PRE-HEALTH INFORMATION
FOR FIRST and SECOND YEAR STUDENTS

prehealth.duke.edu

IF YOU ARE PREHEALTH, you should use your time at Duke to complete required courses, gain experience in clinical areas, and also to become an accomplished, unique individual knowledgeable about the world we live in. Eventually after testing your interests and evaluating choices, you will make the decision to apply. There is no rush. There are many paths to medical school and other health professions and we encourage you to take a route that works best for you, based on your background and interests and skills.

WHAT DO HEALTH PROFESSIONS SCHOOLS LOOK FOR? All look for applicants who are skilled, passionate, and committed to making a positive difference in the lives of others. They will expect a strong foundation in the sciences and experience in the health field in which they intend to work. Life experiences that come through activities such as study abroad, leadership roles on campus, service to the school and community, jobs, internships etc., are also important as they demonstrate maturity, enthusiasm, cultural sensitivity, motivation, resiliency, and drive.

* Academic achievement (grades, courses, MCAT scores)
* Clinical experience working with patients.
* Clinical experience shadowing doctors or other health professionals
* Community Service
* Research

But remember that your time at Duke should not be just preparation for a health professions school. Instead, use these years to test your ideas, gain life experiences, and show who you are and what you can achieve. Some of your experiences at Duke may have a profound influence on your life after medical or health professional school.

NUMBERS for Duke students applying to medical schools for entrance in fall 2013:

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<tr>
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<th>Duke students applied at the end of their junior year</th>
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<tr>
<td>80-90% Acceptance rate of Duke students applying to medical schools</td>
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<td>Average science GPA* of Duke students accepted to medical school</td>
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<td>~ 45% Acceptance rate of students nationally accepted to medical schools</td>
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<td>Average age of entering class at Duke Medical School and similar medical schools</td>
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<td>Average # of medical schools a Duke student applied to</td>
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* For dental, veterinary, nursing, physician assistant and physical therapy schools, the number of Duke students applying is < 20 per year and acceptance rates are similar to that for medical schools.

** The science (BCPM) GPA is based on biology, chemistry, physics, math, statistics and science courses in some other departments; for a complete listing of Duke courses that are included, see prehealth.duke.edu/apply/filling-out-your-application/bcpm-gpa-calculation

ADVISING

Each first-year student has a prehealth advisor based on the dorm in which he/she lives. For names of advisors and how to make appointments see: prehealth.duke.edu/advisor
ADVISESTREAM

AdviseStream is a personalized record of your achievements at Duke. Once you sign up, you can include your courses and grades, reflections on courses you have found meaningful, clinical experiences, community service, research activities, committees, international study, leadership roles and other experiences. You can use the course pathways in the academic and engagement planner to create a four year plan. If you would like to shadow at Duke Hospital sophomore year, you will use the Shadowing Planner to do the online training required for hospital compliance, including HIPPA training, fire and safety training, submitting immunization records, TB test results, etc. Later, you will use AdviseStream when you apply to health professions schools, or when you need to compose a resume. It is a good idea to log on to AdviseStream once a semester and update your record.

To sign up: prehealth.duke.edu/prepare > Sign Up for AdviseStream
To log in: https://duke.advisestream.com

WHAT TO DO IN YOUR FIRST AND SECOND YEAR

The goal of your first year is to begin. See how successful you are in your courses... what is easy, what is more challenging. Get involved. Look for new opportunities. Then gain experience.

TO DO:
• Sign up for your AdviseStream account.
• Join the HPA listserv, monitor your email for announcements, attend prehealth workshops and seminars.
• Read the "Prepare" section of prehealth.duke.edu
• Consider how you might schedule your prehealth courses over your four years at Duke. Note - you do not need to feel rushed to complete the required courses, especially if you will take a gap year.
• Engage rigorously. Learn for the love of learning.
• Develop strong relationships with your professors.
• Meet with your Prehealth Advisor each year to discuss your plans.
• If you experience academic problems, get help right away from your professors and the Academic Resource Center.
• Join one of the several student medical organizations.
• Look for engaging summer experiences.
• Look for clinical experiences where you work directly with patients, to see what health care is like for patients.
• Look for clinical experiences where you shadow a doctor or other health professional, so you see what the lifestyle, challenges and rewards are like for the kind of health professional you might wish to become.
• Look for research experience, volunteering in a lab or on a project, as a work/study student, or in a research independent study if you are interested.

