

UNIVERSITY of  
**HOUSTON**

# **Introductory Orientation**

**(for new Pre-Medical and Pre-Dental students)**

**Dr. Gregory Spillers**

**Director | Pre-Health Advising Center**

# About the Pre-Health Advising Center

- **Mission:** To assist UH students interested in healthcare careers.
  - This includes medicine, dentistry, nursing, or allied-health.
- We can provide guidance on:
  - Various healthcare career paths
  - Admission requirements
  - Application process and timelines, including HPAC process
- We also offer various Pre-Health Events throughout the year.
- We are not a major/department and will not replace your major advisor.

# About the Pre-Health Advising Center

- We are located on the 2<sup>nd</sup> floor of CBB (across from Writing Center)
  - Email: [prehealth@uh.edu](mailto:prehealth@uh.edu)
  - Website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)
- Appointments can be made in a [Navigate](#).
- Please sign up for our [Pre-Health Student Listserv](#) to receive emails.

# Pre-Health Advising Office Staff

## ■ Dr. Gregory Spillers—Director

- Dr. Spillers joined the Pre-Health Advising Center as Director in 2020. He previously served as the first full-time Director of Pre-Health Advising at the University of Georgia. In 2017, he became Associate Director of Academic Programs in the Department of Biomedical Engineering at the University of Houston.
- Dr. Spillers received his B.A. from the University of North Carolina-Greensboro and both his M.S. and Ph.D. from the University of Georgia.

## ■ Ms. Melissa Yeung—Health Professions Advisor

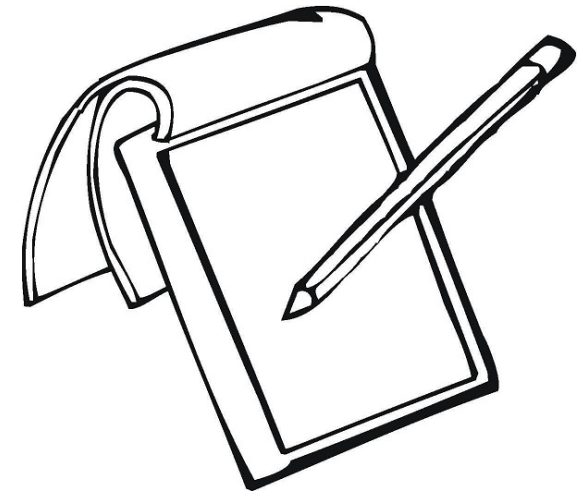
- Ms. Yeung joined the Pre-Health Advising Center in 2020. She previously worked as an admissions coordinator at the Doctor of Physical Therapy Program at Virginia Commonwealth University and worked with recruiting students from underrepresented backgrounds to various health programs across VCU.
- Ms. Yeung received her M.S in Higher Education Administration from Texas A&M University. She is currently completing her Ph.D. in Educational Leadership, Policy and Justice.

# When should you meet with our office?

- Before making an appointment, we encourage students to review the information found in this orientation as well as on our website.
- Specific questions may also be submitted to [prehealth@uh.edu](mailto:prehealth@uh.edu).
- Currently enrolled UH students can make an appointment in Navigate:
  1. Select Academic Advising
  2. Select Pre-Health Advising Center
  3. Select a “service” or reason for appointment
  5. Select available appointment date
- We ask that Incoming Freshman wait to make an individual appointment with our office until their second semester at UH.

# Orientation Outline

- What does it mean to be pre-Med or pre-Dent at UH?
- Medical & Dental Schools in Texas
- Applications and Timeline
- Admission Requirements
- MCAT and DAT
- Health Professions Advisory Committee (HPAC)



# What does it mean to be “Pre-Health” at UH?

- The University of Houston does not offer any formal Pre-Health programs.
  - You cannot major in pre-Med, pre-Dent, nor can you officially declare that you are Pre-Health.
  - You are not required to meet with our office—though we strongly encourage you to.
  - Our office will not replace your major advisor—you will still need to meet with them.
- Once you have decided to pursue a particular healthcare pathway, you may work with our office to learn about the requirements as well as the preparation and application process.
- Recommended first steps as a new Pre-Health student at UH:
  - Focus primarily on establishing strong study habits and acclimating to university-life
  - Earn strong grades (A’s/B’s) in your first-year
  - Utilize campus resources, such as LAUNCH Tutoring and SEP Workshops in NSM
  - Utilize the resources available on our website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)

# Key Points To Consider As You Get Started

- Major does not matter that much!
  - Though Biology or other NSM major may be more practical—they are not required.
  - Our office encourages you to pursue majors/minors that you think you would really enjoy.
- Challenge yourself! Explore what UH has to offer you!
  - Try to take a full-load every semester (>12 credit hours/term).
  - Pursue courses, activities, minors/majors that you are interested in.
  - Avoid thinking there's only one path to medical or dental school.
  - Admissions committees appreciate well-rounded students who “love to learn.”
- Overall GPA vs. Science GPA
  - Science GPA = BCPM (Biology, Chemistry, Physics, Math)



