

# Preparing for a Career in Academia

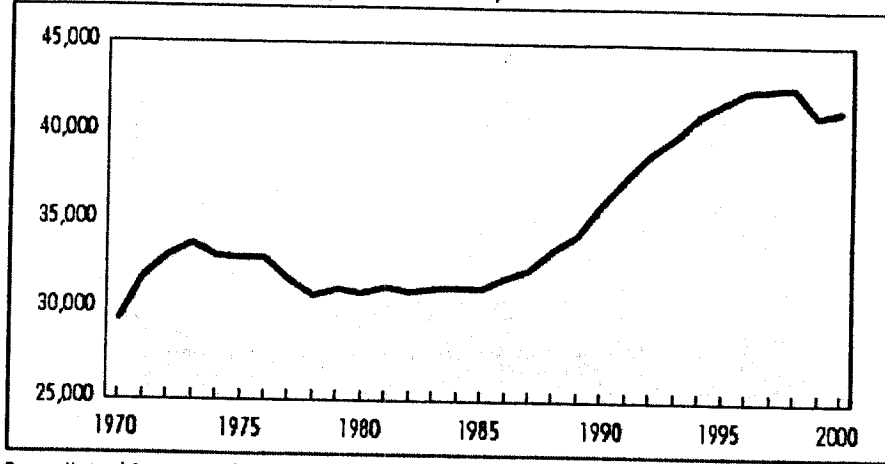
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## Overview

- You are not alone
- Academia ≠ Academia
- Who are *you*?
- Job application and interview process
- References and pointers

# You are not alone...

Number of doctorates awarded by U.S. universities, 1970-2000



Source: National Science Foundation/SRS, Survey of Earned Doctorates

↑  
in 1970 44% awarded  
Here from US

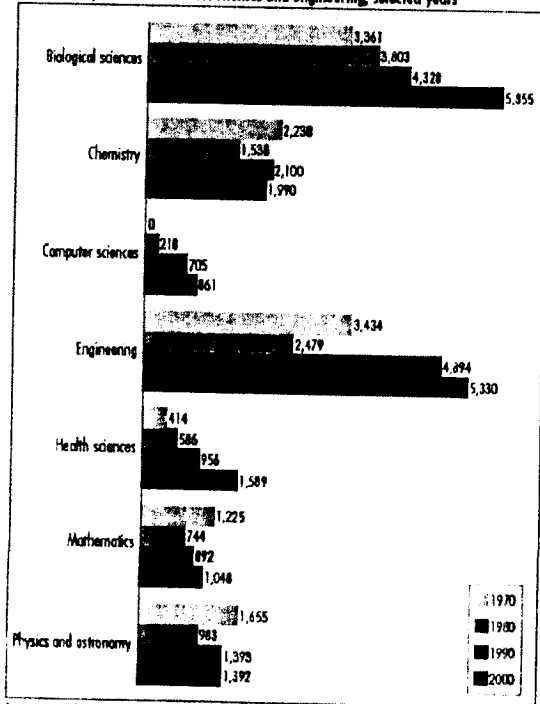
↑  
whereas in 90% of countries  
MS is only giving 15%

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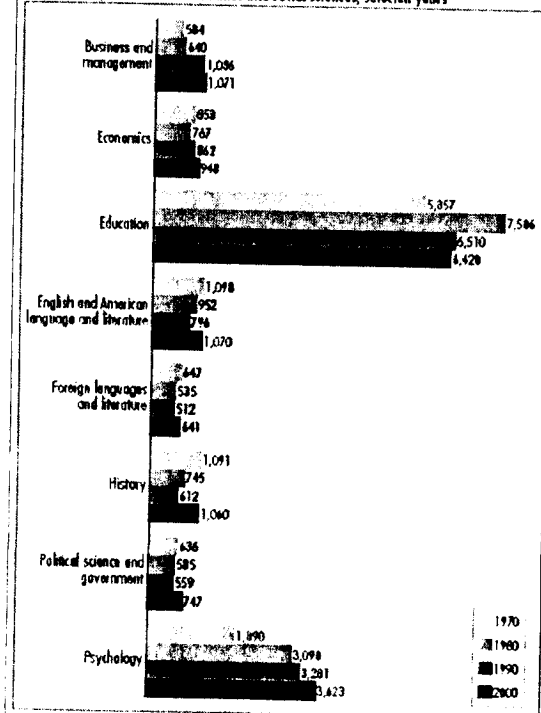
## Some statistics...

