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 careers in medicine, dentistry, nursing, pharmacy, and allied-health.

- We can provide guidance on:
  - Various healthcare career paths
  - Admission requirements
  - Application process and timelines

- We also offer various Pre-Health events and workshops 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 2nd floor of CBB (across from the Writing Center).
  - Email: prehealth@uh.edu
  - Website: www.uh.edu/pre-health

- Appointments can be scheduled in Navigate.
  - Formal appointments are restricted to currently enrolled students. Prospective students and alumni should contact us at prehealth@uh.edu

- We also offer walk-in sessions each week for quick questions.

- Please sign-up to the Pre-Health Email List to receive emails from our office.
Pre-Health Advising Center 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.

- **Mr. Ricardo Garza—Health Professions Advisor**
  - Mr. Ricardo Garza joined the Pre-Health Advising Center in 2021. Mr. Garza previously served as Health Professions Advisor at the University of Texas - Dallas. He has many years of experience assisting undergraduate students in Texas achieve their healthcare career goals.
  - Mr. Garza received his B.S. from Prairie View A&M University and his M.A. from Texas State University.
First Steps for New Students!

1. Join the Pre-Health mailing list to receive email updates from our office.
   - We send regular emails about upcoming events and pertinent application information.

2. Explore our website: www.uh.edu/pre-health
   - Includes information on various career paths, required courses for admission, resources for building a strong application, and other information.

3. Download the pre-Med or pre-Dent Quick Facts Handout and 4-year Plan.
   - These 1-page guides provide detailed overview of course requirements, application components, and overall timeline to get you started.

4. Bookmark the Pre-Health Event Calendar
   - Includes student organization meetings, events, and workshops!
When should you meet with our office?

- Before making an appointment with our office, please ensure you have first:
  - Met with your major advisor to discuss your degree plan and course enrollment schedule.
  - Reviewed the information found in this orientation as well as on our [website](#).
  - Joined the [Pre-Health email list](#).
  - Considered submitting quick questions to [prehealth@uh.edu](mailto:prehealth@uh.edu) (usually much faster than scheduling an appointment).

- Actively enrolled Sophomores, Juniors, and Seniors can schedule an appointment with our office in [Navigate](#).

- Incoming Freshman are asked to wait until their second semester at UH to schedule an individual appointment with our office.

- Pre-Nursing students are required to meet with College of Nursing advisors, rather than our office.
Orientation Outline

- What is 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-Med” or “Pre-Dent” at UH?

- The University of Houston does not offer any formal pre-Med or pre-Dental 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 every semester.

- Once you have decided to pursue the pre-Med/pre-Dental pathway, you may work with our office to learn about admission requirements as well as the preparation and application process.

- Recommended first steps as a new pre-Med/pre-Dental 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
Key Points To Consider As You Get Started

- **Major does not matter that much!**
  - You can apply to medical and dental school with any major.
  - Though Biology or other NSM majors 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!**
  - Avoid thinking there’s only one path to medical or dental school.
  - Pursue clubs, activities, minors/majors that you are interested in (*not what you think looks better*).
  - Try to take a full-load every semester (>12 credit hours/term), unless you are working full-time.
  - Admissions committees appreciate well-rounded students who “love to learn” and do not simply look for the path of least-resistance to protect their GPA. A student with a 4.0 is not automatically better than a student with a 3.6.

- **Overall GPA vs. Science GPA**
  - Science GPA for medical and dental school = BCPM (Biology, Chemistry, Physics, Math)
Medical Schools in Texas

There are currently 15 Medical Schools in Texas:

Allopathic Medical Schools (MD)

Public:
- The University of Texas Southwestern Medical Center
- The University of Texas Medical Branch at Galveston
- McGovern Medical School
- Long School of Medicine
- Texas A&M University College of Medicine
- Texas Tech UHSC - School of Medicine in Lubbock
- Texas Tech UHSC - Paul L. Foster School of Medicine in El Paso
- The University of Texas at Austin - Dell Medical School
- The University of Texas Rio Grande Valley - School of Medicine
- University of Houston - College of Medicine

