



Get Paid to Get a PhD!

Pathway Way to a PhD – Part I

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Most Students Don't Realize...



01

Getting a PhD in STEM does not cost \$\$\$.
You get paid a stipend to live off while you are
doing your PhD.

02

Bachelor's → Master's → Doctorate (PhD)



03

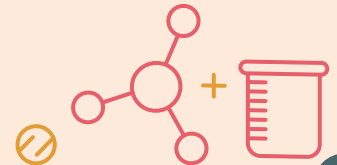
Massive amount of different HIGH PAYING career
opportunities!





What does a PhD in STEM entail?

- 1 - 1.5 years of course work in your field (4-6 courses)
- Teaching assistantships, comprehensive exams, ...
 - *More on this in next workshop*
- Join a research group
- Your own research project!
- Publishing your research!
- Travel to conferences to present your research!
- Overall ~5 years





What is a Postdoctoral Fellowships?



~2-3 years

gain more skills in another research lab

*(also paid)





Career Options

There are MANY!

Academia

Become a Professor

Community College
Primary Undergraduate Institution
R1 Research Institution

Industry

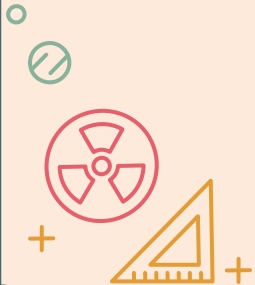
Research Scientist

From Big Companies
to Small Startups
to Consulting

Government

Research Scientist

National Institutes of Health





Is Doing a PhD in STEM Hard?





Is Doing a PhD Right For You?

- Do you like research?
- What sort of career do you want?
- Do you want to be a scientist?
- Do you want to be an educator?





Resources to Help You



- **Office of Undergraduate Research (OUR)**

<https://www.csudh.edu/gsr/undergraduate-research/>

- Research Initiative for Scientific Enhancement Program
 - McNair Scholars Program
- Louis Stokes Alliance for Minority Participation Program
 - Department Clubs





Next Steps...



- Talk to faculty in your department
- START DOING RESEARCH
- Start looking into PhD programs that interest you
 - Don't limit yourself to US schools
- Read articles from labs that interest you
- Follow research labs on social media (Twitter)



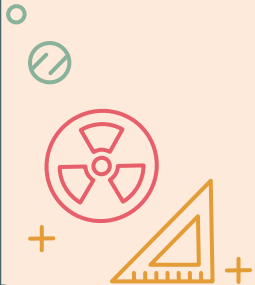


Identifying PIs You Want to Work With!



This is the **MOST IMPORTANT THING!**

Seriously, it's **MORE** important the school or program you are applying to!



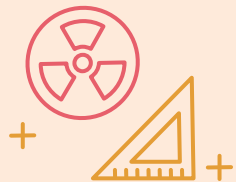


How to get started...



- Start a list of graduate programs at different schools that might interest you
- Make a list of the faculty in those programs who are doing research that interests you
 - Go to their research groups webpage
 - Read their recent research papers
 - Check if they have current funding
 - NIH Reporter
 - NSF Award Search

**Follow all the labs/Pis you are interested in on Twitter.
I am serious!**



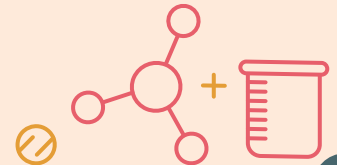


Applying to PhD Programs



Start Applications Early!

- take the graduate record exam (GRE) [US only]
- arrange for strong reference letters
- reach out to faculty you want to do research with
- write your personal statement
- write your research statement





Around the time that you are submitting your application reach out to your PIs of interest!

Dear Professor,

My name is

Tell them who you are and the research you have been doing during your undergrad.

I am interested in obtaining my PhD in and have applied to the program at I am very interested in the work you and your group does on

**Describe in detail the part of their research that interested you.
Refer to the publications you recently read and the results/finding that interested you.**

If any of your research background overlaps, describe that!

If I am invited to interview for the program, I would greatly appreciate the opportunity to speak with you about your research in more detail. I have attached a copy of my CV and transcripts.

Sincerely,

.....





The Recruitment Interviews

This is where you really get a feel for the research environments so ASK A LOT OF QUESTIONS.

You will have interviews with faculty:

- Tell them about yourself**
- Ask about their research and any new projects that they may be starting**
- Ask if they provide RAships for some semesters or if student have to TA**





Research Assistant vs. Teaching Assistant

Research Assistant – your PI provides the funding to pay your stipend and you only do research for the year (along with any course work)

vs.

Teaching Assistant – you work as a TA for a class in the Department to pay your stipend

***These will vary based on the university/program so you will want to ask about these at the recruitment interviews**





The Recruitment/Interviews

This is where you really get a feel for the research environments so ASK A LOT OF QUESTIONS.

You will have opportunities to talk with other Grad Student This is the most important part!

Ask about the research environment:

Is the PI hands-on or absent?

Are the projects collaborative or individual?

Is the PI supportive of student's ideas?

Do student have the opportunity to take control of their own projects?

Do they like being in ...'s lab?

What are their weekly group meetings like?

Do they have all the equipment they need to complete their research?

Do they get the opportunity to present their research at conferences?





The Recruitment/Interviews How the Program Work

By the time the recruitment interview is over make sure you have a SOLID understanding of how the program works!

This is going to vary across university/program:

Lab Rotations

Entrance exams

Second year seminars

Comprehensive/qualification exams

Thesis defense





Pick the Program that is Right for You

THE MOST IMPORTANT THING IS THE PI!

Pick programs where there is someone (possible 2 or 3) that you REALLY want to work with.

Their vibe fits your vibe!

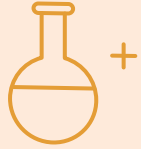
After that, weigh the other factors that are important to you:

Does the program fit your career goals?

Is the stipend/cost of living suitable?

Does the location work for you?





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