

The PhD degree in any biomedical science field leads to an exciting career of discovery in science

It is a national priority to increase the number of individuals of diverse backgrounds in our research community and profession.



Great discoveries come from great minds and diverse perspectives



For more information please visit:

[aamc.org/phd](http://aamc.org/phd)

Developed by the AAMC GREAT Group PhD Outreach Committee to provide educational and career resources to students interested in biomedical science careers.

The GREAT Group fosters exchange of information and ideas among faculty and administrative leaders of biomedical PhD, MD-PhD, and postdoctoral training programs. The Group functions as a national forum to help these programs achieve their goal of educating successful biomedical researchers.

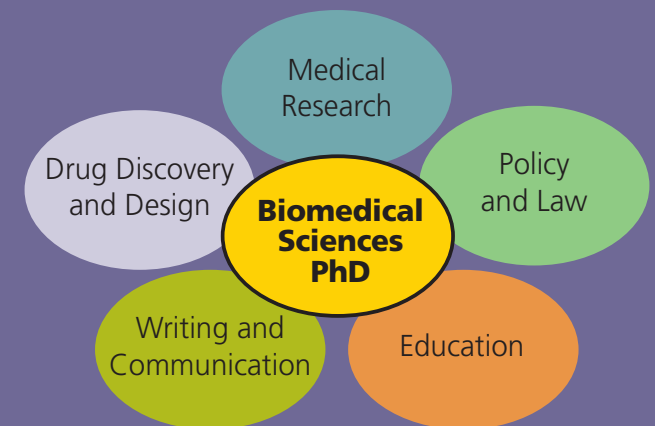
Group on Graduate Research Education and Training  
**GREAT**



# PhD Programs

Learn  
Serve  
Lead

## Graduate Education for Aspiring Biomedical Scientists



The PhD degree in biomedical sciences leads to a broad spectrum of careers



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Association of American Medical Colleges



## What can I be with a PhD?

- Biomedical scientists carry out multidisciplinary research to learn about the functioning of molecules, cells, organisms, and populations
- New discoveries are then applied to prevent and treat human diseases

## Who are biomedical scientists?

- Critical thinkers
- Innovators
- Team leaders & members
- Teachers and mentors

Biomedical scientists bridge the gap between the basic sciences and medicine

## Where do biomedical scientists work?

- Academic research institutions
- Pharmaceutical & biotechnology companies
- Government agencies
- Law firms
- Financial institutions
- Mass communication companies
- Philanthropic/Non-profit organizations

## How can I earn a PhD?

### *What do I need to do during college?*

- Take basic and advanced science courses
- Engage in undergraduate research
- Seek summer research internships
- Prepare for and take the Graduate Record Examination (GRE)

### *What will I need to apply?*

- **Personal statement:** Highlights your research experience and career goals
- **Letters of recommendation:** The most effective letters come from your research mentors
- **Transcripts:** Good grades matter, especially in science courses
- **GRE general test scores**

### *What should I look for in graduate programs?*

- Opportunities for research related to your science interests
- Successful research faculty & graduate students who
  - publish papers
  - obtain grant funding
  - attend scientific meetings
- Collaborative environment
- Challenging curriculum
- Career counseling

## Where can I earn a PhD?

Check out biomedical science PhD programs at medical schools:

[www.aamc.org/phd](http://www.aamc.org/phd)

- biochemistry • bioinformatics • biomedical engineering • biophysics • biotechnology • cancer • cell biology • clinical research
- computational biology • developmental biology • epidemiology • experimental pathology • gene therapy • genetics • genomics
- human disease • immunology • microbiology • molecular biology • molecular medicine • neuroscience • pharmacology • physiology
- proteomics • structural biology • toxicology • translational research



## What can I expect in graduate school?

- 1–2 years of coursework
- Lab rotations to select a mentor
- 3–4 years of doctoral research
- Regular meetings with your lab group
- Regular meetings with your mentor & advisers
- Exciting discoveries
- Expand communication skills
- Develop professional skills
- Prepare for the next step in your career
- Most programs provide:
  - a stipend that covers your living expenses, student fees and books
  - tuition support and fellowship opportunities
  - health insurance

## Who can do this? **YOU** can!

