# **Applying to Grad School**

Gracie Conte<sup>1</sup> & Ezinne Nwankwo<sup>2</sup>

<sup>1</sup> University of North Carolina, Chapel Hill <sup>2</sup> Duke University

# Before You Are Ready to Apply

### Undergraduate Research

- A taste of the rigors of grad school
- Research Experience for Undergraduates (<u>REU</u>)
  - 10-12 week summer program funded by NSF
  - Apply to schools
    - Math list is here
    - Personal Statement
    - Statement of interest
    - References and Transcripts
  - Work with a graduate student
  - Present research to peers and professors
- Research with a professor at your institution

### Programs for Undergrads

#### **McNair Scholars**

- Summer/semester long program starting sophomore, junior, or senior year
  - Must apply and interview through school
- Federally funded program
- Cohort of ~25 people
  - low income, first-gen and/or URM students (40% of spots reserved for URM)
- Funding for undergrad research
- Programming on applying to grad school
  - Writing cv and statements
  - Providing emotional support
  - Providing funding support for grad apps and GRE prep
  - Application fee waivers
- Student Mentor/mentee program (students are paid to be mentors)
- More info here

#### IRT Fellow

- Is a summer and semester grad school preparation program.
  - Must apply the spring semester before grad school applications are due
  - Can apply at anytime even after finishing undergraduate education
- Cohort of ~40 URM applicants from diverse disciplines
- Fellowship provides
  - GRE prep
  - Mentor for writing cv, statements
  - Mentor for choosing schools
  - Funding for grad school apps
  - Graduate school summer fair and workshop
- More info <u>here</u>

### Deciding if Grad School is for You

#### The Decision

- Do you love what you do?
- Does your life goal require it?
- Pro: Irreplaceable experience and opportunities
- Con: Emotional exhaustion
- o Risk: Burn out
- A Guide for Potential Grad Students

#### Imposter Syndrome

- Thinking everyone else is better
- Attribute success to outside factors
- Worry you won't live up to expectations
- Worry people will find out you're a fake
- You're not alone.
- Learn about its different forms <u>here</u>
- You are worthy! Tips for moving past it at the bottom of <u>this page</u>

Self Doubt

# Once You Are Ready to Apply

### **Application Checklist**

- ☐ (All) College Transcripts
- ☐ Letters of Recommendation (2 3)
- ☐ GRE Scores
- Personal Statement
- Statement of Purpose
- ☐ Curriculum Vitae (CV) / Resume
- Other: \_\_\_\_\_

Pro Tip: Make a checklist for each school and keep it up-to-date

### **Application Checklist**

	Dream School	School 1	School 2	School 3	Safety School
Application Deadline					
Application Fee					
College Transcripts					
GRE - General					
GRE - Subject					
Letter of Rec 1					
Letter of Rec 2					
Personal Statement					
Statement of Purpose					
CV / Resume					

### **Funding Opportunities**

Having funding when you apply makes you very desirable

#### **National GEM Consortium**

- Multiple opportunities to apply:
  - As a senior in undergrad
  - As a masters student
  - As a Phd student
- Types of Fellows:
  - Full Fellow (Full Funding + Internship)
  - Associate Fellow (Full Funding)
  - University Fellow (University Funding)
- Application:
  - o Minimum GPA: 2.8 (masters), 3.0 (PhD)
  - Statement of Purpose
  - Letters of Recommendation (x3)
- More info <u>here</u>

## Graduate Research Fellowship Program (GRFP by the NSF)

- You have two opportunities to apply:
  - Once as an undergraduate student
  - Once as a graduate student
- Apply as an undergraduate!
  - Doesn't impact future applications
  - Gives you material to work from when in grad school if you don't get it
- Application
  - Personal Statement
  - Statement of Purpose
- More info <u>here</u>

### **Choosing Schools**

- How to find schools:
  - School rankings
  - Schools your favorite professors went to
  - Location
- Pick which ones to apply to:
  - Find professors that do research that interests you
  - Email graduate students of the advisors you like
  - Types of funding available
  - Other resources that the school provides (ie. mental health resources, strong affinity group communities, values work/life balance)
- Schools on your list:
  - Dream schools
  - Safety schools
  - Target schools

