

Graduate School Workshop

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Workshop overview

1. What is graduate school
2. What to expect
3. Types of graduate programs
4. Choosing a PhD program
5. Undergraduate preparation

Q&A session at the end



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What is graduate school
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Graduate Education

Advanced program in specific area of study – choose your interest wisely!

- Dedicating years advancing research

Graduate education can also mean

- Career change
- Career advancement
- Advancing skill



Undergrad

General education coursework

Larger class sizes

Majority lecture-style format

Structured program and courses
heavy experience

Separation of academics and
personal job

Graduate

Fewer courses – more reading, reviewing,
and analysis

Smaller cohorts, close interaction with
professors

Seminar courses with more
participation

Independence and responsibilities

It's a job, especially PhD



Expectations & Responsibilities

Research & Ethics:

- Research Methods/Historical Knowledge
- Independent Research
- Communication!
- Integrity/Ethics
- Management of Research Records

Teaching & Training:

- Orientations & Meetings
- Time & Commitment
- Teaching and your career



Expectations & Responsibilities

Financial Support

- Stipend and Tuition covered (Duration may vary)
- Different types of support (RA/TA/Fellow/Trainee)
- Research is your only job



Progress Towards Degree

- Communicate! (Advisor, Program, Committee)
- Program and Graduate College requirements met
 - Good Academic Standing (GPA requirement)
 - Coursework completed
 - Minimum Credit Hour requirement met

Expectations & Responsibilities

Professional Development

- Publishing
- Attend seminars/workshops
- Present at symposiums/conferences
- Internships/Exchange Program

Resources

Health & Wellness
Career Center/Counseling
Disability Services
Diversity Resources
Student Safety Resources

Community

- Find your people!
- You can not do this alone



Let's find your
program



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Post-grad program options

Professional Program

- Length can vary
 - 1 year or more
- Career specific
 - Confer degree to practice occupation
 - May be required by law

Medicine
Law
Pharmacy

Social Work
Veterinary Med
Business

Post-bacc Bridge Programs

- Post-Baccalaureate Premed Program
 - 1-2 year program
 - Science-oriented coursework/MCAT prep
 - Cons: expensive, complete, no guarantees
- Post-Baccalaureate Research Education Program (PREP)
 - 1 year program; NIH funded
 - U.S. citizens or permanent residents only
 - Refine wet lab skills – paired with faculty
 - Address academic challenges
 - Prepare participant for PhD or MD-PhD



Grad program options

Master of Science (M.S.)

- Course based: 1-2 years

Public Health Management
Education Communication
Administration

- Thesis based: 2-3 years

Industry Research & Development
Government Sector
Research associate
Laboratory manager

Doctorate of Philosophy (PhD)

- Coursework: 2-3 years
- Research: Varies by program/project
- Average time to degree: 4-7 years

Postdoc/Professor
Grant Administration
Science Policy
Patent Law
Biotech/Industry
Consulting
Medical Communications
Science Journalism/Writing
Science Publishing



Choosing the right fit

Going to graduate school is a huge decision – here are a few things to consider

1. What kind of job would you like?

- Government, industry, academic, science-related or not!
- Work style, finances, and outlook matter

2. Developing skills

- What do you want to develop?
- What are the gaps in your resume?

3. Do you need any more qualifications?

- What are the entry level qualifications?
- Can you develop necessary skills working instead?

4. Financial / Personal decision

- Length of program
- Type of funding available
- Part-time or full-time?
- Location limitations



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Spotlight on PhD
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Choosing your PhD program

1. Narrow down your fields of interest – umbrella programs provide more flexibility.
2. Get advice from the experts – research advisor, academic advisor, instructors, Google.
3. Create a spreadsheet with programs of interest – include university, department name, program name, contact email, application deadline!
4. Ask yourself the following questions:
 - What research options are available to you (and of interest to you)?
 - Are the faculty accessible?
 - What is the quality of the research facilities?
 - Is this compatible with my career goals? Where are the program's graduates?
 - What type of funding is available (and for how long)?
 - What is the cost of living? What is the availability of affordable housing?
 - Where is the university? Does it matter if it's near family or not?
 - Diversity? Social Climate? Support system? Mental health and wellness resources?



Eligibility/Application Requirements

**Requirements will vary from program to program!
Check the program website for specifics.**

- Undergraduate degree in biological or physical sciences
- Minimum GPA requirement
- Entrance exam requirements (GRE, MCAT, TOEFL, IELTS)
- Undergraduate research experience
- Strong research and/or personal statement (proofread!)
- May have additional statement or question requirements
- Resume or C.V. (format & font)
- Letters of recommendation – consider carefully who you ask



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Undergrad preparation



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Experiences in research

If you are pursuing a thesis-based MS or PhD, prioritize research experiences!

Explore the science field – what do you want to learn

- Go beyond what you see in lab courses
- Bench techniques, new protocols, new equipment

Become familiar with literature

- Participate in journal club
- Develop reading strategies

Build confidence as a researcher

- Managing time, space, and tasks
- Problem solve personal projects
- Learn team-working



Experiences in research

Great to start in 2nd and 3rd year – MCB 290

- Advertised in RoadMAP, lab pages, and social media
- Meet with advisor or attend workshop!

Participate in symposiums and more

- MCB Symposium is open to all undergrad researchers
- Regional and national conferences

Summer research opportunities

- SROP at UIUC with faculty member
- External opportunity ei. REU, NIH, Fellowship

Experiential lab course OR working in prep staff



School of MCB
Undergraduate Research
Information Session



Tina M. Knox,
Assistant Director for Advising and Recruitment
September 8, 2021

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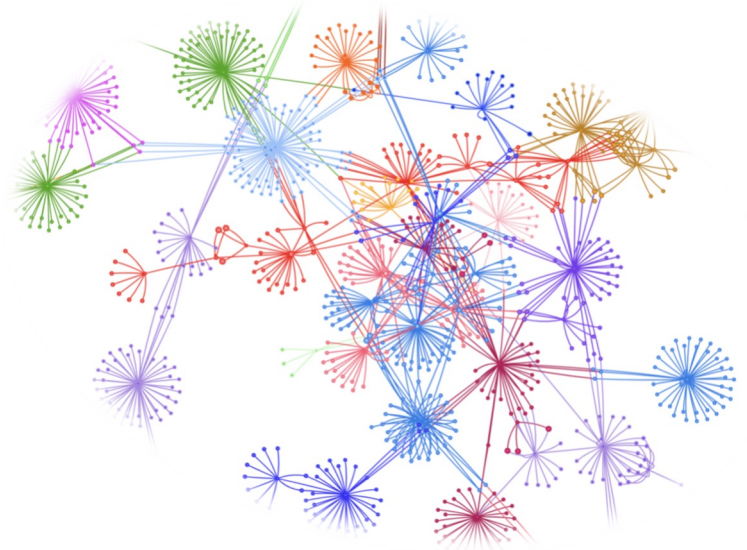
Building Relationships

Great value in talking to PI, faculty, staff

- Plug into their academic network
- Listen to career stories
- Look into values of similar positions
- Letters of recommendation

Connect with graduate students

- Graduate student associations
- Attending graduate panels
- Emails to current students and alumni
- Ask about work and experience in location



Just remember...

Graduate education is hard work – approach it thoughtfully

Programs vary – find a system to organize your options

Pick programs that align with your professional and personal wants/needs

Start building research experiences and relationships in your undergrad

Always ask questions!



Thank you!

Questions?



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