

# NCEAS Academic Career Development Advice

*This is a compilation of my notes from the NCEAS career development "Open Houses", organized by Stephanie Hampton, during 2006-2008. Discussion leaders include Steve Gaines and Jim Lovvorn (2006 application advice), Frank Davis and Kim Schulz (2007 application advice), Alice Alldredge and Roger Nisbet (2006 interview advice), Bill Murdoch (2006 negotiation advice), and John Melack (2008 negotiation advice); other NCEAS sabbatical faculty who were present at some of the discussions also contributed valuable advice. Please note that this is my inevitably imperfect recollection and interpretation of others' ideas from multiple discussions. --Marissa Baskett*

## Application Advice

### The big picture

- Be careful to follow the rules, to show you've read the job description. You can never be too prepared.
- During the first screening, the search committee looks for a match with the job description and publications (what, where, who've been working with). There's almost always one person who looks at everything in detail even in the first screen, but keep in mind their limited time - make the important parts easy to find. Keep in mind that these are people who will be your colleagues for your career, and that's how they're perceiving you.
- **Let your uniqueness/individualism/charisma come through** in your cover letter, research plan, and teaching statement; make them say "I want to get them to come here" and keep in mind that they're looking for a good fit with the department (depending on the search, they'll be looking for the best person in general or to fill a specific hole). Don't be someone you aren't; emphasize your strengths.
- Get all of your material read by 2-3 people.
- For interdisciplinary jobs/departments, you still need to establish deep credibility in one area ("to be interdisciplinary, first you need to be disciplinary"), then indicate where you can work with someone else and show that you're a good collaborator across disciplines. You may consider asking the search committee to meet with people outside the department, but be careful - this could work for or against you.

### Cover letter

- **Be clear about why you're qualified for the position, especially if it's a specifically defined position: hit buttons from the job description in obvious places, and keep the audience/research in the department in mind - show enough overlap to be interesting to them as a potential collaborator, but that you'll also bring in something new. Keep in mind that some searchers are looking for a colleague/collaborator, and some are looking to fill a hole.**
- **In first paragraph must convey why you really want this job (e.g., colleagues you're exited about having, philosophy of the school, etc.). Show that you're really interested in the job**, that it's not just one of many that you're applying to. Refer to the department and target the position. (But, for your own sake, don't get too invested in one job and set yourself up for disappointment; keep in mind that sometimes the search committee is different from the final selection committee.)
- **Let them know you know something about the institution** (e.g., local field work/station, IGRT). **Highlight who might collaborate with you on ideas you have (e.g.,**

"**this place is exciting because I could form a research team on...**"). Don't volunteer others you don't know to collaborate with you, but say that you're complementary to certain people or will add depth to certain topics.

- Make it short - usually no more than two paragraphs, definitely less than 1.5 pages - and focus on why you want the job.
- **Let them know if you have something unique** (e.g., experience working with minorities).
- They are probably looking for an interactive colleague; if that's a strength for you, show it (e.g., highlight NCEAS working groups or ask letter-writers to speak to collaborative potential).
- Don't assume that the search committee are experts in your field.
- Make sure to adjust your cover letter for NGO and liberal arts jobs.
- If are applying for an institution that might perceive you as over-qualified, make it clear your reasons for applying in your cover letter.

### Research statement

- This is the most important part of the application after the publication list - you need to show promise, innovation, collaboration, and funding ability (but you don't necessarily need to list potential funding sources). Talk about in-prep work and say where you're going next. **Show you have your own ideas about how to proceed in the future**, separate from your past mentors. **Make it clear who you are, not just what you do**. Give them an idea of where you are going to be in ten years, show them that have lots of big ideas, and tailor it to each position. This is a statement of why you look like you do on paper, what you're going to be like as a colleague, how it will be funded, what gets you jazzed, and where you're going.
- **Make it interesting and general** - again, don't assume that they're experts in your field.
- **Like in the cover letter, highlight who might collaborate with you on ideas you have. Say why where you're applying to is a good place for your research** (e.g., highlight colleagues or program strengths).
- If you have done a variety of things, tie them together and explain yourself - tell the story that's not in your publications.
- You don't have to cite every paper you've ever written - don't overdo it, just put in the main ones that emphasize key concepts. Use your name (as opposed to numbers) when citing papers, so they see your name in an interesting context.
- Brevity is good - make it no more than 2-3 pages.
- Layout and graphic design are important - focus their attention on what you want them to see (figures are OK).
- Have a part up front without as much detail - an overview of who you are that defines your body of work - then outline the rest with a sub-header for each topic so the search committee members can pick out the bits they're most interested in.

