Academic Job Search

October 6th ,2020

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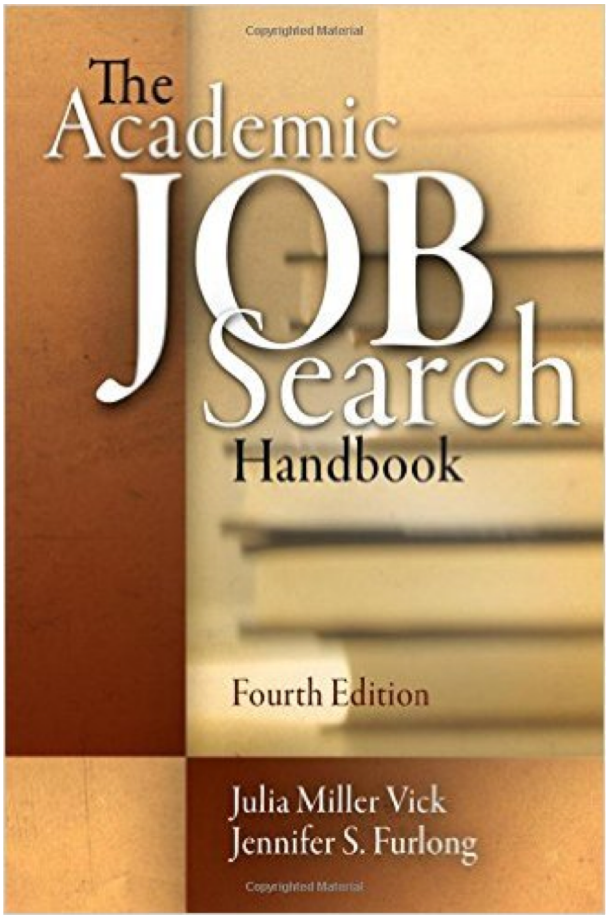
- Goal: Help you prepare for the job market!
  - How the process works
  - For those who will apply in coming years – what to do now….
  - Applying for jobs now…
- This discussion for academic jobs….
  - US University faculty positions
  - Non US University positions (a little….)
  - Lab Scientist positions

- The purpose of this talk (workshop!) is (just) to give information/advice
- Your job search and success depends the most on you – you are your best advocate
- Be pro-active!

