

## **Graduate School**

*When, where, and how?*

### **1. Before you graduate**

- Take a year of Organic Chemistry and labs. Medical schools and many graduate programs require it.
- Gain independent research and teaching experience if you can. This will:
  - 1) Help you assess if you want and need a graduate education (training in research).
  - 2) Help you decide what you find interesting and uninteresting, and shape your goals in life.
  - 3) Give you practice, which will be needed if you decide to go to grad school.
  - 4) Help in getting teaching or research assistantships (TA, RA) as a grad student.
  - 5) Help you establish professional and faculty references by giving people the opportunity to see how you work (hard worker) and how you interact with colleagues (congenial person).
- Take the GRE (general for sure). Taking the subject depends on the school to which apply; however, taking the subject and getting good scores opens more doors.
- Get good grades.
- Contact faculty/professional references:
  - 1) Give your references plenty of lead time for writing letters (at least a couple of weeks).
  - 2) Keep the information up to date!
  - 3) Give your references all of the information they will need to write a complete and thoughtful letter of recommendation (resume, transcripts, statement of purpose).
  - 4) Waive rights to see the letter of recommendation (confidential letters carry more weight).

### **2. When you decide to apply**

- Masters or Ph.D.? Depends on your goals in life.
- Choosing a grad school. Factors to consider:
  - 1) Schools that offer both M.S. and Ph.D. degrees, or schools that offer only M.S. degrees.
  - 2) Location (for general preference, or fieldwork).
  - 3) Facilities.
  - 4) Advisor
  - 5) Financial Aid: TA, RA, versus financial assistance.

### **3. How to apply**

- Before applying:
  - 1) Read the scientific literature and become familiar with the relevant journals and the most prominent scientists.
  - 2) Get information about the school, the department and the faculty (web, word of mouth).
  - 3) Become familiar with the research of faculty to see if their interests match yours.
  - 4) Once you have identified potential advisors write to them. Your letter should make clear why you want to be in graduate school, and work with that potential advisor, and why such advisor should take you as a graduate student. Thus the letter should summarize what you have done, in what you are interested, and how your interests overlap those of the potential advisor.
  - 5) Faculty tends to look for bright and promising students, they may ask for all or part of the following information (so be prepared to send it if asked):
    - a) Unofficial copy of undergraduate transcript,
    - b) Copies of any reports, published papers, technical reports, or class research project that you feel demonstrate your ability to assimilate complex information and research into a well-written product,
    - c) Copy of either a curriculum vitae or a resume summarizing your work and academic experience,

- d) A statement of purpose outlining your short- and long-term career goals, a brief description of the kind of research project you would like to undertake,
- e) Unofficial copy of GRE results if available,
- f) Names, addresses, telephone, and email of 3 references.

- Preparing the application:

- 1) Write your statement of purpose and CV or resume. Make sure they are well-written.
- 2) Have several people (students and faculty) read them. Give them enough lead time.
- 3) Sections to include in statement:
  - a) Why you are applying to graduate school,
  - b) Your background as it relates to preparation for graduate school,
  - c) Your research interests, not too narrow, not too broad,
  - d) Indicate the advisor(s) with whom you would like to work, and any relevant correspondence you have had with them.

### **Shopping around**

Realize that this process is a two-way street. As much as you want to convince people that they should take you as a student, they should also convince you that they deserve your skills and capabilities. So shop around and don't forget to ask former and current grad students what is like to be at the school of interest and how is like to work for the professor of interest.

### **Some useful resources**

#### *General*

Peters, R. L. 1997. *Getting What You Came For. The Smart Student's Guide to Earning a Master's or Ph.D.* The Noonday Press, New York, US.

Educational Testing Service (GRE tests). <http://www.ets.org/>

*Specific to Marine Mammals:* Strategies for pursuing a career in marine mammal science (the strategies outlined are helpful regardless of the field of interest). <https://www.marinemammalscience.org/for-students/how-to-become-a-marine-mammal-scientist/>

Marine Mammal Trainer. <http://www.dolphintrainer.com/>

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