

# MD/PhD

Becoming a physician-  
investigator

# What is the MD/PhD?

- MD-PhD programs provide training in both medicine and research. They are specifically designed for those who want to become research physicians, also known as physician-investigators or physician-scientists. Graduates of MD-PhD programs often go on to become faculty members at medical schools, universities and research institutes.
- Regardless of where they eventually work, MD-PhD candidates are being prepared for careers in which they will spend most of their time doing research, in addition to caring for patients. The MD-PhD dual career is busy, challenging, rewarding, and offers opportunities to do good for many people by advancing knowledge, developing new treatments for diseases, and pushing back the boundaries of the unknown.

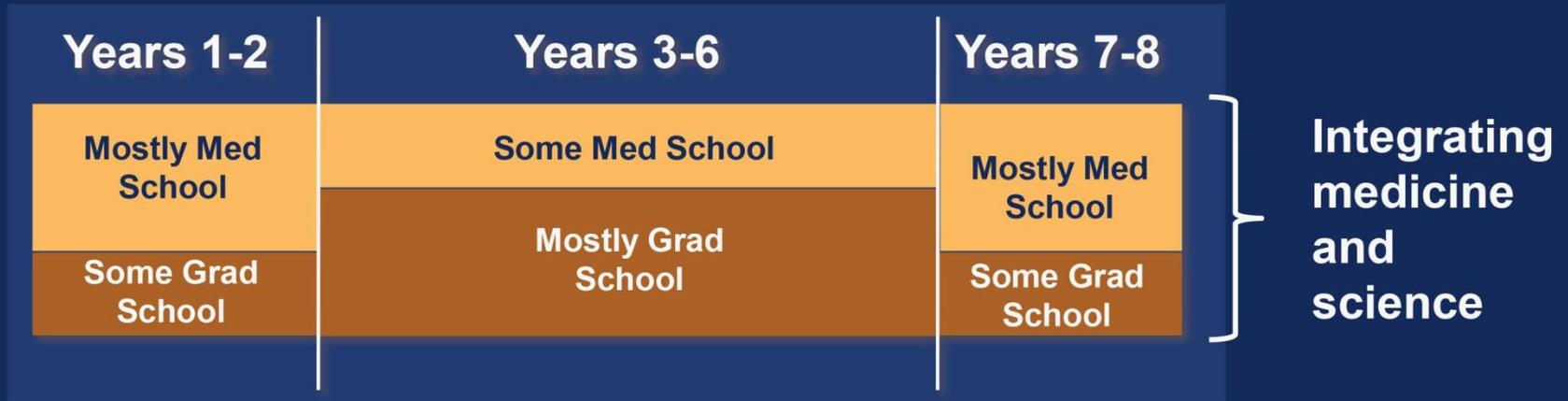
# History of the MD/PhD

Highly individualized MD-PhD training was a natural outcome of the 'integrated' medical school curriculum established by Western Reserve University School of Medicine in the mid 1950s under the leadership of Joseph T. Wearn, MD, Professor of Medicine and Dean of the SOM. This novel curriculum encouraged combined MD-PhD training and contained the following features: 1) Basic science and clinical teaching were interfaced and coordinated throughout the 4-year MD program.

2) Lots of 'elective' and unscheduled time was reserved during the first two years of medical school for students to pursue their own interests. 3) Completion of a research project was a requirement for the MD degree. 4) Basic science and clinical faculty cooperated enthusiastically to make the integrated curriculum a success.



