

2020

MD-PhD: Is it Right for me?

Communications Committee of the MD-PhD
Section of the Group of Research, Education,
and Training (GREAT) AAMC

- Application Process
- Training
- Careers



Tomorrow's Doctors, Tomorrow's Cures®

Learn

Serve

Lead



Association of
American Medical Colleges

Why an MD-PhD?



Biomedical scientists
use the power of
research
to understand and
cure human disease

Students interested in careers as MD-PhDs are...

- **fascinated** by human biology and disease
- **creative**
- **persist** in seeing a project to completion



*MD-PhD graduates sit at the
intersection of science and medicine*

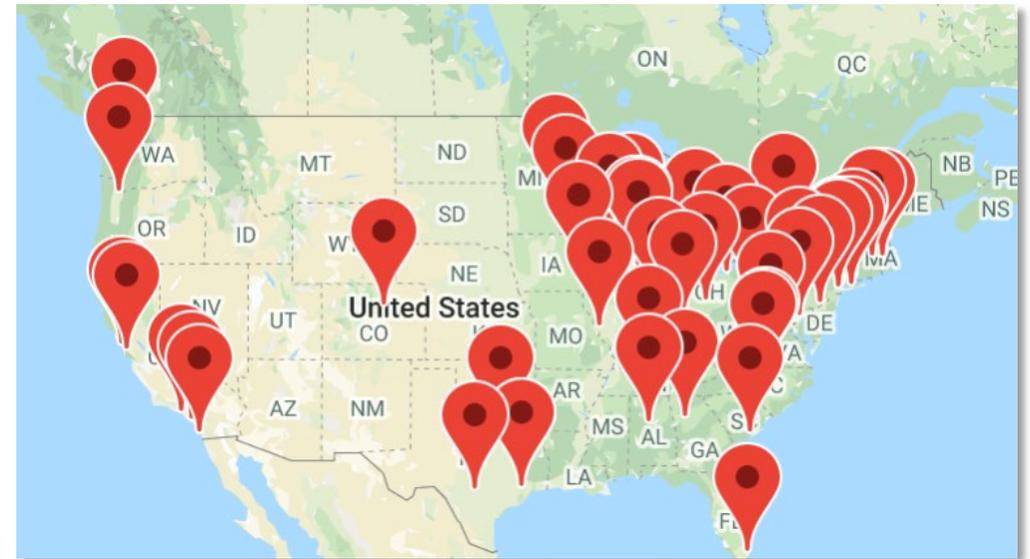


Science

Medicine

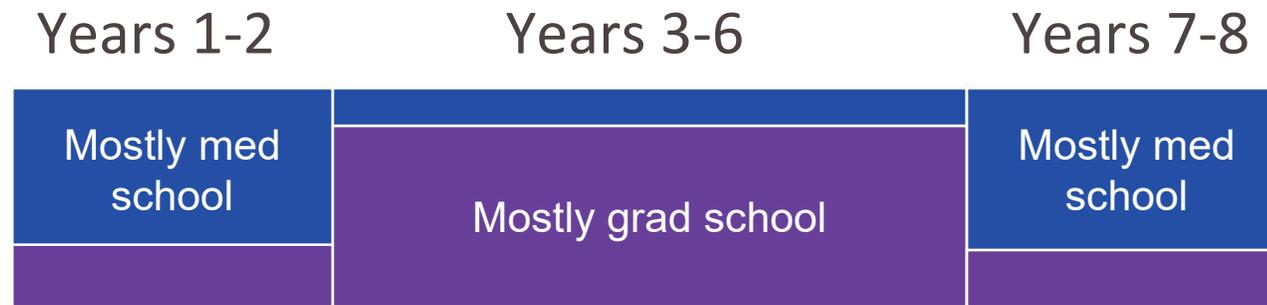
Where is MD-PhD training done?

- There are ~ **90 MD-PhD** programs affiliated with medical schools:
 - 50 programs (with ~40-190 trainees) are supported by NIGMS training grants known as **Medical Scientist Training Programs (MSTPs)**
 - Most MD-PhD programs offer **financial support**: stipends, tuition waivers and health insurance



MD-PhD Program Overview

Goal: Prepare trainees for a career that combines research and clinical care, emphasizing research



- Curriculum integrates MD and PhD training
 - complete both in 7 or 8 years
- Many PhD fields are possible
 - Non-traditional PhD training opportunities

