So you're applying for a postdoc:
some collected experience

by Jen and Sabrina

Helpful links and timelines

- Application season opens in ~November and can go through the summer
- AAS Job Register: https://jobregister.aas.org/
  - Astronomy Rumor Mill: http://www.astrobetter.com/wiki/Rumor+Mill
- "Prize" postdoctoral fellowships: NSF, Hubble, Einstein, Jansky, Sagan… Yale/Caltech/Princeton/etc etc have their own prize fellowships
  - your time will be entirely for your own research that you propose
- Postdocs offered by individuals usually include some combination of time for your proposed research as well as for a (funded) project

How to Strategize Where you Apply

- there is such a thing as too many! it takes time write a good application
- each application should be personalized so if you find that you don't have the time to do that, you are applying to too many places
- first and foremost, apply where you would love to go. don't sell yourself short.
  - this applies to projects you find at least interesting and places to live you would find acceptable
  - if you think you would hate the people, place, and/or thing, it's **not worth your time**
- apply where you have contacts
- apply where your letter writers have contacts
- prize fellowships come first and take more time: if you have a good idea, apply! but don't underestimate the time these will take. each one is like its own telescope observing time proposal.

Parts of a postdoc application

- Cover letter
- CV
- Research statement
- Research summary
- Letters of recommendation

How to write a good CV

- apply for funding as a grad student! it is great for your CV and good practice
  - https://www.nsfgrfp.org/ for instance, or funding with observing time (Hubble, NRAO)
- sections in my postdoc application CV (to give you a place to start, which can be the hardest part)
  - "education", "research experience", "observing experience and research tools", "selected teaching, mentoring, and outreach experience", "awards and academic societies", "conferences and talks", "non-scientific pursuits", "references: letter writers", "additional references"
  - now includes "selected leadership experience", "committees" in case these apply already
- distill what is important: "developed python code to interactively fit optical galaxy spectra and extract continuum" is better than "proficient in python"
- include papers about which you can actually say something intelligent, not just huge collaboration papers that happen to bear your name

How to write a research summary

- summarize your research accomplishments in a results oriented way (i.e. give people a result they can link to your name: "I found interactions between dwarf galaxies enhance star formation" vs "I studied optical imaging of interacting dwarf galaxies."
- explain clearly your technical skills related to modeling, data reduction, etc
- if you know what the person is hiring for specifically, explicitly state how your past research experience prepares you to be amazing at that job
- slip in references to the work of the person doing the hiring (and their students)
- I recommend a paragraph summary at the top because people have a lot to read!
- as with observing proposals, don't be afraid to use bold face (sparingly) to help point to the most important points to take away

How to get the best letters of recommendation

- start building relationships with people early whom you would like to write letters for you
- asking people who know different facets of your research is best
- asking people from multiple institutions is a bonus
- help your letter writers help you
  - don't be shy: remind them of why you are awesome. they won't remember all of the things you've done!
  - let them know, for each individual application, what you want them to say (i.e. they want to hire someone to use their optical IFU so I want to highlight my previous spectroscopy experience)
  - put together a spreadsheet (or a website since things will likely be in flux) with basic info for each of your applications (deadline, how to submit letter, link to ad in the job register)
  - remind them A LOT
  - give them lots of time (as much as is feasible) since your letters (like your applications) are generally not a once-and-done thing

How to give a good (job or otherwise) talk

- be specific about how you supported a project without getting bogged down in the details
  - people want to know the highlights of your creative process, but they don't care about 95% of the work -- so give just the highlights or decision points -- and get to the 5% of the results
  - don't be shy to say when things were your idea! lots of ideas will come from your thesis advisor or collaborators, which is expected, but tell people about your thought process when you started to successfully take others' ideas and run with them yourself
- demonstrate your diverse capabilities
  - you are a radio astronomer but are well versed in relevant results at other wavelengths
  - you may be an observer/instrumentalist, but you appreciate the predictions from simulations
- do your homework on who is likely to be in the room
- don't refer to papers without knowing what's in them
- check astro-ph for the few weeks leading up to the talk (as you always do anyway… right?) so you're not caught by "did you see this recent paper…"

Other Tips

- create a good website so you have a strong online presence
- no one cares how long you stay in grad school: the clock starts ticking once you are out!
- remember that it's not you, it's them. landing a postdoc job takes skill, effort, but also luck, so be prepared for some rejection (especially if you apply to a large number of jobs) and take some extra time for self care
- go "on tour" and give talks even when you're not invited. most places have an informal talk slot that happens weekly; get in the habit of doing this regularly