Private:
- Baylor College of Medicine
- TCU and UNTHSC School of Medicine

Osteopathic Medical Schools (DO)

Public:
- Texas College of Osteopathic Medicine/UNT
- Sam Houston State University

Private:
- University of the Incarnate Word
Dental Schools in Texas

- There are currently 4 Dental Schools in Texas:
  - Texas A&M University College of Dentistry
  - The University of Texas School of Dentistry at Houston
  - The University of Texas School of Dentistry at San Antonio
  - Woody L. Hunt School of Dental Medicine

- All Texas Dental Schools are public and use the TMDSAS application
Medical School Admission Requirements

- The minimum pre-requisites for admission into medical schools include:
  - **Biology**: BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry**: CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry**: CHEM 2323/2123 and CHEM 2325/2125
  - **Biochemistry**: BCHS 3304
  - **Physics**: PHYS 1301/1101 and PHYS 1302/1102 or PHYS 2325/2125 and PHYS 2326/2126
  - **English**: ENGL 1301 and ENGL 1302
  - **Statistics**: MATH 1342 or MATH 3339 or PSYC 2317
  - **Additional Advanced Biology Courses (at least 2)**: BCHS 3305 (Biochemistry II), BIOL 3301 (Genetics), BIOL 3324 (Human Physiology), BIOL 4323 (Immunology), BIOL 4374 (Cell Biology), etc.

- Additional information regarding course requirements can be found on our [website](#).
- It is important you verify 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:

- **Anatomy & Physiology:** BIOL 3324/3224 and BIOL 4397
- **Biology:** BIOL 1306/1106 and BIOL 1307/1107
- **General Chemistry:** CHEM 1311/1111 and CHEM 1312/1112
- **Organic Chemistry:** CHEM 2323/2123 and CHEM 2325/2125
- **Biochemistry:** BCHS 3304
- **Physics:** PHYS 1301/1101 and PHYS 1302/1102 or PHYS 2325/2125 and PHYS 2326/2126
- **Microbiology:** BIOL 2321
- **English:** ENGL 1301 and ENGL 1302
- **Statistics:** MATH 1342 or MATH 3339 or PSYC 2317
- **Additional Advanced Biology Courses (at least 2):** BIOL 3301 (Genetics), BIOL 4374 (Cell Biology), etc.

Additional information regarding course requirements can be found on our [website](#).

It is important you verify 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 \( \sim \)50th percentile
  - The score for the average accepted applicant in Texas is \( \sim \)511.

- The MCAT takes \( \sim \)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:
  - **Biology**: BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry**: CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry**: CHEM 2323/2123
  - **Biochemistry**: BCHS 3304
  - **Physics**: PHYS 1301/1101 and PHYS 1302/1102 or PHYS 2325/2125 and PHYS 2326/2126
  - **English**: ENGL 1301 and ENGL 1302
  - **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 ~50th percentile.
  - Two scores are provided: Academic Average (AA) and Perceptual Ability (PA)
  - Competitive Texas applicants score: AA – 21 /PA - 20

- 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:
  - **Biology:** BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry:** CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry:** CHEM 2323/2123 and CHEM 2325/2125
  - **English:** ENGL 1301 and ENGL 1302
  - **Recommended:** Biochemistry, Genetics, Physiology, Anatomy, Art/3-D Design

- 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. No one is admitted by accident.

- 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 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 (or HPAC)
  - 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 Spring semester before you plan to apply to medical/dental school
Overall aspects to building a competitive application

▪ Academics
  ▪ Strong performance in pre-requisite courses (C or better required—A or B preferred)
  ▪ Limit withdrawals (W’s) and number of courses taken outside of UH.
  ▪ Challenge yourself! Try taking science classes concurrently. (>12 hours/semester)
  ▪ Not all about 4.0. Admissions committees review your academic history/transcript.

▪ 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 practical 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
  • Contact us with questions: prehealth@uh.edu
Thank you! Questions?

Feel free to contact our office at prehealth@uh.edu

Visit our website at www.uh.edu/pre-health