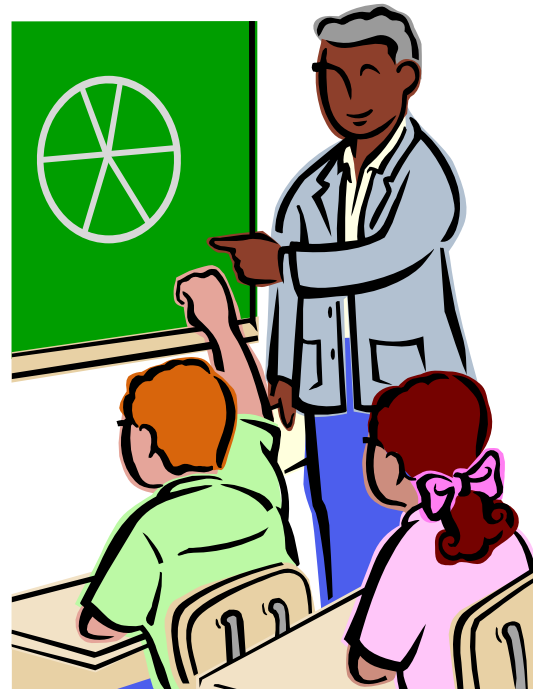


Preparing your Research Statement and Chalk Talk

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Molecular Biophysics and Biochemistry, Neurobiology



My qualifications

(1998) Interviewed at Columbia, Johns Hopkins, UPenn (X2), Stanford, Wisconsin, Yale

Served on 5 search committees:

3X Molecular Biophysics and Biochemistry

2X Center for Cellular Neuroscience, Neurodegeneration and Repair

Outline:

Whether, when, and where to apply for a job

What you are up against - how search committees work

What you should be doing now as a postdoc

What you need to communicate to interviewers

How to write your research statement

How to prepare for your chalk talk/interview

Dos and Don'ts

Whether, when, and where to apply for a job

Reality: Some applicants will never be competitive.

Best time: I am the strongest candidate I can be.
(tempered by life/personal circumstances).

Where: Focus on good fits for your science and lifestyle
(may not be advertised)

Not a good idea to apply for jobs at places you will
not be happy.

What you are up against - how search committees work

Comprised of 4-6 members w/Chair.

Job is to review applications (40-250)

- two members review each application
- committee discusses top applications, decides on which 4-7 to interview

You need to be one of these 4-7 applicants....

What you need to effectively communicate
(How do search committees decide who to invite?)

My research is focused on a problem of fundamental importance.

Need to clearly communicate your research accomplishments and plans and their significance.

I have been productive.

Need to have first author publications as both student and post-doc

My research program will be fundable.

Need to have track record of independent funding

Also can help:

I have unique technical skills or approaches.
(e.g. cryo-electron microscopist, electrophysiologist)

I am a good colleague and/or teacher.
(evidence that you are a good collaborator and/or effective teacher)

Things you should be doing now:

Publish papers

Get your own funding

**Postdoctoral Fellowships

Career Development Awards

Cultivate relationships with potential letter writers
(need 3-5 rec letters, 1-3 from non-mentors)

Network by going to (**small) meetings

Getting yourself known: Networking at meetings

*Small meetings are enriched for leaders in the field
easier to meet and talk with them - may determine
whether you get invited to interview

Present your work

Introduce yourself to leaders/invite them to visit your
poster (but don't be annoying)

Ask for speaking time

Ask (good) questions of speakers.

Applying for a job

CV (Training, Positions Held, Honors/Awards, Funding
Publications, Persons Trained)

Representative Publications (usually 3)

Letters of Recommendation (3-5)

Research Statement

Teaching Statement

Research Statement: The Fundamentals

Before you begin writing your research statement:

1. Collect several examples of research statements from others who have been successful on the job market (no shame in mimicking style, as long as content is yours).

2. Set a deadline for completing the proposal well ahead of when it is actually due, break down into small digestible pieces and write.

Best ideas come after you have written first draft.

Other people's critical comments will significantly improve.

3. Get critical feedback from experts and non-experts.

Structure of the Research Proposal

Usually 3+ pages (more is not necessarily better)

Past and current research (1 page) -

Future Research Plans (2-3 pages) -

References

Past and current research (1 page) -

Describe the overall focus/theme to your research interests.

- Thematically tie together graduate and postdoc work (e.g. I am interested in the fundamental problem of how.....). This makes it appear that you have a master plan to your science.

Emphasize approaches you have taken.

Outline your discoveries as a student and postdoc.

Highlight what impact your work had on your field

- Tell how you know it had impact (e.g. it was highlighted in a minireview, Faculty of 1000 etc.)

Future research plan (2-3 pages) -

If you propose to work on new problem-give an overview

Organize as you would a grant proposal

Divide into Aims (3 is a good number)

Describe amount of work that would take
a 4-5 person lab 4 years to complete

Can also include more ambitious longer-term plans,
but do this under separate heading.

Research Statement: Dos and Don'ts

Do:

Include pictures/diagrams/graphics

Keep it clear, concise, and interesting

Put name on every page and number pages

Don't:

Assume everyone is expert in your field

Make the page cluttered (instead use at least 10-11 pt fonts and 1 inch margins)

Have any typos.

The Chalk Talk gives you an opportunity:

To convince entire department that your future plans are well-conceived, doable, and fundable.

To demonstrate your depth of understanding of a field.

To display your teaching and communication skills.

To demonstrate how you might fit into a department's mission.

Preparing for a Chalk Talk

Ask host about format (chalk vs. powerpoint, how long, how active is the crowd, any advice?)

Give brief intro to problem and why it is important (2-3 min)

Review past accomplishments as they relate to the problem (2-3 min).

Give overview of Aims, including approaches and how they relate to overall goal. (5-10 minutes).

Be prepared to go over each Aim in detail (practice 5 minutes for each, but be prepared to go over in 10 or 15 minute detail)

Chalk talk: Dos and Don'ts

Do:

Practice, practice, practice (write down questions you get during practice and short direct answers).

Practice writing on chalk/white board!!!!

Really think several steps ahead about your problem and feasibility, be ready to defend feasibility.

Point out possibilities for collaborations in dept!

Don't:

Eat during it. Eat just before or after, but not when you are talking

Underestimate its importance.

Other Interview tips

Dos:

Try to read 1-2 research papers from each person on your schedule. Each person you meet with is interviewing you. Express interest/enthusiasm for their science!!

Be courteous and pleasant to administrative staff.

Be consistently enthusiastic about the department. Ask specific questions about departmental mission and how you might fit in.

Follow up with thank yous. Opportunity to reinforce your interest.

Other Interview tips

Don'ts:

Complain about current department or mentor

Gossip/Conceal

Bring up personal information (family, hobbies etc) first
(talk science first).