resources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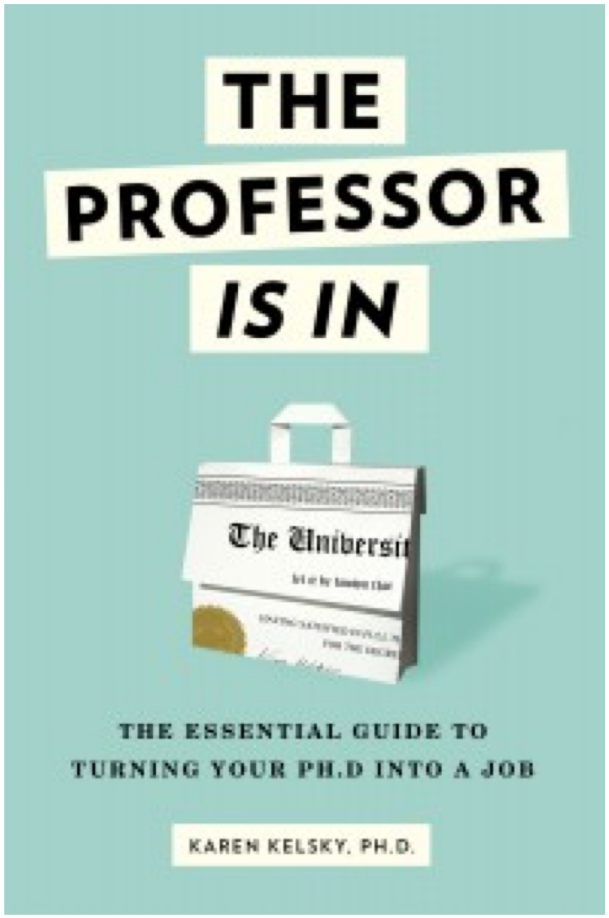
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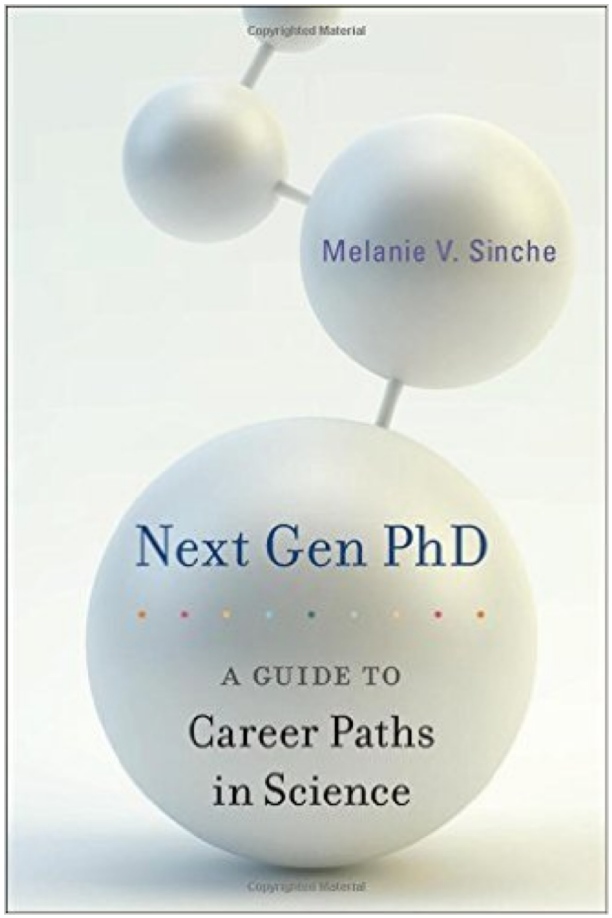
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How the process works from the university side (US jobs)

- Faculty jobs are on the academic calendar
  - Ads go out in early fall (to collaborations, physics today, HEP jobs, CERN courier, …)
  - Applications due as early as October and as late as January/Feb (early dates are good and bad….)
  - Can be a couple hundred replies for a position
  - Committees are typically several from HEP/nuclear and at least one from outside the field (sometimes the chair) and/or from theory
  - Typically interview 4-6 candidates
  - Interviews typically in January/Feb
  - Offers as soon as possible after this -- March

Example:

Job Rumor Mill

Experimental High Energy Physics

https://sites.google.com/site/hepexrumor/

How the process works from the university side (non-US jobs)

- Timing can be the same as US university jobs, but often the process is outside the academic calendar.
- Some differences:
  - Interviews can be conducted all at once and decisions made very rapidly: Typically done in the UK
- If you are applying to a job outside the US, ask a colleague from that country how the process works there!

(HepEx Rumormill lists US and non US jobs)

How the process works from the lab side (US jobs)

- Mostly the same timing applies for those on the academic calendar
- Some can be outside of the academic calendar
- Different labs have different types of positions (eg: Fermilab, BNL, SLAC, all very different)
- Some differences in expectations:
  - Experience in managing projects a plus
  - Teaching experience not as necessary but mentorship is important
  - Some have significant research fraction, some less so.

What can you do now to prepare yourself for the job market in coming years?

- Experimentalists: Make sure you have a good mix of hardware/software and analysis work
- If you are on different experiments/activities, how does the sum combine together? (Can you imagine writing a coherent research statement?)
- Make sure you have or are working towards leadership positions
- Give talks: ***Every talk is a job talk!!!***
- Think about who your letter writers may be
- Network, at conferences etc. Talk to people, don't be shy – everyone wants young people to come up and talk to them at a reception! Have an ***Elevator Speech*** ready
- When to go on the job market….