### Graduate Record Examination (GRE)

- Study!
  - I like Princeton Review
    - Free online test prep
- Take the GRE early
  - Leave yourself time to take it again (and again) if you don't like your results
  - o General: Occurs often, schedule one to set a deadline for yourself
  - Subject: Occurs 4 times a year. Look up when it happens near you and schedule accordingly
- You can send 5 scores for free
  - Know which schools you are sending your scores to
  - Pick the same 5 for general and subject
  - Sending a score after test day costs \$27 per recipient not per score
- Great Score Goals
  - General Quantitative Reasoning: +90%
  - General Verbal Reasoning: +60%
  - Subject: +35%
- Good test scores ≠ good grad student (and they know this)
- Study anyway

### Letters of Recommendation and Transcripts

#### **Letters of Recommendation**

- Ask well in advance
  - They need time to say yes
  - They need time to write a good one
- The people you ask should have different things to say about you
  - ie: Professor vs. Employer
- This is a favor
  - Be grateful
  - Say thank you
  - You may need to pestor (it's ok)

#### **Transcripts**

- Ask well in advance
  - It feels good to check something off the to-do
  - Sometimes there are issues
- Be prepared to send transcripts directly to schools
  - Some schools will not accept transcripts that have passed through your hands

### The Writing Process

General advice for your Personal Statement, Statement of Purpose and CV

- Read the directions given by each school for each document!
  - There will be lots of overlap
  - You should only need to write one (maybe two) great paper that gets tweaked for each school
- Write a good draft
- Take it to the writing center
- Make revisions
- Revisit the writing center (if revisions were notable)
- Have your advisor and/or a close professor read it

### **Personal Statement**

- Components of a good Personal Statement
  - Catch the reader's attention
    - Loving math since you were 5 does not set you apart in this community (sorry)
      - But it's still a fun fact
  - Should contain different information than on your statement of purpose
  - Be self-reflective about your past experiences and about why you want to pursue a graduate degree
  - Opportunity to let the committee see a glimpse of your personality and provide a broader picture of your application
- Share a copy of your personal statement with those whom you've asked to recommend you
  - They will be especially qualified to help

### Statement of Purpose

- Your Statement of Purpose should answer these questions:
  - Why do you want to achieve this degree and how will you use it?
  - Why are you interested in this research area?
  - Why are you a good candidate? / Why would your acceptance be beneficial to them?
  - What research experience do you have?
  - What work experience do you have?
  - What teaching experience do you have?
  - Why do you find *this* school desirable?
- Share with an advisor or someone you did research with
  - Talking about math is difficult, they will be helpful

### Curriculum Vitae Vs. Resume

#### **Curriculum Vitae (CV)**

Resume

Long and detailed

Focuses on academic training and related pursuits to demonstrate potential as a scholar or researcher

For academic positions

Tells the reader what you know

Short and concise

Summarizes your background and experience to demonstrate your ability to do well in a specific position

For non-academic positions (usually)

Tells the reader what you know how to do

### Curriculum Vitae

#### What to Include

- Personal information
  - Full Name
  - Email, website
- Educational history
- Research Interests
- Professional experience
- Anything that qualifies you
- Anything that sets you apart

#### What not to include

- Too personal information (age, photo, religion, gender, family information)
- Hobbies
- Bad grammar

#### Suggested Categories

- Education
- Research Interests
- Work/Academic Experience
- Projects
- Presentations
- Honors and Awards
- Societies
- Publications (this one is impressive)
- Leadership
- Proficiencies
- Community Outreach (relevant volunteer work)

More information here

### Interviewing and Visiting Schools

- Depends on the school:
  - Some schools do interviews during visitation
  - Some schools do phone/skype interviews, and then visitations are just meant to be fun

#### Interviews

- Make sure you can talk about everything on your CV
- Review research papers for interesting professors
- Review statement of purpose
- You don't need to have a clear research question, but just be able to talk about your interests!

#### Visiting Schools

- Chance to visit the school and surrounding area
- Talk to professors in person
- Talk to current graduate students
- Meet potential cohort

# Now you're in. Congrats!

Now what?

### What to Expect

- It will be hard
- You will struggle
- You may think you are not as prepared as your peers
- You may question your decision
- It's normal
- Have a vice
  - Join a book club
  - o Run
  - Watch British comedy with friends
  - Wednesday wine night
  - Pet some kittens