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# Applying to MD-PhD Programs



**Fact Sheet for the  
2021-2022 Application Cycle**

# Choosing MD-PhD Programs

## What is an MD-PhD Program?

An MD-PhD program is a graduate training program that awards its graduates with an MD degree in allopathic medicine and a PhD degree in a biomedical-related field. A typical MD-PhD program lasts for 8 years.

## What is an MSTP?

MSTP stands for Medical Scientist Training Program and is an MD-PhD program that receives funding from the NIH. This allows MSTPs to fully cover their students' medical and graduate school tuition. Students in MSTPs also receive a living stipend that often ranging anywhere between \$30k and \$45k every year depending on the cost of living.

Note that all MSTPs are MD-PhD programs, but **not all MD-PhD programs are MSTPs**. Notable MD-PhD programs that are not MSTPs are Boston University and 'half' of Harvard's program. At Boston University, students are responsible for their medical school tuition and do not receive any stipend. At Harvard Medical School, approximately half of the students are responsible for their medical school tuition and do not receive a stipend *only for the first two years of medical school*.

## What do MD-PhD graduates typically do?

The vast majority of MD-PhD graduates go into academic medicine, seeing patients at a university hospital while also running a research lab. Some other MD-PhD graduates decide to only pursue clinical medicine or only pursue a career in academia. A small percentage of MD-PhD graduates decide to leave medicine and work for biotech startups, the government, consulting, or other fields.

## Which program should I go to?

Everyone is familiar with the [US News World Rankings](#), but in reality, using lists like these is probably one of the worst ways to decide which program to attend. This is because a large percentage of how the ranks are calculated is dependent on the GPA and MCAT scores of the matriculants, which gives absolutely no indication of the quality of a program and its ability to train students *after* matriculation.

The most important thing to think about is **lifestyle**. MSTP training is a grueling 8 years on average and life doesn't get put on hold. People start families, have children, buy houses, etc. Do you want to live in a vibrant, bustling city to enjoy your 20's? Or perhaps settle down with a significant other in an affordable neighborhood? Or stay close to family? Lifestyle choices should always come first.

The next most important thing to consider is **career opportunities**. What programs offer resources and research labs that will help you achieve your ultimate career goal? What opportunities lie in an institution for you to take advantage of? The purpose of this document is to help you start thinking about some of these factors.

# NIH F30/F31 Training Grants

## What are F30 and F31 training grants?

F30's and F31's are MD/PhD-specific training grants to support the work of students in the graduate phase of MSTP training. Most applicants that apply are in their early years of graduate training. By being the primary PI on an F30/F31 training grant, you are demonstrating your ability as an exceptional scientist and biomedical investigator.

## Why should I care about F30/F31's?

The number of students that receive an F30 or F31 in an MSTP is a proxy for the institution's support for their students. Some programs require all eligible MD/PhD students to apply, help students through mock review processes, and have databases of previous successful applications. Other programs have no such support. Asking a program about their F30's and F31's can give you a sense of not only the caliber of the trainees, but also the institution's role in fostering student success.

## What programs are most successful in securing F30/F31 funding?

Here is a list of the number of active F30 and F31 training grants at all US institutions with at least one grant in 2020:

UCSF	28	University of Washington	16
WUSTL	26	Columbia	16
Vanderbilt	26	University of Michigan	15
Weill Cornell	23	Duke	13
University of Pennsylvania	22	UCSD	12
University of Illinois	21	NYU	12
Northwestern	21	Johns Hopkins	11
Yale	19	Ichan at Mt. Sinai	9
Case Western Reserve	18	Emory	9
Stanford	18	University of Virginia	9
UNC	17	UCLA	8
University of Chicago	17	Baylor	6
Harvard	16	UT Southwestern	3
University of Pittsburgh	16		

## What questions should I ask programs during an interview?

1. Are MSTP students encouraged or required to apply to F30's?
2. What institutional support is there for MSTP students that are applying to F30's?
3. Are there any additional benefits for MSTP students that successfully receive an F30? *(Some schools offer awardees a few extra thousand dollars as a part of their stipend if they secure F30 funding.)*
4. Is there are dedicated F30 coordinator that works directly with MSTP students?

## MSTP Program Size

### Why should I care about the size of an MSTP?

The **program size** of an MSTP is defined to be the number of current students that are actively enrolled in the program, whether it be in medical or graduate school phase. Larger programs are often better funded and receive more institutional support, although it may be more difficult to stand out and know who's who. Smaller programs may have more resources available per student but are often sparser in terms of institutional support. Support from the MSTP is especially important in order to ensure that you graduate from your PhD program in a timely fashion. The average MSTP might have around 10-12 students per class.

### What MSTP programs are the largest in the United States?

Here is a list of the largest 22 MSTPs in the United States as of 2020:

University of Pennsylvania*	201	Columbia	106
WUStL	201	Baylor	103
Harvard**	163	University of Michigan	100
Weill Cornell	147	Stanford	97
Yale	144	UCSF	97
University of Illinois	131	University of Pittsburgh	94
Case Western Reserve	116	University of Washington	92
Northwestern	115	Emory	92
UCLA	115	University of Chicago	87
Johns Hopkins	113	NYU	86
Vanderbilt	109	Duke	78

\*Including the VMD-PhD veterinarian-scientist training program, University of Pennsylvania has a little over 230 students enrolled in their dual-degree programs.

\*\* Only about half of the students in Harvard's MD-PhD program are accepted into the MSTP prior to matriculation. The remaining half comes from MD students in the HST program that decide to associate with the MD-PhD program after being accepted into the HST MD program but rejected from the MD-PhD program. This second group of students are indistinguishable from MSTP students, aside from the fact that they must pay tuition costs and receive no stipend for the first two pre-clinical years of medical school.

# MSTP Program Funding

## Why should I care about the size of an MSTP?

This should be fairly obvious: more funding means not only larger stipends and more resources for students, but also that the NIH values the school's MSTP and its alumni contributions more on average. MSTP funding often comes from alumni donations, revenue from the training hospital(s) associated with the school, and NIH T32 training grants that are awarded to MSTP programs among other programs.

## What MSTP programs are the most well-funded in the United States?

Here is a list of the 36 most well-funded MSTPs in the United States as of 2020 (**in millions of dollars**). This list *only* includes funding from NIH T32 training grants.

University of Pennsylvania	2.61	Baylor	1.25
Harvard	2.55	NYU	1.17
WUSTL	2.34	University of Chicago	1.17
Yale	2.18	Emory	1.17
Johns Hopkins	1.70	University of Pittsburgh	1.17
Albert Einstein College	1.70	UNC Chapel Hill	1.06
UCSF	1.67	UT Southwestern	1.02
Stanford	1.60	University of Colorado	1.01
Case Western Reserve	1.54	University of Alabama	0.91
University of Washington	1.54	Stony Brook	0.85
UCLA	1.54	University of Rochester	0.85
Northwestern	1.44	University of Iowa	0.82
University of Michigan	1.38	University of Illinois	0.80
Vanderbilt	1.38	University of Maryland	0.74
Columbia	1.33	University of Virginia	0.74
UCSD	1.28	University of Minnesota	0.74
Duke	1.28	Mayo Clinic	0.64
Icahn at Mt. Sinai	1.28	University of Cincinnati	0.64