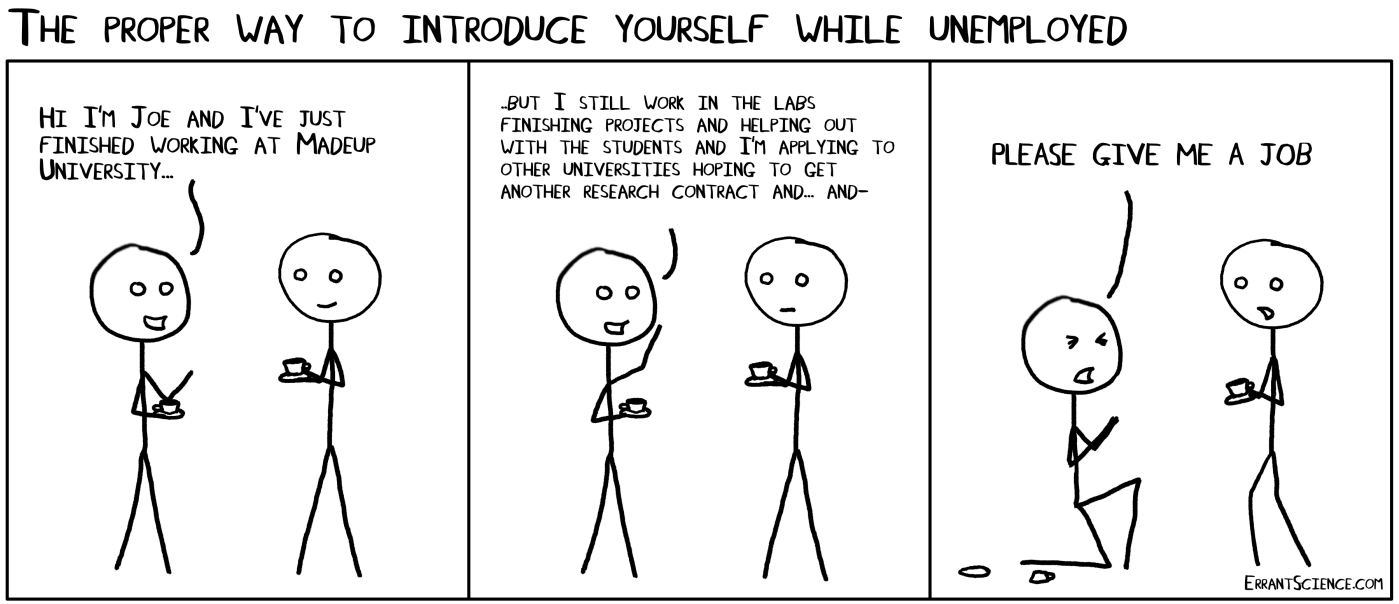
- Applying for faculty positions
  - Where to apply
  - Putting together an application
    - Research Statement
    - Teaching Statement
    - CV
    - Recommendation letters
  - Interviewing
  - Responding to an offer

Where to apply

- Apply broadly – sometimes departments search programmatically and sometimes more broadly
- Good rule of thumb: If you are sure you would not accept a position somewhere, consider not applying…
- Consider if it's a good fit – new program? Step into existing effort? What works for you? A good fit is one that works well for you and for the institution!
- Ask around – you will hear different opinions! Take or leave at your own judgement

Coverletter

- Express **enthusiasm** for specific position
- Narrate the most **relevant** parts of CV
- Explain why you are the **best candidate**
- Demonstrate your **writing skills**



- If there is a chair of the committee listed in the ad, address the letter to the chair or whomever else you are supposed to be sending the application
- 1 page. An opportunity to hit some high points you really want them to remember (like an abstract for your research statement)
- Include relevant information for that institution (ie: if there is already a MicroBooNE group there)

Research Statement: 3-4 pages which should cover

- Your research experience: PHYSICS FIRST! Tie different components of your research together where possible – show complementarity
- Hardware experience
- Leadership roles in both
- Be specific for both
- Awards and prizes and papers (mention them!)
- What you will bring to an institution as a faculty member
- How what you will bring will tie into the program at that institutions (either with an existing group or as a new effort which is complementary to existing groups)
- Active word choice (ie: I led, **not** I am part of a team)

Teaching Statement

"A **teaching philosophy** is a self-reflective statement of your beliefs about **teaching** and learning. It should also discuss how you put your beliefs into practice by including concrete examples of what you do or anticipate doing in the classroom."