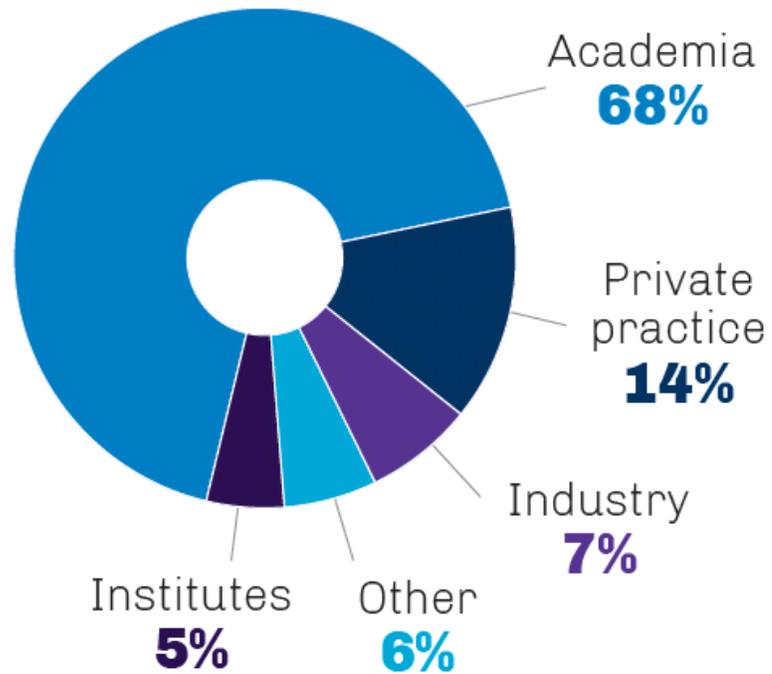
MD-PhD Alumni.....

- Choose a variety of **residency training** specialties
- Do **research** more than 50% of the time
- **Enjoy their careers**; more than 80% would choose their career again

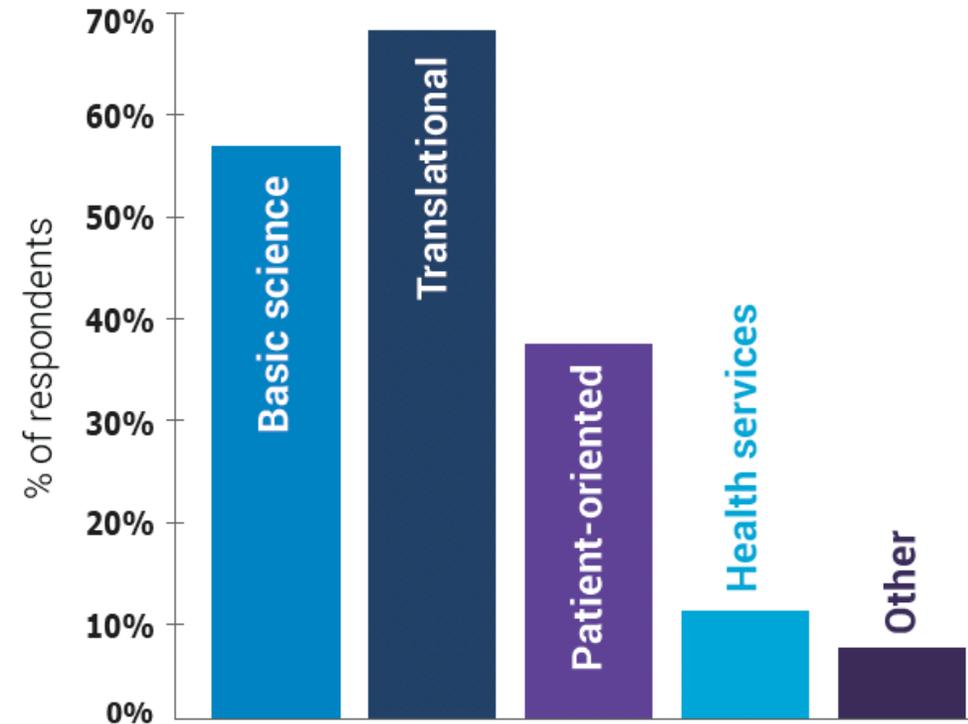


MD-PhD Careers: long term outcomes

Most MD-PhDs work in academia.