# Medical & Dental Schools in Texas

- There are 15 medical schools in Texas:
  - 12 “public” medical schools
    - These schools use the TMDSAS application
  - 3 “private” medical schools
    - These schools use either the AMCAS or AACOMAS application
  - Of the 15 medical schools: 12 are “allopathic” and 3 are “osteopathic”
- There are 4 dental schools in Texas (all use TMDSAS):
  - Texas A&M University College of Dentistry
  - UT School of Dentistry at Houston
  - UT School of Dentistry at San Antonio
  - Texas Tech University Woody L. Hunt School of Dentistry



# Medical School Admission Requirements

- The minimum pre-requisites for admission into medical school include:
  - Introductory Biology: BIOL 1361/1161 and BIOL 1362/1162
  - General Chemistry: CHEM 1331/1111 and CHEM 1332/1112
  - Organic Chemistry: CHEM 3331/3221 and CHEM 3332/3222
  - Biochemistry: BCBS 3304
  - Physics: PHYS 1301/1101 & PHYS 1302/1102 or PHYS 1321/1121 & PHYS 1322/1122
  - English: ENGL 1303 and ENGL 1304
  - Statistics: MATH 2311 or 3339 or PSYC 3301 or INDE 2333 (others may substitute)
  - Additional Advanced Biology Courses (at least 2): Genetics, Human Physiology, Microbiology, Immunology, Cell Biology, etc.
- It is important you double-check the specific course requirements of each medical school in which you hope to apply, as they may vary.

# Dental School Admission Requirements

- The minimum pre-requisites for admission into dental school include:
  - Introductory Biology: BIOL 1361/1161 and BIOL 1362/1162
  - Anatomy & Physiology: BIOL 3324 and Advanced Anatomy (Course Prefix TBD)
  - General Chemistry: CHEM 1331/1111 and CHEM 1332/1112
  - Organic Chemistry: CHEM 3331/3221 and CHEM 3332/3222
  - Biochemistry: BCBS 3304
  - Microbiology: BIOL 3332
  - Physics: PHYS 1301/1101 & PHYS 1302/1102 or PHYS 1321/1121 & PHYS 1322/1122
  - English: ENGL 1303 and ENGL 1304
  - Statistics: MATH 2311 or 3339 or PSYC 3301 or INDE 2333 (others may substitute)
  - Additional Advanced Biology Courses (at least 2): Genetics, Cell Biology, etc.
- It is important you double-check the specific course requirements of each dental school in which you hope to apply, as they may vary.

# Is AP or IB credit accepted?

- Course credit earned by exams, such as AP or IB can sometimes be used for medical or dental requirements. However, these policies vary.
- You are not automatically required to retake a course if you have earned AP or IB credit for a pre-requisite. Instead, please consult with our office as well as the specific medical or dental schools in which you hope to apply.
- Medical and dental schools that use the TMDSAS application currently accept AP/IB credit if the credit is clearly defined in the transcript (as is true at UH).
- Baylor College of Medicine does not currently accept AP/IB credit.

# What is the MCAT?

- MCAT is the test that you will need to complete to apply to medical school
- Currently, the MCAT consists of 4 sections:
  1. *Biological and Biochemical Foundations of Living Systems*
  2. *Chemical and Physical Foundations of Biological Systems*
  3. *Critical Analysis and Reasoning Skills (CARS)*
  4. *Psychological, Social, and Biological Foundations of Behavior*
- MCAT scores range from 472-528
  - Each section is scored 118-132.
  - A score of 500 is ~50<sup>th</sup> percentile
  - The score for the average accepted applicant in Texas is ~511.
- The MCAT takes ~7 hours and 30 minutes to complete and costs \$310

# What courses will I need to prepare for the MCAT?

- Take the MCAT no later than May of the year you plan to apply
  - Offered in January and March-September each year.
  - Registration opens in October for Jan-June dates and in February for July-September dates.
- Courses you need before the exam:
  - BIOL 1361/1161 and BIOL 1362/1162
  - CHEM 1331/1111, CHEM 1332/1112, and CHEM 3331/3221
  - BCHS 3304
  - PHYS 1301/1101 and PHYS 1302/1102
  - Recommended: Statistics, Psychology, Genetics, Organic Chemistry II, Physiology, Cell Biology
- You can study for the MCAT on your own or take an MCAT prep-course
  - Key is to make a study plan and take at least 5-6 full-length practice tests!

# What is the DAT?

- DAT is the test that you will need to complete to apply to dental school.
- Currently, the DAT consists of 4 sections:
  1. *Survey of the Natural Sciences (Biology and Chemistry)*
  2. *Reading Comprehension*
  3. *Quantitative Reasoning*
  4. *Perceptual Ability*
- DAT scores range from 1-30.
  - Each section is scored 1-30. A score of 18 is ~50<sup>th</sup> percentile.
  - Two scores are provided: Academic Average (AA) and Perceptual Ability (PA)
- The length of the DAT is 4-hours and 30-minutes and costs \$445.