- Describe teaching philosophy
- Describe your teaching experiences
- Include mentorship of students (grad and undergrad)
- Include outreach experience
- If you know: include things you'd like to teach (avoid listing only graduate experimental particle physics…)

Diversity Statement

”A **diversity statement** is a personal essay that is a depiction of your past experiences and explains how these experiences have contributed to your personal and professional growth. It allows the applicant the opportunity to explain to a search committee the distinct qualities and commitment s/he can bring to the table.”

- These are relatively new….
- Look for examples online…

CV

- Academic experience
- Honors/awards
- Research positions and leadership positions (but don't repeat what is in your research statement)
- Teaching/outreach
- Service work (committees etc)
- Publications (highlight YOUR contributions)
  - Peer review papers with which you had significant involvement
  - Peer review papers overall
  - Reports/Whitepapers/Proposals
  - Your conference proceedings
- Talks (separate into conference/seminar etc. and invited/parallel etc to call out specific talks…)

Overall

- Consider what the committee is looking for.
- Provide examples to **<u>show</u>** that you possess these skills/interests.

Overall

- Show, don’t tell
- Main research interests
- Your most relevant experiences
- Specific skills and techniques that you will bring
- Major achievements
- Context and broader impacts of your work
- Future research

formatting

- 12-point
- One-inch margins
- Times New Roman

writing

- Have connecting phrases/sentences between paragraphs or topics.
- Use strong action verbs
- Outline the specifics of *your* involvement

action verbs

- **Research skill verbs:**

Clarified, collected, evaluated, examined, identified, investigated, surveyed

- **Technical skill verbs:**

Calculated, designed, operated, repaired, solved

- **Teaching skill verbs:**

Adapted, communicated, developed, enabled, evaluated, facilitated, instructed

Recommendation Letters

- Choose 3-5 depending on position (not 6-8!) Talk with your advisor about who to ask
- Good to have people who are leaders in the community but don't pick someone who cannot talk specifically about your work.
- Choose writers who will span your research experience and who you think will write a good letter but not who may say the same things
  - (you can ask them if they can write you a strong letter)
- Give them enough time (for a new letter – at least 2 weeks advance warning if not more)
- Send them your CV and your research statement at minimum
- Can also send them a separate doc with useful information for your letter describing all your work including what they may be less familiar with
- Send them a spreadsheet or document of where they need letters sent and when
- Remind them and hear back from them (spam can catch things it should not!)

Correspondence in general

- If you see someone from a search committee at a conference – say hi! (even if its on zoom) Tell them/remind them you've applied for their position
- If you know them, send them an email when you send in your application to let them know (particularly important if they are NOT on the committee)
- Don't be dismayed if you don't hear back right away – search committees are busy and sometimes are limited in what they are allowed to tell you….

Interviewing

- If you get asked to come for an interview (on the short list) reply immediately!
- Don't overbook yourself during interview season
- Typical interview
  - Schedule of individual meetings, sometimes a meeting with the whole committee
  - Seminar (job talk) often at the end of the day
  - Lunch and dinner with the committee/sub groups/and or students (be prepared with a few general non-physics topics → avoid awkward silences!)
- Stay calm and confident! You are there because these people already consider you as a possible future colleague!
  - Make eye contact, smile, both talk and listen well in conversations (they are selling themselves as much as you are selling yourself!)
- For interviews on zoom, all the same protocols but beware of what is on camera, and make sure you have a good wifi connection.

Interview talk

- Your interview talk is very important!
- You want to **“tell a story”** weaving in your work on the experiment.
- **Know your audience:** You will likely be talking to more than just HEP folks (non-HEP folks on the search committee will attend) so you have to hit the big message while talking about your specific contributions…)
- **Find ways to show off your work** without too much bragging (use photos with you in them!, write your leadership roles on slides even if you don’t want to call them out verbally
- **Make sure you understand every thing on every single plot on your slides!!!!**
- Give a **practice talk** and give AMPLE TIME (ie: not the day before your talk) to amend your practice talk in preparation for your interview
- **Don’t go overtime!**
- **Dress for the job you want (not like this guy!)**

Do your homework ahead of time

- If they don't send you a schedule of whom you will meet with, ask for one.
- Make sure you know who's who on your schedule and what their research is (why are they talking to you?)
- It will be a LONG day so be well rested
- Your talk is REALLY important so spend time on it and give practice talks well ahead of time!
- Bring a backup of your talk on memory stick and/or online (in pdf!)

