

### **About Us:**

# STX-MSTP

### Our Goals

### The goals of the STX-MSTP are to:

- Prepare physician-scientists to become accomplished health care providers and investigators with problem-solving knowledge and skills
- Train physician-scientists in the conduct of clinical and translational research in culturally diverse settings
- Develop future leaders in academic health care and biomedical research



### Overview

The STX-MSTP is a dual-degree MD-PhD program designed to provide an integrated and cohesive experience in which both the MD and PhD degrees are earned in a single continuous enrollment. Graduates of our program will have the rigorous research and clinical background necessary to ensure successful and productive careers as physician-scientists in leadership positions in academic medicine, in public and private research institutions, and/or in the pharmaceutical/biotechnology industries. Our trainees benefit from the rich environment fostered by the NIH-sponsored Clinical Translational Science Award (CTSA), one of 60 in the country, demonstrating the intensive nature of the biomedical research environment at our university.

### Structure

Our students follow a training path that lasts 7-9 years total. The first two years are spent in medical school with research lab rotations during the summers prior to medical school coursework. Years 3, 4, 5, and 6 are devoted to graduate school training and research, culminating in the PhD degree attainment. Finally, the last two years, years 7 and 8 conclude with the final two years of medical school, completing clinical clerkships and electives resulting in the MD degree. STX-MSTP trainees participate in an integrated curriculum throughout the program to promote their development as clinician-scientists that includes: enrichment seminars with guest speakers, journal clubs, individual development advising, grant-writing workshops, and retreats.

# Program Admissions

### **Application Process**

The MD/PhD application is collected through the AAMC American Medical College Application Service (AMCAS). To apply to both the MD-only AND the STX-MSTP, please submit separate applications to both AMCAS and the Texas Medical & Dental Schools Application Services (TMDSAS) application. The TMDSAS application is not needed for those who do not wish to be considered for our MD-only program separate from the dual-degree MD/PhD program.

# We do not ask for lengthy and repetitive essays on our secondary application!

Our secondary application is sent only to students who we invite to interview with our program as a way to collect additional descriptive information, such as emergency contact, food allergies, and research faculty to request for interviews.

### PhD Disciplines

- Biology of Aging
- Biomedical Engineering
- Cancer Biology
- Cell Biology, Genetics, & Molecular Medicine
- Molecular Immunology & Microbiology
- Biochemical Mechanisms in Medicine
- Neuroscience
- Physiology & Pharmacology
- Radiological Sciences
- Translational Science

### Financial Support

Our program is fully funded. Included in this: tuition, fees, a living stipend (\$30k/ year), and health insurance provided throughout all years of enrollment. Additionally, we also provided funding for mandatory medical fees such as exams and equipment.

### Dates & Deadlines

May 1stAMCAS application opensAug - JanInterviews conductedNov 1stApplication deadlineJan - AprilAdmissions decisionsAprilSecond look visitJuneProgram begins

### Program Timeline

Year	Stage	MSTP
1 - 2	Summer Lab Rotations Medical School Years 1 and 2: Basic Science 1 Coursework STEP 1	
3 - 6	Graduate School Years 1, 2, 3, 4: Graduate Discipline Coursework Bench Research F-30 Submission Qualifying Exam Dissertation Defense	STX-MSTP Integrated Curriculum (throughout program):  Bench to Bedside monthly seminars, Journal Club, Retreats, Workshops, individual development advising
7 - 8	MS 3 Core Clerkships MS 4 Electives STEP 2	



# Program Outcomes



Graduation, Spring 2019: MSTP students graduate after completing both their PhDs and MDs. (Left) Dr. Curtis Clark matched to U. Alabama Birmingham in radiation oncology, Dr. Tiffani Houston matched to U. Miami in Med/Peds, Dr. Jose Cavazos (Program Director), and Dr. Justin Drerup matched to UT Southwestern in anesthesiology.



