

Advice for Students Interested in the MD/PhD Program

For those of you interested in combining basic science research interests with medicine, then the MD/PhD combined degree program that trains physician-scientists is for you. This is what I did after graduating from Yale. This is typically a seven-year program; two years of medical school followed by four years of PhD, with a final year of clerkships. Then you do a residency (four to seven years) followed by (or concurrently) with a postdoc (four years). This is a long journey; I was 36 before I landed my first real job as an Assistant Professor. But the MD/PhD program is extremely rewarding if you like doing medically relevant research and apply it to the bedside. In addition, it's free: medical school tuition is waived, and you get paid a ~\$30,000 stipend during your PhD years, just like any STEM graduate student. MD/PhD physician-scientists typically do 80% research and 20% clinical activities. Using myself as an example, I run a basic science cancer research lab and sign out clinical chemistry cases 1 week out of every month. You are expected to obtain independent grant funding to support your research, and mentor graduate and medical students.

Please visit this link to see the latest outcome survey for those enrolled in a MD/PhD program, <https://members.aamc.org/eweb/upload/AAMC-National-MDPhD-Program-Outcomes-Study-2018.pdf>.

The National Institute of Health (NIH) funds the Medical Scientists Training Program (MSTP), but almost all medical schools also have their own funding to support additional MD/PhD students. Examine this link for more information about the MSTP, <https://www.nigms.nih.gov/Training/InstPredoc/Pages/PredocOverview-MSTP.aspx>.

Note: If you are a student supported by the MSTP and after your MD/PhD training decide NOT to do academic research but to go into private practice, you will have to pay back to the federal government the tuition and stipend that supported your educational training. Remember, this program is to train future ACADEMIC physician-scientists, not private practice physicians.

To get into a MD/PhD program, you need to do everything I outlined in the pre-med and graduate school sections. Yale undergrads competitive for this program are usually STEM majors with intensive research experiences. Grades matter, and undergraduate publications are a definite plus. Come and talk to me if you are interested in this challenging program.