TO FIND OUT INFORMATION ON HEALTH CARE:
• Read stories by or about physicians, veterinarians, etc.
• Set your internet browser to a news site that carries articles on health, such as cnn.com, nbcnews.com, and nytimes.com. Then read the articles. The NY Times carries a blog called "Well" in which Tara Parker-Pope discusses medical science, nutrition, fitness and family health. The reader comments are sometimes very interesting.
• Attend seminars at Duke that are offered on health care. Watch the Chronicle and the prehealth listserv for announcements.
• If your parents have a local newspaper subscription, read it while you are at home. Your state legislature may be debating policies that affect health care in your community, such as support for early childhood education, funding for local clinics, abortion rights, legalization of marijuana etc.
• If you study abroad, find out what health care is like in that country or locale.
• Browse through the websites of medical or health profession schools in your state, or others you might be interested in, as they often will state what they are looking for in applicants.
• For general advice on medical schools and the MCAT, browse through the AAMC (Association of American Medical Colleges) website aamc.org.

Do a google search to find the health professions schools in your home state. Or to see a state by state listing of medical schools, go to https://services.aamc.org/30/msar/home
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*If you have a 5 on the AP chemistry exam (Chem 21) and go directly into organic chemistry (Chem 210DL), you may need to add an additional chemistry course (e.g., Chem 210DL, Biochem 302, Biochem 401) later, depending on the requirements of the medical schools you apply to.

Physiology courses include Biology 329D, 329L, 278LA (at the marine lab) and Cell Biology 503.

For more details on requirements, course preparation, AP credits, and possible courses for statistics, psychology, sociology and English, see prehealth.duke.edu/prepare

Physics: Prospective physics, biophysics and math majors should take Physics 161L, 162L. Pratt students with AP credit for Physics 25 and 26 can enroll in Physics 153L.

Dental and veterinary schools have similar requirements. All students should begin to check in their sophomore and junior years the websites of health professions schools they may apply to, to see if there are additional courses needed.
IDEAS FOR FINDING EXPERIENCES
For more information, see: prehealth.duke.edu/prepare > Finding Experience

CLINICAL EXPERIENCE and COMMUNITY SERVICE

1. DUKE ACTIVITIES FAIR: held early in the fall, will have student prehealth groups and service organizations.
2. PREHEALTH list serve: be sure to join so you can receive periodic announcements. prehealth.duke.edu
3. DUKE LIST: advertises research, jobs, internships and volunteer opportunities. dukelist.duke.edu
4. DUKE CENTER FOR CIVIC ENGAGEMENT: service opportunities, service-learning courses. civic.duke.edu
5. DUKE COMMUNITY SERVICE CENTER: volunteer listings. csc.civic.duke.edu/main/
6. DUKE SERVICE LEARNING PROGRAM: service-learning classes. servicelearning.duke.edu
7. DUKE ENGAGE: summer service (all expenses paid) in US and abroad. dukeengage.duke.edu
8. DUKE PARTNERSHIP FOR SERVICE: a large variety of opportunities for service at Duke.

   dps.dukegroups.duke.edu/how-to-get-involved/  Examples include

   Adopt-a-Grandparent   America Reads and Counts   Innoworks  Camp Kesem
   Engineers without Borders and Engineering World Health   GANO   FEMMES
   Duke Global Health Brigades   Operation Smile   Duke PAWS  McKids  Science Days at Duke
   The Girl's Club: mentoring   WISER   WOODS   Unite for Sight

