

# A (hopefully practical and useful) guide to getting a faculty job

Brian O'Shea  
MSU CMSE, P&A, NSCL  
[oshea@msu.edu](mailto:oshea@msu.edu)  
[www.msu.edu/~oshea](http://www.msu.edu/~oshea)

Talk notes + slides + resources: <https://goo.gl/tprlo9>

**BRACE YOURSELVES**



**LOTS OF ADVICE IS COMING**

memegenerator.net

**Thesis 1:** Applying for and interviewing for jobs is a skill that can be learned - and thus you can improve at it!

**Thesis 2:** There are a lot of ways to greatly improve or damage your chances of success during an academic job search that have nothing to do with the quality of your research; many are non-obvious.

# Caveats before we get started

- Expectations at teaching-focused vs. research-focused schools are different, but there is overlap!
  - Teaching-focused schools often want people who can provide research for their students, as long as you clearly want to be there.
  - Teaching-focused schools typically want to see real teaching experience (instructor-of-record for course)
  - Research schools have an increased understanding that teaching is important and valuable
  - Both need “good citizens”: committees, student advising, co-/team-teaching, etc.

# Why listen to me?

- Chaired 4 search committees at MSU, heavy participation in many additional searches (helping launch CMSE)
- Have read 100s of application packages in detail, participated in dozens of interviews
- Have observed many students/postdocs/colleagues successfully (or not) apply for jobs
- Have been a faculty member both in teaching-focused and research-focused units at MSU (basis for comparison)

# How do searches work as the employer?

1. Dept. convinces college/university to let them hire a new faculty member (possibly in a specific topic)
2. Search committee formed, typically including somebody from outside of the interest group/dept.
3. Job ad written and published in various places (Physics Today, Chronicle of Higher Education, AAS Job Register, sciencecareers.org, higheredjobs.com, careers.aps.org/jobs, etc. - see talk notes)
4. Search committee creates list of required/desired qualities of job applicants (ideally)
5. Applications come in and are evaluated by the search committee using the criteria defined (ideally)
6. Possible phone interviews with “long short list”
7. On-campus interviews with 3-5 candidates on the “short list”
8. Job offer to favorite candidate, followed by negotiation. (Possibly with more than 1 candidate)

Job applications

This is where 90%+ of applicants are filtered, by tired people who read many app packages. **Takeaway:** you have little time to make your case - appearance and organization matters a lot!

- Read the job ad's instructions and provide what is asked for (don't deviate without good reason!)
- A well-formatted and well-organized app can't make up for insufficient research/teaching, but a poor application can take you out of the running.
- Make sure to get several people (esp. non-experts) to **proofread your entire application** and give you critiques on content, writing, overall appearance!
- Note that even good applicants might be filtered at this stage b/c applicant doesn't fit some unstated criterion.



# Big picture: what is the committee looking for?

- Does the applicant have the necessary/desired qualifications and experience?
- Are they doing what we're interested in?
- Do they seem like “faculty material”? (i.e., big-picture view; coherent writing; evidence of interest in teaching and mentoring; evidence of ability to effectively apply for grants)
- Do they seem like they might be a reliable and responsible colleague?
- Typical materials used to judge this: cover letter, research statement, teaching statement (poss. add'l teaching materials), 3-4 recommendation letters (or at least contact info for writers)

# Cover letters

- Incredibly helpful but often poorly utilized - this can make or break your application!
- Cover letter: guide to your entire application.
- 1-2 paragraphs: why are you the right person for this job, at this university? Why are you qualified? (This is the part of the app most carefully tailored to this place - make the most of it.)
- Keep it to one page, reasonable font and margins!

# CV advice, 1

- Needs to be organized in such a way that people can get required information: education, employment, papers, grants. Poorly-organized CVs sink applications!
- **Critical info must be easy to find** by somebody reading it in a hurry - good formatting/organization is crucial!
- Don't pad paper counts with papers "in preparation," and break papers into separate sections (peer-reviewed, conference proceedings, in press, under review). Put down numbers and make the years of publication clearly visible!
- Education, employment, awards first, then other stuff (grants, papers, presentations, teaching experience, etc.)

**Use your university's PhD career services office!**

# CV advice, 2

- Other relevant things:
  - Mentoring experience (undergrads, younger grad students, etc.) - who did you mentor, where are they now?
  - Teaching experience (including guest lecturing and workshops)
  - Grant-writing workshops and experience (even if grant were rejected)
  - Outreach activities
  - Open-source software development (esp. if available online)

Anything you have done to develop your professional skills or share experience should be listed - CVs are supposed to be comprehensive, and you don't know what the committee is looking for!

**Use your university's PhD career services office!**

# CV advice, 3

- Things you should NOT put in (for apps in North America, at least):
  - Personal information (birth date, marital/relationship status, information about family, info about hobbies unless relevant to work, religious affiliation, non-academic organization memberships, ...)
  - Picture of yourself
  - Lists of declined fellowships/positions
  - Publications irrelevant to job (e.g., articles for a climbing magazine, church newsletter, etc.)
  - Don't try to be cute or clever.