Doctoral recipients in the natural sciences and engineering, selected years



Source: National Science Foundation/SRS, Survey of Earned Doctorates

Doctoral recipients in the humanities and social sciences, selected years



Source: National Science Foundation/SRS, Survey of Earned Doctorates

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...and more

Postdoctorate plans of Ph.D. recipients by field, 2000  
(percent)

Field of study	Still seeking employment or study	Plans upon graduation			Planned sector of employment			
		Postdoctoral study	Employment	Plans unknown	Educational institution	Industry or business	Government	Other and unknown
Total, natural sciences and engineering	25	40	51	9	33	48	9	10
Biological sciences, except biochemistry	25	67	26	7	38	34	12	15
Chemistry	22	48	43	10	19	69	5	7
Computer sciences	21	10	80	10	36	54	4	6
Engineering	27	20	70	10	18	69	9	5
Health sciences	23	17	73	10	54	49	13	15
Mathematics	23	31	62	7	56	33	3	8
Physics and astronomy	26	48	42	9	18	65	7	10
Total, humanities and social sciences	27	11	79	11	68	12	6	15
Business and management	16	3	86	11	72	20	3	5
Economics	19	7	85	8	50	22	15	13
Education	22	5	84	11	79	6	4	11
English and American language and literature	39	6	88	6	80	9	1	11
Foreign languages and literature	30	9	85	6	85	5	2	9
History	38	11	80	9	74	7	5	14
Political science/international relations	33	9	82	9	68	11	6	15
Psychology	26	30	58	13	39	24	11	26

Totals may not sum to 100 due to rounding

Source: National Science Foundation/SRS, Survey of Earned Doctorates

## Academia ≠ Academia

Do you want to become an excellent researcher, an excellent teacher, or both?

What is the type of institution are you targeting?

- Teaching-oriented universities: 5-7 courses per year; some research; mainly B.S. and M.S. programs
- Research-oriented universities: 2-4 courses per year; strong emphasis on research; Ph.D. granting institutions

➔ Job offers will often be based on research record rather than teaching record, because research is easier to verify.

# Who are *you* ?

If you prepare for a career in academia, you have to

## 1. Do top-notch research

You do not even exist in the profession until you have written papers that are circulated in your research community

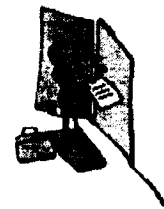
## 2. Build a community around your research topic

My (sarcastic) view:

Sometimes it is more important *who you know*  
than *what you know*.

(networking)

## Networking



- What is networking?
  - Making professional connections and using them; these connections are no substitute to quality work!
  
- Why is it important?
  - Makes you and your work known; eventually, you need letters of recommendation; you also want to leverage connections to help you increase your visibility in the community (invited talks, program committees, edge on getting papers accepted...)
  
- First step: maintain a professional home page!

# Networking (2)

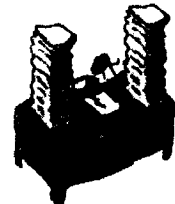
- Identify relevant people
  - Through main research conferences, journals, other faculty...
  - Identify common interests with these peoples
- Write to these people individually
  - Let your research articles be your emissaries (ambassadors)
  - Say something intelligent
- Meet each person face-to-face at professional meetings
  - Go to conferences and professional meetings even if you don't present a paper (money might be well spent...)
- Follow up
  - Invited speakers, visits...



Go to top  
conferences

# The Job Application

- Know where job announcements are made
- Make sure you "know" the places where you apply
- Applying: the cover letter says it all
  - rework it n+1 times
  - seek input, criticism...
  - tailor it to individual institution
  - don't twist your letter to show that you're the perfect fit
  - make use of your network (informal emails...)



online journals/websites

don't apply just  
for their position

don't shenanigan  
force it.

figure know each other, take advantage of it.  
find a faculty member in your department +  
help you network.

# The Interview



- Be prepared, in fact, be very well prepared. A two day interview can be quite intense.
- Know the faculty, what they are working on, what they teach etc.
- Be prepared to answer tough questions ("Where do you want to be in 5 yrs, 10 yrs?")
- Prepare to meet students *- they ask the tough questions*
- Ask the right questions *- show interest*
- Follow up ("thank you note")

*- Be able to answer questions*

## Resources and Pointers

- Networking on the Network: A Guide to Professional Skills for PhD students; <http://polaris.gseis.ucla.edu/pagre/network.html>
- Beyond supply and demand: Assessing the Ph.D. job market. Occupational Outlook Quarterly, Winter 2002-03; <http://www.bls.gov/opub/ooq/2002/winter/art03.pdf>
- PhDs and the Academic Job Search. The Career Center, U Michigan; <http://www.cpp.umich.edu/students/gradservices/academic/>
- Preparing future faculty; <http://www.preparing-faculty.org/PFFWeb.Resources.htm>

*- discusses typical startup packages - find funding for students (2 years allow)*