9. DUKE MEDICAL CENTER VOLUNTEER PROGRAMS. Only for sophomores, juniors and seniors. Duke students volunteer through The Duke Health System Pre-Health Volunteer Program (PHVP). Application and training for the year occurs in early August so this program is not available for first-year students. There is a 2 semester commitment and it requires 2 to 4 hours of service per week. It is highly competitive.

   dukemedicine.org/patients-and-visitors/hospital-information/volunteer-services  Examples include:

   Best Buddy Program   Cancer Patient Support Program   Child, Adolescent Life Program
   Children's Health Center Patient Support   Eye Center/Touchable Art Gallery/Pediatric Art Cart
   Heart Center Patient Support Program   Helping Hands   Intensive Care Waiting Rooms   Kidz Need Hugz Program
   Oncology Recreation Therapy, Hospitality Cart   Rainbow Volunteers (Pediatric Blood/Bone Marrow Unit)
   Ronald McDonald Family Room

10. DIRECTOR OF ACADEMIC ENGAGEMENT for Global and Civic Opportunities: Meet with a DAE to plan for local, national and international service work. globaladvising.duke.edu/

11. DUKE CAREER CENTER:

   General website: studentaffairs.duke.edu/career
   Online tools and great resources: studentaffairs.duke.edu/career/online-tools-resources
   (this includes internships, funding internships, writing resumes, cover letters, networking and more)
   Duke alums who might serve as mentors: dukeconnect.com

12. EMERGENCY MEDICAL TECHNICIAN training at Duke: dukeems.org/

13. DURHAM OR LOCAL OPPORTUNITIES: note that many of these positions will require a car or transportation

   Durham VA Hospital: http://www.durham.va.gov/giving/assignments.asp
   Duke Regional Hospital: dukeregional.org/about/volunteer/
   For the Duke Regional Emergency Room Ambassador Program (fall program for undergraduates)
   contact Sammy Pisiolis at pistioli@live.unc.edu ; application deadline is August 30.
Lincoln Community Health Center: staff the pediatric playroom/waiting area. Call 919-956-4011 lincolnchc.org/

Duke Hospice: http://dhch.duhs.duke.edu/volunteering-0

Central Regional Hospital in Butner: you can participate as part of psychology courses you might enroll in, or call the hospital at 919 764-2000 and ask to speak with the Director of Volunteer Services; there is an orientation program during the first 2 weeks of the semester that you will need to attend, then you will get a listing of possible placements and times; pediatrics and geriatrics are available. ncdhhs.gov/dsohf/services/crh/

Volunteer Center of Durham: thevolunteercenter.org

Wake Med Internship Program: wakemed.org/landing.cfm?id=347

14. ELSEWHERE: Check for positions and programs at home - your pediatrician, family doctor, friends of your parents, local hospital or medical center, community groups, church, local schools, nursing homes, convalescent centers, rehabilitation centers, hospice programs. For ideas about community service away from Durham, see Volunteer.org and idealist.org

15. SUMMER MEDICAL AND DENTAL EDUCATION PROGRAMS: SMDEPs are offered by a number of medical schools each summer; these are free, six-week programs that offer academic enrichment and experience for rising sophomores and juniors interested in medicine and dentistry. smdep.org/

16. SCIENCE ENRICHMENT PREPARATION: The SEP Program is an 8-week summer program at UNC-Chapel Hill for talented rising sophomore and junior prehealth students. All can apply, but they are especially interested in first-generation, underrepresented minority, or socioeconomically disadvantaged students. All costs are covered and a stipend is given. nchcap.unc.edu/college/sep-program/

17. INTERNSHIPS: The Rochester Institute of Technology Internship Search Page lists research, clinical patient interactions, health organizations, non profits and others. people.rit.edu/gtfsbi/Symp/premed.htm