# MD-PhD curriculum is a continuum



## Preclinical (years 1 - 2)

- Medical sciences and explore research opportunities (lab rotations)

## Research (years 3 - 6) Complete PhD degree

- Conduct thesis research with opportunity for clinical experiences

## Clinical (5 - 7 or 6 - 8) Complete MD degree

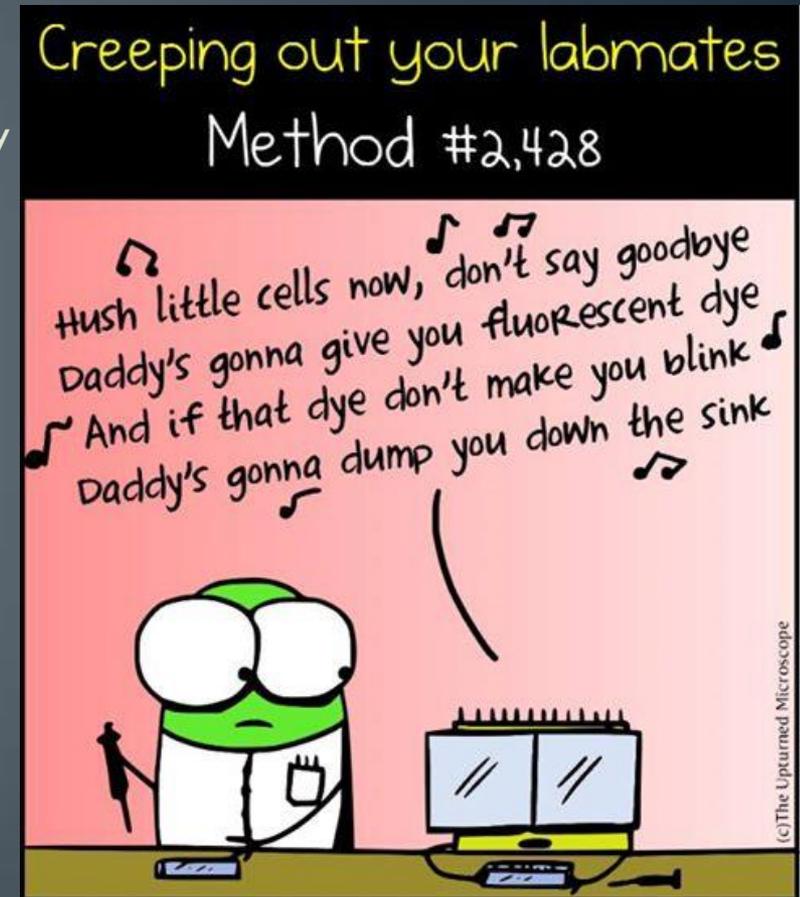
- Clinical clerkships
- Additional research experiences
- Each MD-PhD Program offers unique research opportunities

PhD is awarded in a wide variety of disciplines

# Princeton Alumni in MD/PhD Programs

- Harvard – Neuroscience
- Harvard – Health Policy
- Loyola – Cell Biology, Neurobiology & Anatomy
- Mt. Sinai – Cell & Developmental Biology
- Mt. Sinai - Neuroscience
- NYU – Developmental Genetics
- Stanford – Bioengineering
- UCSD – Biomedical Sciences
- UNC – Anthropology
- U Penn – Anthropology
- Yale – Intradepartmental Neuroscience

Additional schools where Princeton alums are pursuing the MD/PhD include Case Western, Drexel, Duke, Einstein, Hofstra, Johns Hopkins, New Jersey Medical School, UCLA, U Pittsburgh, U Virginia, Washington University



# For more information...

- AAMC List of MD/PhD Programs By State:  
[https://www.aamc.org/students/research/mdphd/applying\\_md-phd/61570/mdphd\\_programs.html](https://www.aamc.org/students/research/mdphd/applying_md-phd/61570/mdphd_programs.html)
- Summer Undergrad Research Sponsored by MD/PhD Schools:  
<https://www.aamc.org/members/great/169782/mdphdsummerprograms.html>
- National Institutes of Health MSTP Overview:  
<http://www.nigms.nih.gov/Training/InstPredoc/PredocOverview-MSTP.htm>
- American Physician Scientist Association:  
<http://www.physicianscientists.org/>
- MD/PhD Guide written by MD/PhD students:  
<http://www.mdphds.org/>