

Overview of Graduate School

Prepared for students in the Collaborative Learning at the Interface of Mathematics and Biology training program, UC Davis (NSF CLIMB) <http://climb.ucdavis.edu/index.html>

Look for research opportunities if you are not already involved in research

Research Experiences for Undergraduates; this is an NSF-funded program.

Add-ons to faculty grants: 1-2 students

REU sites: formal program – there's a searchable listing at

<http://www.pathwaystoscience.org/Summerresearch.asp>

Talk with professors and postdocs – who do they know who might have positions?

Seek experiences outside of your institution whenever possible – a broader scope of influence; new ideas; move beyond the classroom.

Timing: Winter break, summer break, when opportunities present (sooner the better).

Assuming you have research experience...

Why go to grad school? Because you...

..want to learn more about your area

..enjoy intellectual discovery

..are hooked on research

..want to be more independent in the lab/field/research in general

..want to teach college

..want to make a difference for future generations of students

How much does grad school cost?

tuition and fees depend on private vs. public

does the institution offer fee waivers for RAs, TAs, training grants, other options

TA vs. RA vs. fellowships

<http://gradstudies.ucdavis.edu/>

How do I figure out where to apply?

select a grad school based on the strength of its program in your area

ask your mentor, grad students, postdocs

read the literature – whose work do you admire?

web search

What's the application procedure?

generally December-January deadlines for admission

deadlines for financial aid may differ (earlier)

application packet:

application form

letters

personal statement – this needs to say something about your research interests

GRE scores

What's the GRE like?

**** The GRE format is going to change within the next year. Watch the GRE website for additional information.**

<http://www.ets.org/gre/index.html> – this contains general info about the test, dates and test site, and info about the new format exam

always – general exam

verbal – like the SAT – analogies, sentence completion, reading comprehension

quantitative – like the SAT – no calculus, some data analysis

analytical writing – “critical thinking skills (the ability to reason, assemble evidence to develop a position, and communicate complex ideas) weigh more heavily than the writer's control of fine points of grammar or the mechanics of writing (e.g., spelling).”

perhaps: subject in your field – some schools require this, some don't
find out what the average GRE score is for the program(s) you are applying to.
take the GRE early if possible. If your scores are low, this provides time to study and take them
again if your scores are likely to increase
Why retake the exam? To raise a low score
Why not retake the exam? If you get low scores twice, it confirms that you score low on
the GRE. An alternative strategy is to compensate for low scores with knock-out
personal statements, letters, etc.
what constitutes low? For many programs, < 600 on any of the general exam sections. Really.

Whom do I ask for letters?

faculty who know you well – mentors, research supervisors, faculty who've had you for several
upper division classes

Famous Faculty who know you at least a little

other people who know you well – no more than one non-faculty member

useful phrasing: "Do you know me well enough to write a **detailed positive reference**?"

You don't need to ask this question of your mentors or other faculty with whom you have
worked closely, but you should for faculty with whom you have a less close relationship.

The ideal is three detailed positive letters from ladder-rank faculty with whom you've
done research or taken one or more upper division classes.

What should I give my references?

a lot of lead time

as much information as possible: transcripts, GRE scores (if available), personal statement,
research essay (ask your mentor if s/he is willing to review essays)

applications, envelopes, paper-clipped together

a summary sheet of what is due when and to where it goes (back to you or the school directly)

an emailed thank you after each item (or batch of items) is due

Is it better to go straight to grad school or work for a few years first?

it depends.

Timeline for applications

action

figure out when you want to go

figure out where you want to go

contact prospective advisors

study for the GREs

look for fellowships

sign up for GREs

take the GREs

ask faculty for letters

work on personal statement

mail application

follow up – "did you get my application"

visit school

when to do it

within the next year or so...

start 3-6 months before you apply

summer-early fall

start at least 3-6 months before you apply

summer – early fall

early fall

by end of November for 15 Jan deadlines

2 months before earliest application deadline

2 months before earliest application deadline

at least one day before it's due

after they should have received it

before making admissions decision

Importance of faculty relationships: Contact faculty with whom you want to work. Faculty can have a
substantial impact on admissions. Faculty cannot go to bat for you if they don't know who you are in a sea of
applications.