18. MEDIA INTERNSHIPS AND FELLOWSHIPS on US Health Care: kff.org/media-internships-fellowships/

19. AAMC SUMMER ENRICHMENT PROGRAMS: services.aamc.org/summerprograms

20. HEALTH CAREER INTERNSHIPS: healthcareers.org/resources/students and explorehealthcareers.org/en/careers/programs

RESEARCH

1. UNDERGRADUATE RESEARCH SUPPORT OFFICE: This site has lots of information about how to get started, opportunities, summer research programs at Duke and elsewhere, undergraduate research links, summer research programs at Duke and elsewhere, grants you can apply for and assistantships and more. home website: undergraduateresearch.duke.edu/

2. MUSER: search and apply for posted research positions in science and engineering labs during fall add/drop and fall and spring registration periods to find openings to volunteer, work or earn independent study credit.

3. also DUKE LIST, DUKE COMMUNITY CIVIC CENTER and CAREER CENTER (see above under Clinical Experience)

4. RESEARCH AT DUKE: research.duke.edu and medschool.duke.edu/research

5. SPECIFIC INTEREST? Contact a department that has research and ask if there are jobs or volunteer positions available. You can call, e-mail, or contact the Director of Undergraduate Studies (DUS), faculty members, staff assistants, post-doctoral students, graduate students, or other undergraduate students.

6. BIOLOGY DEPARTMENT: has information on research biology.duke.edu/undergraduate/research-independent-study6.
PRATT SCHOOL OF ENGINEERING: pratt.duke.edu/research

7. CHRONICLE: the classified section of the Chronicle often lists opportunities and jobs.
8. INSTRUCTORS. enjoying a class? Ask the instructor if he/she is doing research or if he/she can refer you to someone else who is.

9. HUMANITIES AND SOCIAL SCIENCES: you might be attracted to research on social issues, history, the arts. Duke has a number of interdisciplinary programs where faculty, undergraduates, graduate students and others work as "teams", and the projects are often ones where you can participate on and off over a number of semesters. You could take an associated class, attend events, volunteer, join a team, do a research project, and/or enroll in a research independent study. See the examples below. Also check the departments in which you are considering a major to see what they might offer or participate in.

BASS CONNECTIONS. Projects are Brain - Society, Information-Society-Culture, Global Health, Education - Human Development, and Energy. bassconnections.duke.edu/theme bassconnections.duke.edu/content/get-involved

HUMANITIES WRIT LARGE. fhi.duke.edu/labs and humanitieswritlarge.duke.edu/undergraduate-research

DUKE WIRED. Application of technology to the study of culture, art, urban history and architecture dukewired.org

SERVICE OPPORTUNITIES IN LEADERSHIP hart.sanford.duke.edu/sol/how-to-join/

DUKE IMMERSE four courses, one semester on a current issue sites.duke.edu/dukeimmerse/

SHADOWING HEALTH CARE PROVIDERS AWAY FROM DUKE

1. HOME PEDIATRICIAN, FAMILY DOCTOR. Contact family physicians at home; you might shadow during the summer or winter or spring breaks.

2. HOME HEALTH CARE. Check with your local hospital, medical center, rehabilitation center, retirement home etc., or places where you have volunteered.

3. FAMILY FRIENDS. Check with family friends, health professionals you know.

4. DUKE ALUMS. Check for Duke alums in your hometown (use the Career Center's alum search).

5. RESEARCH CONNECTIONS. If you are working in a medical research lab that has a connection with an MD or MD/PhD, ask if they do clinical work and if you could shadow.

6. ATHLETE? SPORTS? If you are an athlete or like sports, check with sports medicine and orthopedics.

7. RECOMMENDATIONS. When you finish with one shadowing provider, ask for suggestions of others.

Note: Be sure to check in advance to see if a health practice has requirements for shadowing.

SHADOWING HEALTH CARE PROVIDERS AT DUKE

Sophomores, juniors and seniors can shadow physicians, dentists and other health professionals at Duke Medical Center. First-year students are not eligible to participate. The Health Professions Advising Office provides training and matching.

For details see: prehealth.duke.edu/prepare/gain-experience/shadowing-a-provider-at- duke

Updated Feb 2016 DK