

Why pursue a PhD?

Career Opportunities

- According to CNBC, “biologist” is the seventh best job in America for 2011.
- Many biology careers require a Ph.D.
- Ph.D. will allow for more advancement in your field/company

Ph.D. Careers in Biology

- Academic (research/teaching)
- Industry
 - Research
 - Manufacturing
 - Sales/marketing
 - Manufacturing
 - Tech Support
 - Pharma, Biotech, etc.
- Government
 - Regulatory
 - Research
 - Management
 - NIH, CDC, FDA, EPA, state, etc.
- Business
 - Consulting
 - Sales
 - Investing
- Law
- Science Writing/Journalism
- Other

More Importantly

- If you have a strong interest in research, intellectual curiosity, a passion for biology or a related field, strong motivation, and an interest in an intense, focused, and in-depth education, pursuing a Ph.D. might be right for you
- Will enable you to explore important research questions and contribute to our understanding of the world
- Provides you with strong problem solving and critical thinking skills which will provide you opportunities in numerous careers and in life

What to Expect

- Ph.D. usually takes about 5-6 years to complete
- Many programs have one year of rotations, a couple years of classes, and a strong focus on research
- Preliminary exams
- Dissertation
- Usually work long hours with large degree of independence

The Application

1. Web-Based Application
2. Personal Statement
3. Letters of Recommendation
4. GRE Test Scores
5. Official Transcript

How to Prepare...

1. Substantial Lab Experience
2. Investigate the Grad School Programs
3. Take the GRE
4. Talk to Recommenders
5. Start Personal Statement

Lab Experience

(Probably the most important component of the application)

- Get into a lab before senior year
 - Investment in a project will lead to good discussions during interviews
- Summer Experience/Full-Time Position
 - Shows dedication and that you know what to expect during your grad school experience
- Conference Presentations and Publications
 - Not absolutely necessary, but impressive
- Take ownership of your project!
 - Work on something you are passionate about!



Where to apply?

(Do your homework!)

1. Research

- Make sure there are people you want to work with
- Might be good to contact professors before you apply
- Talk to your PI

2. Location

- You will be living there for for 5-7 years

3. Local Amenities

- Medical School/Special Facilities

GRE

(Study! Take it in the summer!)

- ETS = <http://www.ets.org/>
 - Where to sign up for the test!
 - Great practice exams
- General GRE
 - Computer Based Test
 - Quantitative, Verbal, and Essay Sections
 - Do practice tests and study vocab!
 - South Bend Site:
 - **PROMETRIC TEST CENTER 3005 GRAPE RD, STE A**
- Subject GRE
 - Paper Based Test
 - Not required by many schools, look on websites
 - Take the Biology Test (if needed)!



New GRE (Be aware!)

- Applicants who register to take the test between August 1 and September 30, 2011 will save 50% on their test fee; their scores will be sent by mid-November.
- Right now, applicants can register for either the current GRE General Test, which will be administered through July, or the upcoming GRE revised General Test.
- If applicants need their GRE scores *before* November, they must take the current GRE General Test *before* August to get their scores in time.
- If applicants are registering to take the GRE revised General Test between Aug and Nov, go to the special score reporting schedule <http://links.mkt1126.com/ctt?kn=28&m=4801476∓r=Njk3MTM2OTc2MgS2&b=0&j=MTc1MDA4NTM3S0&mt=1&rt=0> , which details when they can expect their scores.

GRE Changes

- **The Verbal Reasoning** measure places a greater emphasis on higher cognitive skills, making it a truer, deeper assessment of the test taker's ability to understand what they read and how to apply their reasoning skills.
- **The Quantitative Reasoning** measure tests the same basic mathematical concepts, but emphasizes the data interpretation and real-life scenarios a test taker will encounter, to better gauge their skills.
- **The Analytical Writing** measure asks test takers to provide more focused responses to questions, so they can more accurately demonstrate their skill in directly responding to the task presented.
- **Can skip and change answers!**

Recommendations

- You will need three per school!
- Ask early
 - No less than a month before the application is due
- Pick recommenders who know you well!
 - Another reason you should start working in a lab early!
- Recommenders often appreciate if you give them your personal statement, resume, transcript, and a list of the schools with application due dates.
 - Most recommendations are submitted online, but include envelopes if necessary
- Remember to thank your recommenders (and keep them updated)!

