed to assess communication skills as well as provide additional information that is helpful in assessing a student's readiness for medicine. According to Stephen Manual, Ph.D., assistant dean of admissions at the University of Cincinnati College of Medicine, "The MMI scenarios also are developed to assess a candidate's skill and proficiency in areas such as problem solving, logical thinking, interpersonal skills, and ethical judgment. For example, one scenario may ask a candidate to describe what they would do if they learned that a physician was giving patients placebos instead of actual medications. There are also scenarios that involve teamwork and assess the ability to work with a partner to solve a problem. Communication skills also can be assessed through scenarios where actors pose as patients." An applicant at the UA College of Medicine – Phoenix said, "I felt like the MMI allowed me to act for the first time in an interview as a genuine person. Not only does this format allow for such a wide range of skills to be assessed (communication, problem solving, etc.), it does it in such a way to make the entire process informal enough to personally interact with the interviewers. It gave me a chance to work with other applicants to solve ridiculous tasks. I truly enjoyed myself because I know that I was able to give every interviewer a glimpse of my personality as to the type of doctor I will be."

What is the best way to prepare for the MMI?

The MMI does not test specific knowledge. The format is designed to allow candidates to showcase their communication, interpersonal, and critical thinking skills. The best way to prepare is to practice expressing yourself articulately and logically in a timed environment.

According to an applicant who completed the MMI during the 2013 admissions season at UA College of Medicine, "I felt like the MMI allowed the interviewers to get responses that couldn't be so easily prepared for in advance, thus giving them a very realistic picture of the applicant and enabling them to make better decisions. I felt prepared to show who I am in everyday life!"

Possible interview scenarios:

- Scenarios involving interactions with an actor
- An essay writing station; this station may be take longer than the others
- A standard interview station
- A teamwork station where candidates must work together to complete a task
- An ethical scenario involving questions about social and policy implications
- A "rest" station to help students catch their breath and relax



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