### CV

- **The publication list is the first thing looked at - make this easy to find, and remember that paper titles matter (formatting is important!).** Put your publications most recent first; include in-press papers. Separate peer-reviewed from non-peer-reviewed (invited review, book chapter, etc.) publications. Only include in prep. papers if you refer to them in your Research Statement, and don't overdo it! (It counts as in prep. if you can

send it, if asked, without staying up all night). In prep articles are usually ignored anyway, unless you highlight it by mentioning exciting results. Don't number your publications, which gives the impression that the number is more important to you than the quality.

- **Avoid clutter, like listing every talk you've ever given.** Focus on invited talks (this may include interviews??)
- Only include undergrad research if it led to something or shows connections to a person writing a letter; search committee members will focus on the grad career.
- Teaching experience is important to deans (but don't overdo it - don't include guest lectures, etc.).
- Put pdfs of your papers on a web-page so committee members can find them easily.

### Teaching statement

- Include your philosophy and different teaching experiences - include specific examples of things you have done and experiences that have affected you, and riff off of that. If you've had undergraduates involved in your research, tell them (for liberal arts jobs, including undergraduates in research is important). **Be specific** - don't use platitudes like "I love to teach" and "I like interactive classrooms", instead highlight types of teaching techniques you use.
- It is hard to tell how good of a teacher you are from the teaching statement, but they can tell how much emphasis you put on teaching (like whether you critically evaluate what it takes to be a good teacher). You need to convey that you take teaching seriously and show that you are trying to learn how to be a better teacher (e.g., examples of things changed to improve your teaching).
- **Talk about what you can contribute**, being sure to research what class are there first. Try to provide examples of good complementary courses to what's going on in the department, especially if the job is open because of a recent retirement. Say what you're excited to teach and specific courses you'll develop and what truly interests you (e.g., intro for non-majors). Talk about possible grad classes, but don't only express interest in advance classes. Be positive and talk about what you'll bring, but don't shy away from or be negative about intro classes because you'll probably have to teach them. If the position description has specific course, give an example of your relevant experience (if possible).
- **Make it personal.** For example, if you have teaching experience outside a university, talk about how you learned about yourself as a teacher from that. Show how you learned from others' teaching styles you've observed and what fits you. Convey experience beyond grading, etc. - show that you can take on a course. If you've made extra efforts like going to teaching workshops, mention it.
- If you have a syllabus, it may be worth including, but recognize the search committee's limited time and be sure to keep everything short.
- Maybe ask a letter-writer to talk to your teaching.
- This statement is very important at a liberal arts school. TAing is OK experience to highlight for research universities, but not necessarily liberal arts - it may take more.

### Letters of recommendation

- **For newly graduate postdocs, the letters or recommendation are especially important - make sure your letter-writers get them in on time (and address them to the right place).**
- Independent and complementary reviews are important. Ask people that can speak to

different skills (e.g., TA supervisors), and be strategic (e.g., people who have connections). At least two, if not three, letters should be from senior, well-established faculty who can write a substantial letter about you. Try to get a diversity of people, not just from your PhD institution (e.g., collaborators outside your PhD school). Cultivate your references: pick people who know something personal about you, e.g., they've worked with you or can otherwise related to what you've done.

- Keep in mind that there is a large variation in letter-writing ability. Letters usually comment on potential for success as an academic (e.g., how independent you are) - one positive or negative sentence can make all the difference. Letter-writers may also be able to comment on whether you're suited for the department. Recognize cultural differences: non-US letter-writers tend to be more understated. Ask letter-writers to let you know if there's any reason they wouldn't give you strong support.
- Keep letter-writers informed as to where you are, and ask them to emphasize things - tell them how you are pitching yourself. Give letter-writers a short paragraph on what you've done recently and your latest CV. Don't assume the letter-writer read the job description; it's up to you to highlight the relevant parts. If there's something specific you want them to write to, let them know and make recommendations - tell them why you're asking them to be a writer. Search committee members can tell if you're using the same old letter (especially if it's addressed to another school!).
- Putting in an extra letter can dilute the references; only include if there's something specific they can speak to, and look for wording like "at least three letters."