Questions you may get asked

- Tell me about your research?
- What is your teaching experience? What kinds of classes are you interested in teaching?
- What is your hardware experience?
- What is your experience working with students/mentorship?
- Why “Yale?” (Institution name here)
- If you came here, what kinds of needs would you have in terms of space and resources? ($) You don’t have to have a detailed plan but you should be able to answer in general
- What questions do you have for me?

More general questions…

(sometimes harder!)

- What are the biggest open questions in the field in general? (have an opinion!)
- Where do you think the field is heading?
- How would you explain your research to a general audience?
- Particle physics is huge! How do you distinguish yourself on a large collaboration? (non HEP folks ask this)
- What are your short, medium, and long term career goals?
- What are your weaknesses and what are you doing about it?
- What achievements are you most proud of and why?

Be prepared with questions

You can ask the same question in multiple interviews – what questions you ask show your thoughtfullness for a position and the institution, and you may get different answers from different people! Useful for you.

- Any questions you have about a particular person's research program…. (people love to talk about themselves, but don't ask just for this reason…)
- How many faculty are there? How many graduate students? How many undergraduates?
- Does your department have a 5 year plan moving forward? What is it? What is the direction of the department

Be prepared with questions cont.

- What is the process/path to promotion/tenure?
- What is the typical courseload for universities?
- What support does the department have within the university?
- What service work is expected in lab positions?
- For lab positions, what is the research fraction?

Practice! As a few senior people (us!) to do a mock interview with you.
Talk to folks who recently got jobs about their experience interviewing….

What you don’t have to discuss (and may not want to)

- Anything related to your family (kids, position for spouse, etc)
- Any other positions/options you are considering
- Any other personal information not related to what your job duties would entail.

What they should not ask you…

- Are you married? Does your spouse need a job?
- Do you have children or will you have children? Do you need childcare?
- How old are you?
- What is your ethnicity?

Some people are well meaning in asking these, some may not be. Most know not to ask but be prepared.

What they may ask you...

- Do you want information about childcare?
- Do you want information about our spousal hiring program?

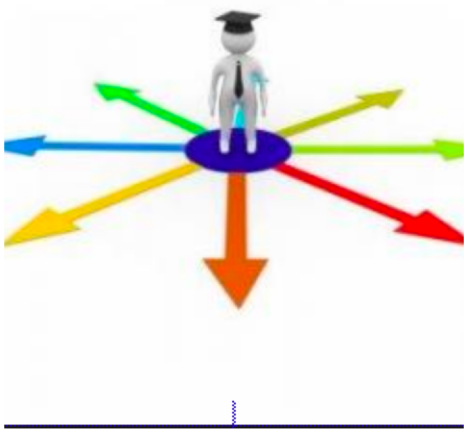
Responding to an offer…..

- Early searches may require early answers – this is tricky….
- Ask for the salary you deserve (a good starting point is really important!) Research what is average in the area/at that institution
- Ask for startup to cover what you need en route to getting funding (this is tempered by what the department thinks they can ask for from the university)
  Ask for the office and lab space that you need!
- Once you've signed on the dotted line, asking for (getting things) is MUCH harder
- This is the time to ask about childcare, relief for dependent care and impact on tenure clock, home loan programs, …..

Dealing with not getting an offer….

- Important to remember that some things are in your control and some things are not. The best you can do is to do a great job at the things that are in your control! (talk, materials etc).
- Don’t take things personally
- Try to learn from a rejection to do better the next time!