**Use your university's PhD career services office!**

# Research statement

- **This is a sales pitch, not a review article!**
- Needs to be accessible to the non-expert (and the intro should be accessible to the non-physicist) - grant applications!
- Committee looking for evidence that you're "thinking like a faculty member" - you see the big picture and have a long-term plan
- Do you have projects that can be given to grad/undergrad students and turned into dissertations?
- Where do you anticipate the funding for your research will come from? (OK to mention specific calls for proposals, but not necessary)
- Keep it to **3-4 pages** and don't be afraid to put in a figure or two. Excessively long = committee will question your judgment.

# Teaching statement/materials

- Lecturing highly deprecated - learn about active learning, clickers, flipped classes, backward course design, learning goals, etc., and make sure you actually know what they mean and how they're used!
- If asked for example course materials or student reviews, include these strategically - don't overwhelm the committee!
- Also a good place to talk about mentoring experiences if you have not taught a class! (And even if you have.)
- Keep this to 1-2 pages unless specifically instructed otherwise.

# Recommendation letters

- Provide the number of letters asked for; no more than one extra, and **only** if there is a strong reason! (And explain that in your cover letter)
- Make sure your letter-writers can (and will!) write you a strong letter.
- Don't be shy about giving your letter-writers suggestions! (Accomplishments, traits, explanations of things that don't appear elsewhere in the app)
- Be strategic in choosing letter-writers: think about what they'll talk about and how the set of writers will be perceived.
- Give your letter-writers CV, research+teaching statement drafts, any additional information 2+ weeks ahead of time.



# Contacting the search committee

- Search committee chairperson's name is generally on the job ad - one of their main functions during the app process is to answer questions.
- Do not contact them just to “get your name out there” - this will backfire.
- Don't ask questions about department politics/personalities - this is inappropriate and will backfire.
- DO ask questions regarding fit with the department, what they're looking for with teaching statements (esp. if other material is requested), etc.
- A phone/Skype call is not out of the question, but make sure you have a list of questions ready and don't waste their time!

How can you make yourself  
a stronger applicant?

# Two critical points

1. The more you can speak about matters the way a faculty member would (i.e., broad perspective), the easier it is for the search committee to see you as a member of their department!
2. The more you already do things that a faculty member does that grad students/postdocs typically don't, the easier it is to see you as a faculty member!

# Specific suggestions, 1

- Research: take a grant-writing workshop and participate in the writing of a few grants to use those skills.
- Mentoring: read about mentoring/go to a mentoring workshop and volunteer to mentor (or co-mentor) an REU student or junior grad student in a clearly-defined project.
- Service: joint a committee and organize something for a while (conferences are the big one; but seminar, journal club, astronomy/science on tap, etc.)
- Website: create a modern and up-to-date website that highlights and expands upon your application! (And keeps the personal stuff to a minimum.)

# Specific suggestions, 2 - teaching

- Go to teaching workshops to learn about the “right” things to do - active learning, backward course design, flipped classes, etc. (CIRTL network, ISEE PDP, ...)
- Guest lecture for one or more faculty members, but strategically - courses that are like what you might teach in the future.
- Help create an assignment for a class and get feedback on it.
- Teaching-focused institution: try to be the instructor-of-record for at least one course so you can get that experience. (This is easier than you might think.)

# The interview

# General thoughts

- If you get this far, you're clearly qualified.
- It's more about if they actually want to hire you. ("Fit.")
- Job interviews are a two-way street: the committee/dept./dean is selling you on the institution as well as vice versa!

# What are we looking for in a candidate?

- Do they seem sane, and not (too much of) a jerk?
- Will they be successful enough in their research to get tenure?
- Would they be a good research collaborator?
- Will they do a good job representing our department?
- Will they be a good departmental/college citizen?
- Do we think they'll be a good teacher?
- Do they actually want to come here?



# How to prepare, 1

- Research the department/college/and the general area (East Lansing is not Ann Arbor)
- Make sure to have short “elevator pitches” on your research for an expert, a non-expert physicist, and a non-physicist.
- **Very important:** think carefully about how you might fit into the department. What’s your 5-year plan at this institution?
- Come up with lists of questions to ask people - you need to have good questions to ask.

# How to prepare, 2

- Think about what you might want for your startup package, and make sure it's realistic for the type of institution you're interviewing at.
- Ask for your meeting schedule ahead of time and look up the websites/papers of the people you're going to meet with, and make notes!
- Choose an appropriate interview outfit, make sure it still fits and it's clean. (Do this at least a week before your interview!)

# During the interview

- Bring a bottle of water and portable+non-messy snack, notebook, pens/pencils, paper copy of your schedule (but make sure it's up-to-date).
- Don't be shy about making bathroom/water fountain stops between meetings or asking for a few minutes of quiet time. People rarely think to ask/schedule this in.
- Make sure to ask people questions, and ask multiple people the same questions (this can be very informative)
- Set your phone to “silent, no vibration” and do not answer phone calls or texts during meetings or your talks. Similarly, don't use your phone to take notes - this can be very off-putting and potentially distracting.

