PRE-HEALTH INFORMATION
FOR FIRST and SECOND YEAR STUDENTS

prehealth.duke.edu

IF YOU ARE INTERESTED IN A CAREER IN A HEALTH PROFESSION, 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 in which we live. 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 you intend to work

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

In addition, they will look for life experiences that come through activities such as service to others, jobs, internships, study abroad, leadership, etc. These can demonstrate your maturity, enthusiasm, cultural sensitivity, motivation, resiliency, adaptability, and drive. The Association of American Medical Colleges discusses 15 core competencies that they look for in applicants:
aamc.org/initiatives/admissionsinitiative/competencies/

REMEMBER, however, that your time at Duke should not be just preparation for a health professions school. 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 2016:

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<th>Acceptance rate</th>
<th>Average science GPA* of Duke students accepted to medical school</th>
<th>Average overall GPA of Duke students accepted to medical school</th>
<th>Average age of entering class at Duke Medical School and similar medical schools</th>
<th>Average # of medical schools a Duke student applied to</th>
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* For dental, veterinary, nursing, physician assistant, pharmacy 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

August 2016
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, clinical experiences, community service, research activities, committees, international study, leadership roles and other experiences. Take the opportunity to record reflections on all of your courses and experiences; you will use this information when you are preparing to apply to health professions schools. 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 on AdviseStream to do the required online training 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 (go to prehealth.duke.edu for a link)
• Join the HPA listserv (prehealth.duke.edu), 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.
• Develop strong relationships with your professors.
• Meet with your Prehealth Advisor each year to discuss your plans.
• Meet with a Director of Academic Achievement to discuss opportunities in research, study away, local and global engagement.
• 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 in which you work directly with patients, to see what health care is like for patients.
• Look for clinical experiences in which 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 articles, books 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 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
IDEAS FOR FINDING EXPERIENCES
From: 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 OFFICE OF DURHAM AND REGIONAL AFFAIRS/COMMUNITY SERVICE CENTER: American Reads America Counts etc. community.duke.edu
5. DUKE CENTER FOR CIVIC ENGAGEMENT: service opportunities, service-learning courses. civic.duke.edu
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
sites.duke.edu/dukepartnershipforservice/
sites.duke.edu/dukepartnershipforservice/dps-connect/ (dPS Connect for first-year students)
sites.duke.edu/dukepartnershipforservice/service-organization-database/ (database of organizations)
9. DUKE HOSPITAL DUKE STUDENT VOLUNTEER PROGRAM: Primarily for sophomores, juniors and seniors. Requires a commitment for two academic semesters, 2 to 4 hours per week. Applications due early August. It is highly competitive.
https://dukehealth.org/volunteer-services/duke-student-volunteers
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: resumes, internships, resources: studentaffairs.duke.edu/career/online-tools-resources
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 (for the fall program for undergraduates) contact Victoria Grice, Patient Advocate Duke Regional Hospital at victoria.grice@duke.edu; application deadline is Sept 2 at 5 pm. Interviews are on Sept 8 and 9, mandatory orientation is on Sept 15 from 4:30 to 8 pm. Dean Kostyu has copy of the program description and application (you can email her at ddkk@duke.edu).

Helping Hand: volunteer with seniors, disabled adults; requires 90 hours volunteering and training on topics related to aging. Applications due by Aug 22, 2016 for fall 2016 program. ahelpinghandnc.org/opportunities/internships/

Lincoln Community Health Center: staff the pediatric playroom/waiting area. Call 919-956-4011 lincolnchc.org/

Duke HomeCare & Hospice: dhch.duhs.duke.edu/volunteering

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. muser.biology.duke.edu

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

4. RESEARCH AT DUKE: research.duke.edu

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: biology.duke.edu/undergraduate/research-independent-study

7. PRATT SCHOOL OF ENGINEERING: pratt.duke.edu/research

8. CHRONICLE: The classified section of the Chronicle often lists opportunities and jobs.

9. 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.

10. 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: bassconnections.duke.edu
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
### RECOMMENDED COURSES FOR PREMED STUDENTS

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Dental, veterinary, PT, PA and pharmacy schools have similar requirements.

* A NOTE ON AP CREDIT

Most medical schools will accept AP credit. However, there are currently a few exceptions that Duke students should be aware of: UCLA, Loma Linda, U California Riverside, Kentucky, St. Louis, U Nebraska, U Nevada, Yale and Cornell.

Some of these schools state they will not accept AP credit or they may ask for higher level courses as a substitute. It is difficult to predict if they will change their policy in future years. So our recommendation is that you follow regular placement guidelines by departments and then check the individual websites of medical schools in your home state or those to which you may apply later on. Sophomore year would be a good time to begin. If you decide to apply to one of these schools and their restriction on AP credits remains, you can add additional courses in your junior or senior year.

*For corrections and comments, email Dean Donna Kostyu at ddkk@duke.edu  August 24, 2016*