### Writing samples

- When asked for sample papers, go for the best, not necessarily the most recent.
- Indicate a diversity of interest.
- Make sure the sample papers match the research description.
- Sample papers can definitely be in-press.

## Interview Advice

### Format

- You always need to come across professionally.
- There's huge variation across institutions, and especially countries, in format and formality.
- The format usually includes a formal talk; meetings with the search committee, and department chair, and other faculty; a meeting with the grad students, and a meeting with the dean.
- You can often guess the search committee by who's closest to the position field.
- Sometimes faculty vote on search committee decisions, sometimes on all the candidates - the decision process is highly variable.
- Feel free to ask whoever contacts you about the interview structure.
- The interviews can be on short notice, so have a talk ready.
- If you're re-applying to a failed search, talk to someone in the department first.
- Phone interviews between the application and invited interview are becoming more common. Print out pictures of the people you're going to talk to with short descriptions of what they do and imagine talking to them in person, or maybe ask for a video conference.

## One-on-one interviews

- **Do your research beforehand!** This includes what the faculty are researching and what the teaching opportunities may be (i.e., what's offered, what sort of information goes to undergrads, how many students there are, whether they tend to be pre-med or environmental scientists, etc.).
- **Be interactive, positive, and excited.** The biggest complaint from faculty about interviewees is a lack of interest and excitement in the one-on-one interviews.
- Be honest - for example, interrupt when you space out to get back on track.
- Feel free to cover topics other than science and research, such as the department culture, life at the institution/town, child care, etc.
- The questions you ask are very important - they should show your enthusiasm and that you did your research. This is especially true for faculty in a different field than you - ask them how they interact with people in your field, or general questions like what grad applicants are like and how the department chooses students.
- For the meeting with the department chair, you'll usually talk about equipment needs - you don't need dollar amounts, but it's good to have an idea of what the big ticket items will be; significant other concerns and teaching also come up.
- For the meeting with the deans, the usual topics are housing and long-term space/plans for expansion.
- For lunch with the graduate students, be yourself, have fun, and treat them with respect. Take an interest in their research, and have good questions about the program and their needs.

## Questions they ask

- "Where do you see yourself in 5 years?" or some variant - a general question about what areas you want to get into (e.g., "What would you like the punchline of your tenure case to be?"). Give an idea of the area you would like to make an impact on.
- "What is the first grant proposal you plan to submit?" It's good to have two big ideas.
- "What do you imagine your lab looking like?" How many students, masters or PhD, how they're funded - the answer depends on department funding, like availability of TAships. You need to show you understand the cost and challenges of running a lab, and you should research things like the size of the grad program.
- "What do you imagine teaching?"
- "What will the opportunities for undergraduates be in your lab?"
- They shouldn't ask about sexual orientation, marital status, etc. If they do ask an illegal question, you can joke, with a smile, that they're not supposed to ask it, or, if you're comfortable, just answer.

## Seminar

- **This is the most important part:** the job talk is 80% of the interview!
- Tailor it to the department/institution.
- You need to show that you are doing state-of-the-art science in your subfield to excite the search committee plus capture the interest of a broad audience, **to show you will be a good teacher** - they'll look to the job talk to tell this. Keep in mind that a majority of the audience is not in your sub-field.
- Have a general opening section, a solid chunk that is accessible to everyone, and a solid chunk for the specialists, then try to reengage everyone at the end.

- Feel free to put something in about future projects and even connect it with the department/institution (e.g., show picture of field station).
- Place your research in a larger context - make its significance obvious.
- Don't put too much in - tell a story.
- When talking about collaborative work in the job talk, be clear what you did - show your leadership potential and establish your identity.
- If you're a theoretical biologist, you need a little math so they know what's involved and you can show your expertise. Show that you can explain it well - e.g., show non-theorists you could help their students. Identify one or two important bits, but don't go into too much detail; maybe explain why you chose that method - think about why you're putting that equation up.