# The job talk

- Not a standard seminar: more like a colloquium due to non-experts present (biggest mistake is making this too “expert”)
- Need to capture the big picture: where/how does your work fit?
- Talk about your work and make it clear what you personally have done.
- You don't have to talk about ALL of your work - can focus on one or two particularly interesting things (but mention that you have more)
- Talk about your future plans - what would you do if you came to this dept.?
- Make sure your slides are legible!
- Give two practice talks: once to 1-2 people you really trust to tear it apart, and then to an audience including people outside your sub-field. **Get feedback and implement it!**

# After your visit

- Make notes about everybody you met with: what you talked about, impressions, ideas you had for research/teaching/collaboration, etc. - this may come in handy later.
- Send a **short** thank-you email to everybody you met with! Keep it **vague and positive**. (This is surprisingly important.)

# Negotiation

- It's all about good-faith negotiation:
  - What do you need to be successful at this institution?
  - Is what you're asking for reasonable given the institution and your specific area of research? (Careful about public vs. private)
- Collect as much information as you can:
  - Advisors and senior colleagues at your institutions
  - Emails to people who recently got jobs at similar institutions
  - Public institution salary info is online, but sometimes hard to find.
- This is where you discuss 2-body problems
- Multiple job offers: can be used to negotiate effectively, but don't play games - the dept. chair/dean has done this more than you, and they're very smart too.

# In summary

- Academic job searches are complicated, but succeeding at one is a set of skills that can be learned.
- The application is extremely important - most candidates get filtered out there, without knowing why!
- The interview is a chance to demonstrate that you are a good fit for this job, and also that you're interested in the position. This doesn't replace being a good scientist, but it really helps!

Talk notes + slides + resources: <https://goo.gl/tprlo9>

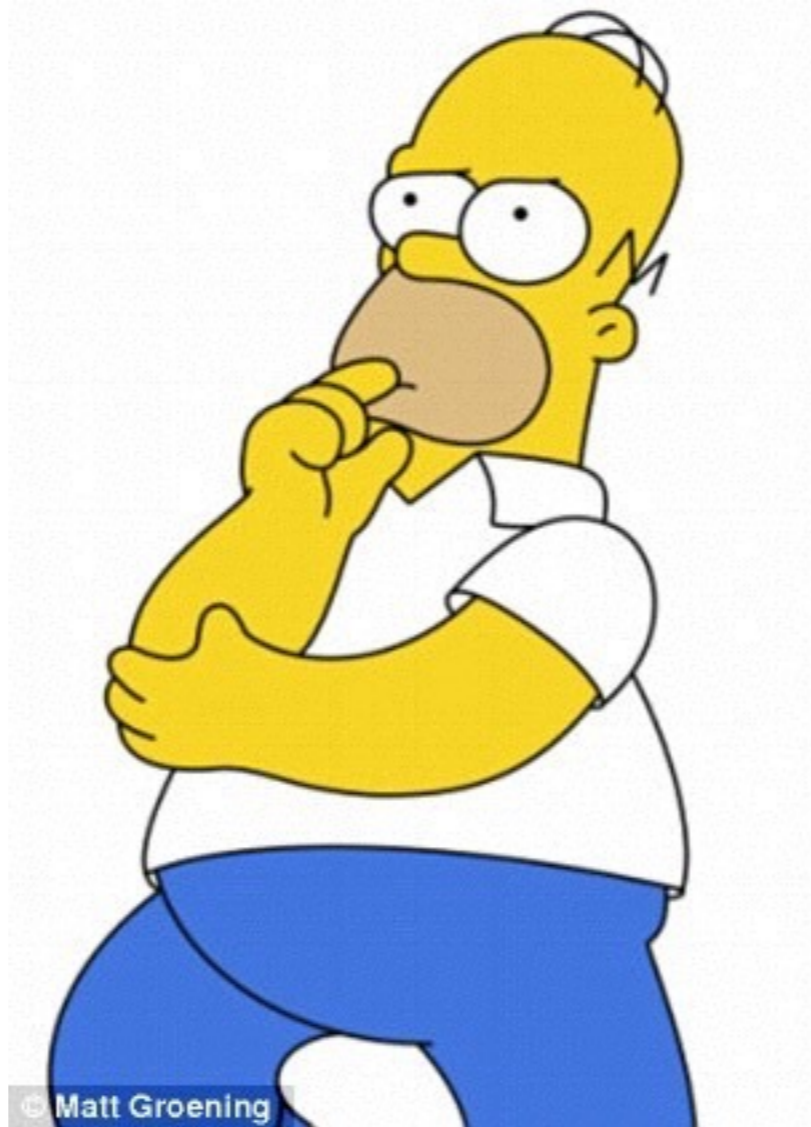
# Thanks to:

- The organizers for inviting me!
- Many people for providing feedback on this talk, including Ed Brown, Danny Caballero, Vashti Sawtelle, Elizabeth Simmons, Jay Strader, and Steve Zapf

Talk notes + slides + resources: <https://goo.gl/tprlo9>



# Questions?



Talk notes + slides + resources: <https://goo.gl/tprlo9>