Advice from Prof. Goutte (more geared towards molecular biology)

BEFORE applying to graduate school:

Get your foot in a lab to try research - grad school is a big commitment, and you don't want to jump in cold (in fact your application will be far stronger if it is clear that you have tried lab research and know what you are getting into). This can be in the form of doing an honors thesis here at Amherst, and/or summer research here or off campus, and/or getting a 1-2 yr. job as a research tech. after graduation.

CHOOSING a Graduate program:

- Realize that many Med. Schools have Graduate Programs (i.e. Ph.D. as well as the MD programs (for example look at UMass Med. School in Worcester, or Harvard Med)
- □ Take into consideration the location (geography and urban/rural and far/close to home,etc.) You'll be there for ~6 yrs, so better go somewhere you like!
- □ Since most 21-22 yr. olds don't yet know what specific field they want to specialize in, its advantageous to chose a program that is broad try to chose "umbrella programs" that join several specific fields and give you much latitude in terms of which labs you can join, rather than very specific departmental programs (unless of course that specific program really appeals to you!).
- Go to the program web sites and look at the affiliated faculty to see if their research sounds interesting, and look at specific features of their programs
- □ Talk to professors and other researchers about different institutions the scientific world is not that big!

The APPLICATION:

- □ Mostly done online, but takes time! You will need GREs and recommendation letters in addition to your application part.
- □ For recommendation letters: If you have done any type of lab research, definitely have the P.I. (= "principal investigator", i.e. head of lab) write you a letter. Ask professors who know you well especially in a lab setting (even if it is just a class lab) a Prof. who knows you and has seen you learning/doing/discussing science is far more important than a Prof. who gave you an A in a large course.
- ☐ The top 20-30 graduate programs in the country will almost certainly have training grants (from places such as NIH) which they will use to pay you a stipend while you are there, so it is NOT necessary to have obtained a fellowship before applying.

The INTERVIEWS:

If you make the first cut at a school, they will generally fly you out for an "interview"...this interview is just as important for them as it is for you, as this is where you visit with faculty and students and get a feel for the program - something you will never be able to get from the program's web site, or other people's impression. (other people's impressions are extremely valuable, but keep in mind that programs do change over time). If you go on such an interview be prepared to talk about any lab research that you've done.

GRADUATE SCHOOL:

You will generally spend the first year doing short (~2-3month) "rotations" through laboratories of your choice - this gives you a chance to join a lab and do some research and decide if you like it...after doing 3-4 of these, you will chose which lab you would like to go back to for the remainder of your graduate training. Also in the first year or two you will be taking classes. Usually in the second or third year you will do some teaching (as a TA of some sort). Some programs may have more teaching requirements than others.