# What courses will I need to prepare for the DAT?

- Take the DAT no later than May of the year you plan to apply
  - Offered nearly year-round.
  - Must wait 90-days before you can retake
- Courses you need before the exam:
  - BIOL 1361/1161 and 1362/1162
  - CHEM 1331/1111 and CHEM 1332/1112
  - CHEM 3331/3221 and CHEM 3332/3222
  - Recommended: Biochemistry, Genetics, Physiology, Anatomy, Art/3-D Design
- Competitive Texas applicants score: AA – 21 /PA - 20
- You can study for the DAT on your own or take a DAT prep-course
  - Key is to make a study plan and take at least 5-6 full-length practice tests!



# When would I apply to medical or dental school?

- UH students typically apply in the Summer between Junior and Senior Year.
- Importantly, your individual time-line may vary!
  - Your major, amount of AP/IB or transfer credit, academic performance, individual goals, etc. can all affect when you are able to apply.
- Do not focus on when you can apply, but when you will be competitive!
  - Getting into medical or dental school is not a race.
- Taking an extra year or two before applying can be very beneficial.

# What is Shadowing?

- Shadowing involves observing physicians or dentists providing care to patients.
- Most schools do not require a set minimum—although 50-100 is recommended.
  - Shadowing (Exposure to “doctor-patient” interaction)
  - Variety is encouraged if possible.
- Start with your family physician or dentist.
  - Campus organizations are also a great way for connecting and networking with potential clinical opportunities.
- Importantly, you must not engage in any activity that could be considered the practice of medicine or dentistry.
  - This is especially important for medical and dental mission trips abroad.

# What is Volunteering?

- Volunteering involves doing good work and giving back to your community.
  - You want to be a doctor or dentist to help people? Well, prove it!
- Importantly, volunteer experiences do not have to be medical or clinical in nature
- No minimum hours, but strong applicants show consistent engagement.
  - Try to find activities where you are regularly involved, rather than one-offs.
- Keep a record of your experiences/activities (dates, locations, responsibilities).
  - This will make completing your eventual application much easier

# What is Research?

- Participating in a research lab is recommended, but not required.
  - You may participate in a lab for course-credit, for pay, or as a volunteer.
  - Very important for dual-degree programs (e.g., MD/PhD).
  - Most students begin looking for research opportunities in their sophomore year.
- Only do research if you are truly interested in it.
  - Plan to be involved in a lab or project for at least a year.
  - You must be able to discuss the research (goals, results, your role) in-depth.
  - Does not have to be medical or translational.
- Talk to your advisor, your professors, and review departmental websites.
  - All it takes is a few emails to prospective professors to become a research assistant.

# What is Leadership?

- Get involved in student organizations and the community
  - Admissions committees prefer applicants who take charge in the activities in which they are most passionate.
- Attending organization meetings is helpful but leading one is better!
  - Who cares if you are a member of 10 clubs? Active involvement is what matters!
  - You do not need to be President, but some executive or advisory role is helpful.
- Check our website for a [list of student organizations](#) to get started

# What is HPAC?

- Health Professions Advisory Committee
  - 15-18 UH faculty from various colleges across campus
  - Meet to review and discuss applicants to Medical and Dental School
  - Provides committee recommendation letter to accompany application
  
- Am I required to complete an HPAC review?
  - Only if you are applying to medical and dental school from UH
  
- When do I begin the HPAC application?
  - During the Fall semester before you plan to apply to medical/dental school

# Overall aspects to building a competitive application

## ■ Academics

- Admission pre-requisite courses (C or better required)
- Limit withdrawals and number of courses taken outside of UH!
- Challenge yourself! (>12 hours/semester)
- Not all about 4.0

## ■ Extracurricular activities

- Shadowing (Exposure to “doctor-patient” interaction)
- Volunteering (Commitment to helping others and community involvement)
- Leadership (Extracurricular engagement)
- Research (does not need to be medical or clinical)

# Major Takeaways!

- Major/minor in whatever you are most interested.
  - Biology and other “science” majors are a good fit—but not necessarily the best choice!
  - Do not worry about what you think medical or dental schools want to see.
  - Seek out activities and organizations that you are passionate about—even if non-medical
- Your primary focus in your first year should be on strong grades (A’s/B’s)
  - Do not stress about the MCAT/DAT, when to apply, or other application components
  - The best thing you can do to prepare as a Freshman/Sophomore is get good grades!
- Utilize the resources available in the Pre-Health Advising Center!
  - Join our Pre-Health listserv for email updates
  - Review our website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)
  - Contact us with questions: [prehealth@uh.edu](mailto:prehealth@uh.edu)



# Thank you!

# Questions?

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