So, you're thinking about graduate school?

oSTEM Sept 19, 2024





Evaluating your options

Graduate School
Or
Professional
Degree

Post Bac Program

STEM employment

More info on Post Bac Programs in Life Sciences:

CSU PREP Program

CU Anschutz PIKE-PREP

NIH Postbac Program - multiple locations throughout the US

Something else

There are many different types of programs

Certification or Accreditation

Masters MS MBA Professional Science Masters

Doctoral PhD

Professional
Doctoral
MD
PharmD
DVM
EdD

Program types vary in duration, compensation, and ultimate goals

1 wk - 1 yr

1 - 2 yr

2 yr

5 - 7 yr

~7 yrs varies

Certification or Accreditation

You typically pay

Masters MS MBA

You typically pay

Professional Science Masters

You typically pay

Doctoral PhD

Funding and Stipend options

Professional
Doctoral
MD
PharmD
DVM
EdD

You typically pay



Some programs are scams
Some programs are predatory

Getting into grad school (PhD path)

What makes me a strong candidate?







Faculty mentors



Hands on research experience



Alignment with career goals



Motivation & energy Grit, resilience, & resolve

^{*}varies across fields

The timeline

Many programs recognize the inequity of GREs and do not require them

January – Zoom interviews
February – In Person Interviews
March/April – Decide
Summer – move
August – start!

WHEN TO APPLY TO GRAD SCHOOL



MAY

Research grad schools and take a GRE practice test.



JUNE

Sign up for a GRE prep course and register for the official test.



JULY

Request information from schools and meet up with former professors.



AUGUST

Take the GRE general test and draft your statement of purpose.



SEPTEMBER

Finalize your list of schools. Polish your statement of purpose.



OCTOBER

Request your official transcripts. Send reference materials to recommenders.



NOVEMBER

Have someone read over your personal statement. Take the GRE subject test.



DECEMBER

Submit all grad applications. Verify that your recommendations are sent.

Thriving in graduate school



Growth Mindset



Curiosity & Wonder



Human Connections



Grit, resilience, and resolve











Additional Resources & Links

Choosing which graduate program

- Dr. Grace Borlee's approach
 - Make an excel spreadsheet to compare programs, save links, and list key attributes
 - Rotations?
 - Stipend?
 - Teaching load?
 - Relevant Coursework?
- Talk to program coordinators! Ask to speak with grads.
- Use US News & World Report rankings!
 - Erin's Advice: Go for the highest ranked school that values cooperation/community!
- Lillian in Equilibrium Youtube
 - https://www.youtube.com/watch?v=rFG9NDOt61E
- Princeton Review: Choosing a Grad Program
 - https://www.princetonreview.com/grad-school-advice/choosing-a-school

Choosing a mentor

"Finding a good lab with a good mentor is key. Mentor is more important than the research. Find a PI that utilize IDPs (Individual Development Plans) and mentoring compacts and engages in mentoring activities on campus. They are forward thinking about mentorship." — Dr. Grace Borlee

- Ten Rules for Choosing a Mentor
 - https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1009330
- The Science of Effective Mentoring Podcast
 - https://www.nationalacademies.org/our-work/the-science-of-effective-mentoring-in-stemm
- Also consider the mentor's funding, track record of placing students in desirable careers, and prestige
 - Elected into the National Academy of Sciences
 - Howard Hughes Investigator Status

The Application

Statement of Purpose

• https://mitcommlab.mit.edu/meche/commkit/statement-of-purpose-for-graduate-school/

• GREs

- Only required for some programs
- Plan ahead can be costly, require travel, and require additional prep.

• Strategize your letters of recommendation EARLY!!!

- Need at least one from your Lab/Research PI
- Should be someone who have worked with closely
- Develop these relationships now
- Provide letter writers with your CV, ask to discuss your goals and programs
- Your letter needs to stand out
- Don't wait until the last minute
- Remind letter writers frequently of deadlines

The Other Things to Consider...

- LGBT+ friendliness
 - Look Schools up by their CAMPUS PRIDE INDEX
 - Erin Reed's Legislative Risk Map
 - <u>Supporting LGBT+ in STEM</u> workshop I (Erin Nishimura) organized at a conference.
- Health, Mental Health, & Dental care
 - Ask if your program offers support
 - What about for your dependents?
- Rotations
 - I STRONGLY recommend rotations to develop a good sense of the mentorship and culture of each lab and professor
- T32 Programs
 - Some programs are supported by the NIH through T32 programs. These offer more financial support, training, and staff to help you
 - Some programs that do not have T32s still offer strong support so ask how much is funded
- Lots of questions you should ask...
 - https://gradschool.duke.edu/admissions/how-choose-right-graduate-school/questions-ask-graduate-program/

Grit, Resilience, Resolve

- Angela Duckworth's Grit Ted Talk
 - https://youtu.be/H14bBuluwB8?si=Cd3zEXKpiHQPzC_9
- NIH Becoming a Resilient Scientist Workshop Series
 - https://www.training.nih.gov/wellbeing/join-webinars-and-lectures/brs/
- Be inspired by real-world people and their stories of triumph
 - Offline is better

MIP515: Surviving Graduate School

- Dr. Grace Borlee
- Fall Semesters
- Panel Discussions
- Write your NSF-GRFP Fellowship
- Evaluate grad programs
- Build resilience & thrive