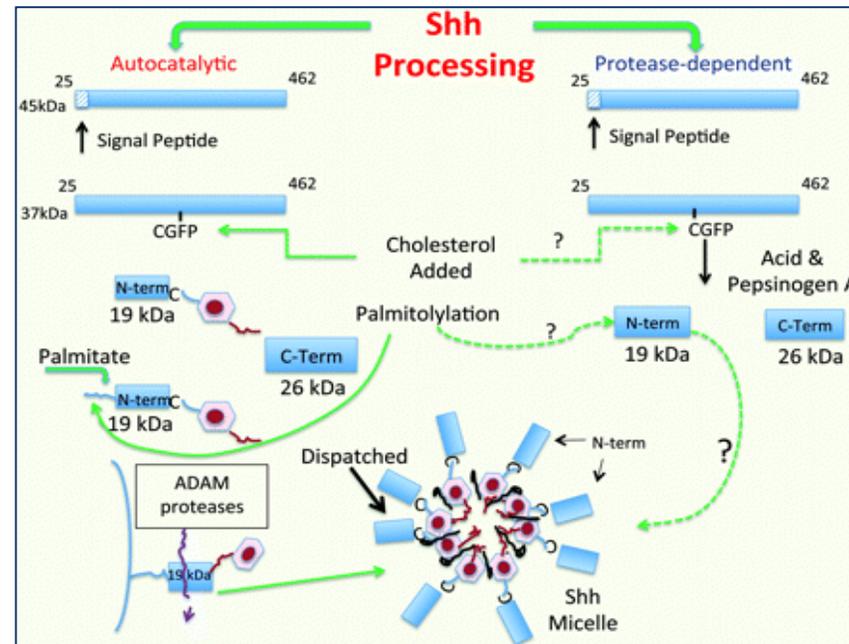
MD-PhDs conduct various types of research.



A Career as a Physician Scientist



Juanita Merchant, MD, PhD
Professor of Medicine
Chief, Division of Gastroenterology



...studies transcriptional control of gastrointestinal peptides that regulate cell growth and cancer



Tomorrow's Doctors, Tomorrow's Cures®

Learn

Serve

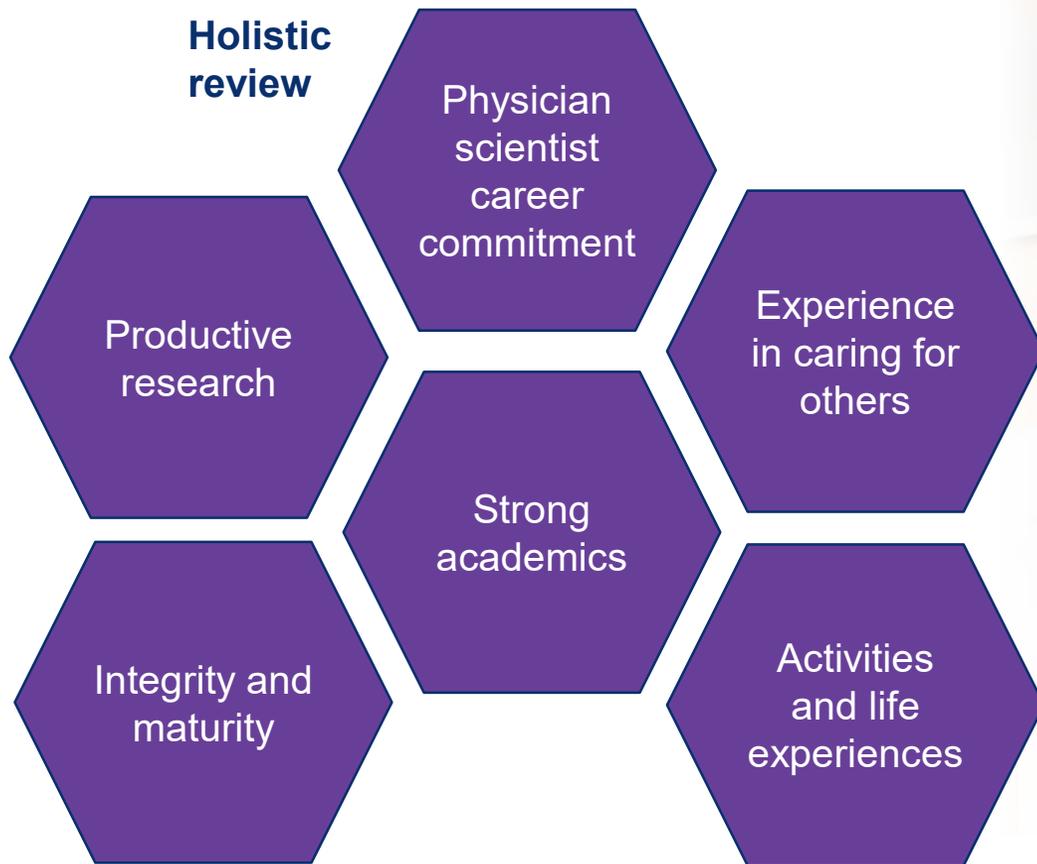
Lead

Preparing for and Applying to MD-PhD Programs



Association of
American Medical Colleges

Elements of a successful MD-PhD application



What constitutes a substantive research experience?