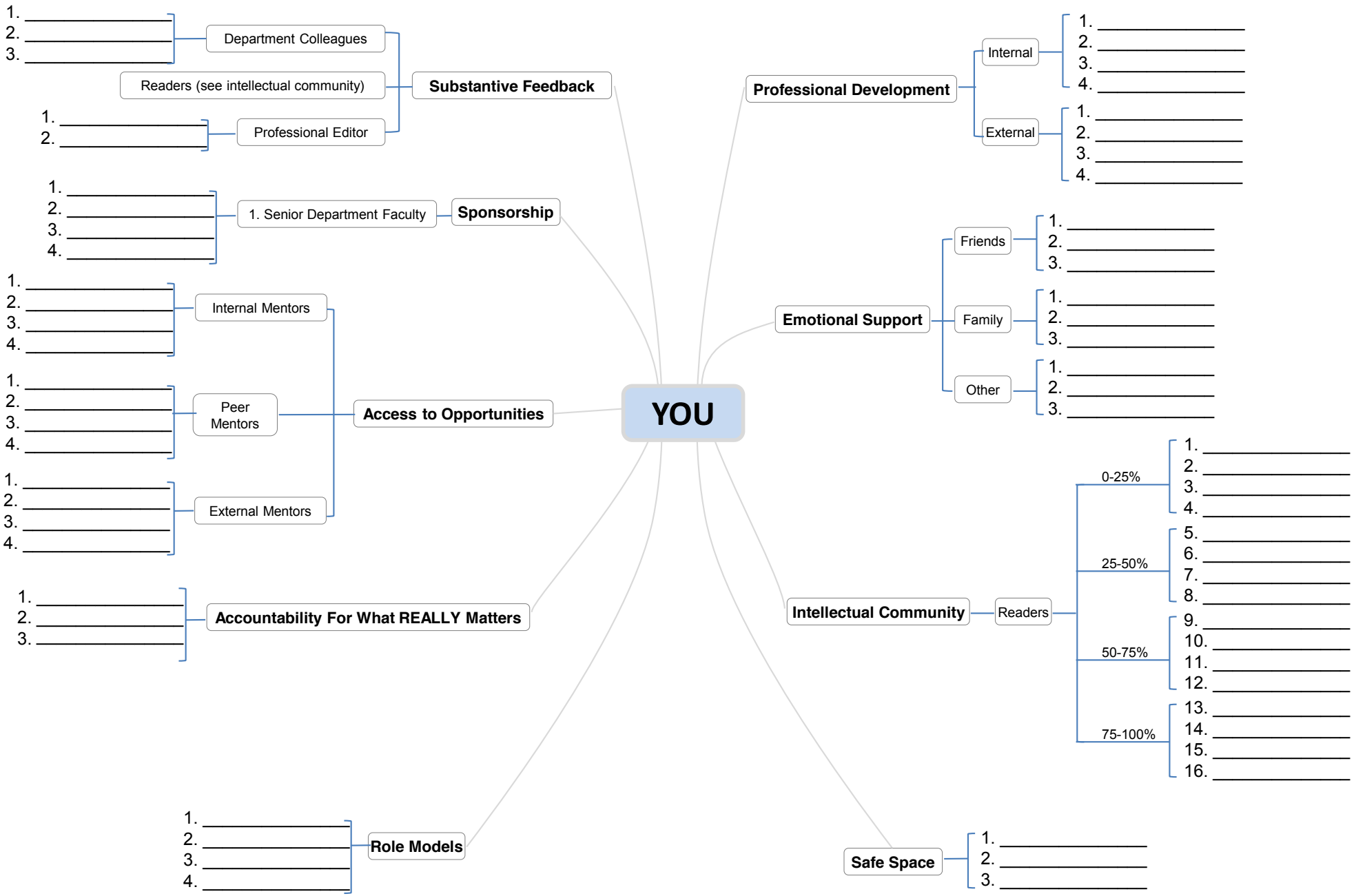
Final Words



- Be pro-active!
- Ask for advice/help!
  - Your advisor
  - Your colleagues who most recently got jobs
  - Other faculty in your department
- Think strategically: where do you want to be in 5 years? What are you applying for and doing now to get there?
- Think about building your “team” of mentors/advocates/supporters. Do you have the team you need to succeed?

→ Mentoring map!

NCFDD MENTORING MAP



www.FacultyDiversity.org