Vinh Dao, MD, PhD, class of 2017
Vinh completed his PhD in Microbiology & Immunology in 2015. He received his PhD after three years of graduate research in the lab of Tyler Curiel, MD, MPH. Following medical school, Vinh moved to Stanford to complete a PSTP in Internal Medicine and Hematology/Oncology.



Mariam Ishaque, MD, PhD, class of 2018 Mariam completed her PhD in three year

Mariam completed her PhD in three years in the Radiological Sciences graduate program. The focus of her research was on pediatric brain injury with mentor, Peter Fox, MD. In March of 2018, Mariam matched to the University of Virginia and plans to complete a residency in Neurosurgery.

Our students match to top residencies across the country:

Class of 2019: U. Alabama Birmingham,

U. Miami, UT Southwestern

Class of 2018: Wash. U, U. Virginia, UTH Houston

Class of 2017: Stanford, Harvard, UTH San Antonio

Class of 2016: Yale, Baylor, UT Southwestern,

Methodist Houston, UTMB Galveston

Class of 2015: UT Southwestern, J. Hopkins, Baylor

Class of 2014: UC Denver, Wake Forest,

UT Southwestern

Class of 2013: U. Penn, UTH San Antonio

## Research Facilities

#### MD Anderson Cancer Center

The Mays Cancer Center, the newly named center of UT Health San Antonio MD Anderson Cancer Center is the only NCI-designated cancer center serving South Texas. It is a state-of-the-art research center with a focus on moving cancer discoveries in the laboratory into the clinic to save lives. As an NCI-designated cancer center, it has well developed research science programs aimed at conquering cancer paired with state-of-the-art cancer clinical care. They host a variety of educational opportunities including hands-on training with clinicians, community educational seminars on cancer, as well as professional conferences and seminars. The Mays Cancer Center is also the host organization for the San Antonio Breast Cancer Symposium, the largest in the world for the disease.





### Barshop Institute for Longevity and Aging

The Barshop Institute for Longevity and Aging brings together the world's leading scientists in aging and longevity research providing them with the latest technologies in the application of cutting-edge research methods. The primary spaces within the facility include wet laboratories, laboratory support areas, and an animal vivarium, as well as administrative and building sup port. The Barshop's research and core facilities include the San Antonio Aging Interventions Testing Program, San Antonio Nathan Shock Center, San Antonio Pepper Center, San Antonio Geriatric Research, Education and Clinical Center, Marmoset Aging Center, and Naked Mole-Rat Aging Center.

Brand new facility opening spring 2020!

#### Texas Biomedical Research Institute

The Texas Biomedical Research Institute is an independent biomedical research institution, specializing in virology and immunology, genetics, aging, regenerative medicine and nonhuman primate research. It is also the home of the renowned Southwest National Primate Research Center. Texas Biomed has the nation's only privately owned biosafety level 4 (BSL-4) laboratory. This maximum containment lab allows for safe research on lethal pathogens for which there are no treatments or vaccines, including potential bio-terror agents and emerging diseases. It is also home to AT&T Genomics Computing Center, the world's largest computer cluster for human genetic and genomic research which allows scientists to search for disease-influencing genes at record speed. For more information, please visit txbiomed.org.





#### Research Imaging Institute

The Robert F. McDermott Clinical Sciences Build-

ing is home to the Research Imaging Institute. The mission of the Research Imaging Institute is to perform basic, clinical and translational research using noninvasive, biomedical imaging methods for measuring the structure and function of living organisms. McDermott is home to neuroscience research, radiological sciences, along with labs focusing on cancer prevention. The Research Imaging Institute has a total of 28,000 sq ft of space that houses the laboratories, computing facilities, and offices.

## About San Antonio



### High quality of life.

Since San Antonio has one of the lowest costs of living in the country, the MD/PhD Program's \$30k/year stipend is extremely competitive. Many of our students own property!



#### Family-oriented.

We are known for having a small-town feel, being community focused, and family friendly (25% of our students have children).



#### Great weather.

On average, we have 300 Sunny days each year. Great weather means weekend exploring! Check out SA favorites like the Riverwalk, the Pearl, or hiking in the Hill Country.

### For more information, please contact us!

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