Personal Statement

- Start working on it the summer before you apply!

First wave of applications are due
are around Dec 1st

GRAD SCHOOL PERSONAL STATEMENT



PERSONAL STATEMENT

- Intro – Why you're interested in grad school
- Body – Your research experiences, why you're awesome (in research, working in groups, thinking and writing scientifically) and examples, research and career goals, any presentations or awards
- Why that specific program and school fits you

PERSONAL STATEMENT: TIPS

- Be professional but show your passion for research
- Edit before each submission
- 800-1000 words usually
- Be honest
- Mention professors of the school that you have corresponded with
- No “when I was little stories...”
- 90% about your research

YOU GOT INVITED TO INTERVIEW!

They will contact you

By phone or e-mail

No need to commit right away!

Scheduling conflicts

Planning the trip:

School should pay for it

May ask faculty you want to meet with

Make sure you understand instructions

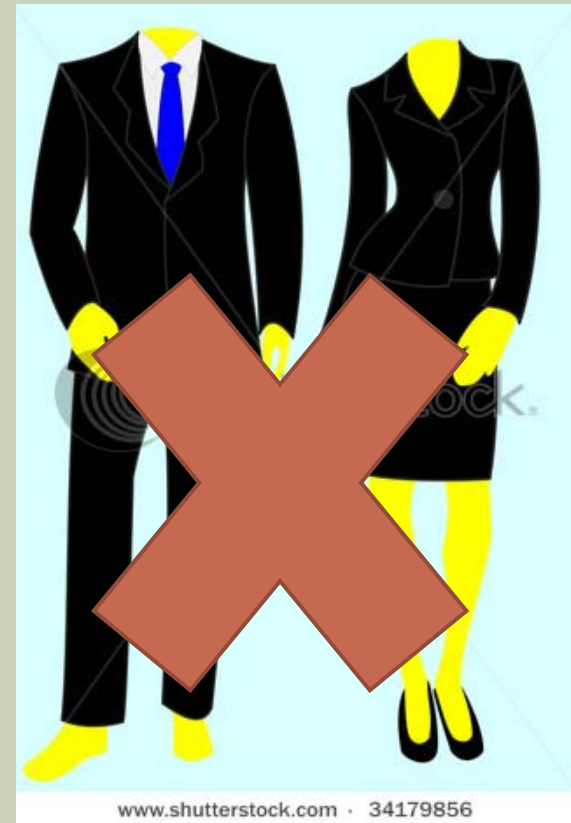


**GRAD SCHOOL VISITS:
NOT JUST AN INTERVIEW**



INTERVIEWING: THINGS TO BRING

- Anything you need for traveling
- Clothes: Business casual
 - Comfy but nice shoes
 - No suits (in general)
 - Bring clothes for other activities



INTERVIEWING: PREPARATION

- Print out your resume, personal statement, other app materials and review
- Papers written by your interviewers – or at least summaries
- Research the school/program
- Know your answers to potential questions
- Know questions you have for them



**If you can, be
over-prepared!**

THE INTERVIEW: POTENTIAL ?S

- Tell me about your research?
- What are your research interests and why?
- What are your future career plans/what are you doing after grad school?
- Why this school/program?
- Might look at your resume and ask ?s
- Name a time you were persistent

You can't predict everything so be ready to think

ASK QUESTIONS!

- Tell me more about YOUR research
- Lab dynamics: how big, lab meetings...
- Do you like living in this city/area?
- Department collaborative vs. competitive
- What facilities are available (sequencers etc.)
- Rotations necessary?
- TAing necessary?

AFTER THE INTERVIEW

- E-mail or call grad students/faculty if you have questions
- Write down pros/cons
- Reimbursement paperwork
- Thank-you e-mails if necessary

REMINDERS

- Be confident
- They want to impress you as much as you want to impress them (so stay calm)
- Be observant – learn as much as you can
- Be polite but not robotic
- Shake hands when you meet people
- Talk to current students if possible
- Relax and have fun!