## Negotiation Advice

### General tips

- When you first go to the interview, you should have some idea of space, startup, salary, teaching responsibility, etc. needs; the discussion of this gets more detailed and definitive during negotiations.
- Usually you're negotiating with the department chair, and whether the chair is your advocate and wants to get you as much as you can (usually the case) depends on who's in charge of the money (usually the dean). The university wants you to be able to start and be functional right away. You want to keep the chair on your side, so make sure you don't give the impression that you're not being straight; e.g., tell them about other interviews.
- Money for different pieces (e.g., salary, startup) may come from different pots, so some will be more negotiable than others.
- Sometimes it's best to talk over the phone while negotiating, but be sure to get everything (*everything*, including the teaching load and relief) in writing in the end. The department chair's letter is not binding; the formal offer comes from the dean/president/chancellor.
- Talk to friends who have recently been through the negotiation process, particularly anyone you know in the department.
- They've made a lot of effort in deciding on you, and you're valuable to them - don't undersell yourself.

### Startup

- Ask colleagues to look at their startup packages to get a ballpark. Startup is usually around \$100K for teaching institutions and \$200-\$500K for research universities (2008 estimates).
- In your table of startup items, have a justification column as well as item and price.
- Find out if it's staged or has an expiration date (postpone or avoid the latter if possible).
- A field vehicle is a good thing to consider since NSF grants won't cover one and it can be a pain to share department vehicles.
- Find out what equipment they have already; pay attention to what you need now vs. over multiple years, and what will be multi-user.
- Include publication costs and travel.

### Salary

- Find statistics for that university (maybe ask the last person hired as an assistant prof or talk to a senior prof that you know there) and the average across universities (see the Chronicles of Higher Education - <http://chronicle.com/weekly/v52/i34/34a01402.htm>). Usually you'll be low-balled on the salary and would want to ask for a little more (using some kind of metric, such as recent hires); then this can be something you can give up later while compromising. Note that women tend to ask for less than men.
- Depends on if it's a 9 month or 12 month position; try to negotiate a 12 month position for the first 2-3 years until you get grants to cover summer salary.
- Keep in mind that this is a basis for increments as you get raises. If you defer the start date, consider the inflation in that time for your starting salary.

### Teaching load

- Don't think of teaching as a negative, it can be a positive; committee work can be a bigger drain on your time (so maybe see if you can get committee relief, or in the interview ask if they are careful about giving junior faculty too much committee work).
- Consider the trade-off between easing into the teaching load compared to having time off when you're preparing for tenure; teaching first when your lab still isn't set up and you don't have any students yet could be a good use of your time, plus it provides a chance to get to know the students.
- Keep in mind that department chairs and courses change, so it's better to get a teaching load (classes/year) than specific classes. That said, it is worth trying to get the same set of classes for the initial phase and lock in the courses you want to teach, as developing new classes take up a lot of time.
- Find out what's available in terms of TAs, equipment for teaching, field trips, etc.; maybe even get a teaching budget.
- It may be worth talking about the timing of teaching, especially if you have a set field season.

### Lab space

- Very important, not just in terms of square footage, but also location and state - renovation is a time and money sink.
- You need space for grad students and postdocs, field gear storage, and experiments/animals/cultures/etc.
- Find out when it's available - make them put a date on when it will be ready.
- Ask if renovation is part of the startup.
- Often some space, such as regulated temperature rooms, is shared, and some places even have shared lab space (possibly including a shared lab tech) with the amount of space depending on the grant money you're bringing in.

### Other negotiation points

- Start date
- Technician
- Grad student support: the amount of support available varies widely with university, so ask how graduate students are supported in general, beyond your startup (keep in mind that graduate student and tech support could come out of different funds); some departments give new faculty the first shot at TAships for their graduate students or work study allocation for lab techs.

- Chemical disposal (some universities charge for this)
- Spousal accommodation (in terms of timing, universities prefer it if you tell them about a spousal hire when you apply or are short-listed rather than after the offer during negotiations, but the strategy/timing on this depends in part on your personal preferences and what you know about the department; this is a topic for its own lengthy discussion...); for spouses outside academia ask what the community may have available for their skills set.
- Housing support: faculty housing, subsidy for down payment (taxable), subsidized interest rates on mortgage
- Family leave, tuition for kids, day care
- Insurance, benefits (e.g., retirement, family health insurance)
- Moving expenses, house-hunting trips