Applying to Graduate School

By Nicholas Ellis, Biology,’09
Timeline

- **May**- Identify potential schools and labs
- **July**- Register for GRE
- **August**- Begin GRE prep, identify recommendation writers
- **September**- Take GRE, narrow down program and school choices, draft personal statement
- **October**- Last chance to take GRE, work on NSF Fellowship
Timeline cont.

- **November**- Subject Test if needed, mail out hardcopy transcripts
- **Dec-Jan**- Finish up applications
- **Feb-March**- Interview
- **April**- Accept an Offer!
Letters of Recommendation

• All Ph.Ds
• NO TAs, friends, family, doctor from home, etc.
• At least two writers who can comment on your research
  – P.I. and mentor may write a joint one
  – Entering Research (BIO 260/261) professors are a good 2nd
• One person outside of your research discipline who can comment on other aspects
  – Course professor/instructor who knows you well
  – Other organizations
Ensuring a great letter

• Ask whether they can write you a *strong* letter

• Setup a meeting to chat about life aspirations, specific career goals, updates on research, etc.

• Give them your CV, possibly personal statement as well
Respectful Protocol

• Give your reviewers PLENTY of advance notice

• Make a spreadsheet with school, program, due date, and mode of submission

• If any schools require hard copies provide addressed envelopes with stamps
Graduate Record Exams – the GRE

• Take them early so you can retake if needed

• Tons of free resources exist
  – Kaplan free practice test on campus
  – ETS website

• Familiarize yourself with testing procedure
  – Timing of sections
  – Typing with blocked font
  – Lack of spell check
Graduate Record Exams – the GRE

- Expensive so come prepared
- Less important in recent years but varies via discipline
- Prepare for obnoxious, sterile testing environment
Subject GRE

• Emphasis on specific knowledge in field
  – Biochemistry, Cell and Molecular Biology
  – Biology
  – Chemistry
  – Computer Science
  – Literature in English
  – Mathematics
  – Physics
  – Psychology

• Requirement depends on discipline and program

• Biology → Less important, only include scores if you ace it
  – Recommended does not mean required!
Personal Statement

• Used by Graduate Schools to 1) Get to know applicant, 2) Determine if you would be a good fit, 3) Find out how well you write
• Audience: Faculty members
  – Want to see potential
    • Evidence you would be successful and prepared
  – Be interesting and original
    • No clichés
  – Let personality shine through
  – Tell a story!
    • Avoid tangents, center on yourself
  – Focus on strengths and link to professional goals
• Faculty members will often just read your first paragraph and your research statement… THAT’S IT!!!
  – Need to catch attention off the bat or your PS will not be read

• Ex. “My research career began at age 8, hovering over a blue plastic USB microscope connected to a computer tower larger than myself, clutching a common housefly with florescent green tweezers as if my life depended on it. Unbeknownst to me, I would find myself in the same situation a little more than a decade later, only this time with a smaller fly, metal tweezers sharp enough to be considered a weapon, and a microscope worth more than my life insurance policy. Though I hadn’t realized it yet, I had already chosen my career path as a researcher.”
Starting points

• Sentence Completion
  – The story of my life begins with ______
  – I am most curious about ______

• List and Fill
  – List everything you think a school needs to know about you

• Looping
  – Free write for 5 minutes, pick a sentence in the middle and continue to write, repeat
Random Tips

• The Writing Center at UW-Madison offers outstanding free workshops. Check for dates and times: [http://writing.wisc.edu](http://writing.wisc.edu)

• Personalize, Personalize, Personalize!!!
  – Don’t submit the same one to each school

• This is the only area of complete control in your application→ make it count

• Name drop
  – Mention faculty you want to work with
  – State what you like about the particular grad program

• Conveying your research is the most important section
Personal Statement vs. Statement of Purpose

• Personal Statement- what has happened to you
  – Tone- imagine you run into someone from 5th grade and want to talk
  – Path to the world of research

• Statement of Purpose- outlines what you want to do in a technical sense, prior research experience described in terms of your intellectual development
  – Tone- to receptive faculty member
  – List specialization or at least an area of interest
  – Expanded abstract
Grades

• Junior Year most important
• Really upper level courses
• If grades are not great...mention it!
  – Don’t hide anything in your application

• Example of how to address concerns:
  “I believe I am properly prepared and ready for the challenge of the MCB program at UC-Berkeley. Although my GRE test scores are below your averages, I would like to direct you to my performance in upper level biology coursework, my extensive research experience, and my letters of recommendation to demonstrate my dedication and commitment to research. Thank you for your consideration.”
What to look for in a Graduate Program

• Funding
• Time to Graduation and Graduation rates
• Insurance
• Preliminary/Qualifying exams and Thesis Defense
• Coursework
• Teaching (Undergrads vs. Other Grad students)
• Rotations/Advisor Selection
• Core Facilities
• Research Atmosphere
• Training support of students
Funding

• How many years are guaranteed?
  – Departmental Support, Training Grants
  – Are you expected to secure your own funding?
• Financial situation of your advisor
• Fellowships
  – NSF Pre-doctoral Fellowship
  – Department Specific
    • Usually precede graduate admission deadlines
    • Sometimes integrated into admission process
  – Ensure you’ll have funding after your fellowship ends!
• Travel money and relocation money
Choosing an Advisor

• Tenured vs. Fresh Faculty
  – Tenure rate
  – Reception by other faculty
• Age and funding situation of faculty
  – Publication strength
• Gender issues with advisor
• Ensure personalities jive
  – The science can be great, but you don’t want to be miserable/uncomfortable for 5 years
  – What sort of lab dynamic do they support
• TALK TO THE CURRENT STUDENTS!!!
Preparing for Interviews

• Write one sentence about each person you are interviewing with
  – For biology that means general field, organism, etc
  – Ex. Seth Blair studies development and pattern formation in the wing of Drosophila.
• If extremely interested in particular lab, read a paper or two and come with questions
• Otherwise don’t bother. No seriously, don’t bother diving into the literature
Interviewing

• Generally 30 minute interviews
• First 5 minutes are icebreakers
• Explain your research for next 15 minutes
• Faculty will talk about their research for 15 minutes
• Faculty will notice you conspicuously looking at your watch, realize they have kept you 10 minutes over and let you leave

• Bring a watch... they won’t keep you on schedule
Interviewing

• You’re bound to have extremely uncomfortable interviews so be prepared for them!
  – Be pleasant and respectful
  – Try not to get into an argument with them

• Scientists are notoriously socially awkward

• Silence is ok every once in a while to gather your thoughts or allow them to
Questions to ask current students

- Is the stipend livable for the area?
- How is the insurance plan?
- Where do you live? What is your rent?
- How many hours per day do you spend in lab?
- What are your hobbies?
  - In other words, are you a real person and not a robot?
- Do you spend time with your classmates?
Post Interview

• Send thank you emails to faculty members you met with
  – At least the ones who you are still interested in

• Thank your hosts for putting you up for the weekend

• Send in your travel receipts quickly
  – Some schools will only reimburse for 2 weeks after your visit
Is this place the right fit?

- Weather
- Research Atmosphere
- City Atmosphere
- Green Space, Bike/Run Trails, Workout facilities
- Who has my back if I run into problems?
- Faculty attitudes
- Restaurants, grocery stores, and shopping in the area
- BEER!
- You’ll be living there for at least 5 years and you want to be comfortable...
Good Luck!