- **Enough research experience to understand what you are getting into:**
 - Multiple summer projects
 - Undergraduate research, Senior research thesis
 - One or more years pursuing research after undergraduate degree (Post-bac)



Become familiar with testing a hypothesis

MD-PhD Statistics (2018-19)

- **5,563 MD-PhD trainees nationally**
- **2018-2019 Application cycle (matriculated Summer/Fall 2019):**
 - 1855 MD-PhD applicants (>50K straight MD)
 - 14 applications submitted/applicant (avg)
 - 672 matriculants: ~1/3 of MD-PhD applicants will enter an MD-PhD Program in 2019
 - 46% women entering 2019
 - 10.4% racial/ethnic URM
 - 8.9% multi racial/ethnicity



MD-PhD Applicant Statistics (2018-19)

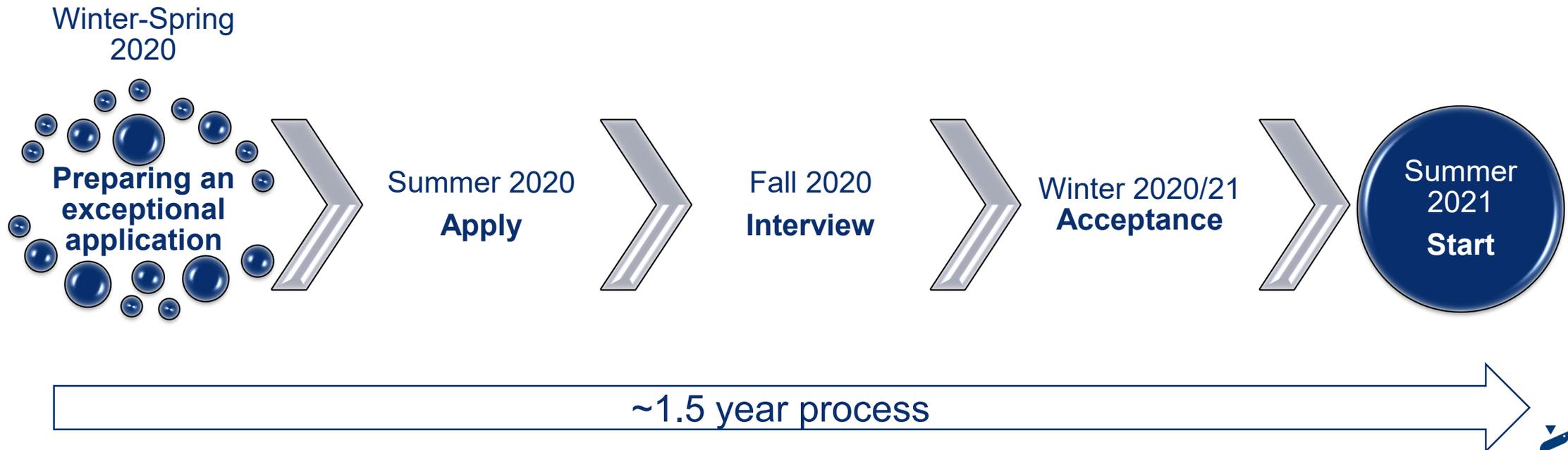
	Mean	Range
Total applicant pool (n = 1,855)		
MCAT	510	472-528
GPA	3.6	1.9 – 4.0
Matriculants (n = 672), 36%		
MCAT	516 (95%)	497 – 528 (40-100%)
GPA	3.8	2.7 – 4.0

Application Timeline

Candidates Matriculating in the Summer of 2021

Pre-application (2-3 years)

- Courses
- Research
- Clinical exposures
- Activities and life experiences



What should you look for in a MD-PhD program?

- Environment (research and academic)
- Students, program activities & professional development, community involvement
- Alumni achievement
- Location
- A sense of belonging or “good fit”



For more information:

- <https://www.aamc.org/mdphd>
- [NIH.gov/training](https://www.nih.gov/training)
- Role models
- Knowledgeable people who care about you:
 - Directors and Mentors (Summer Program and Post-Bac)
 - Professors, Lab Heads and Department Chairs
 - MD-PhD Students, Graduate Students and Post-Docs
 - Career Advising Offices
 - PhD and MD-PhD Program Directors



Tomorrow's Doctors, Tomorrow's Cures®

Learn

Serve

Lead



Association of
American Medical Colleges