Cullen's Tips for Faculty Job Interviews

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Interview Experience: Ohio State (offered), Univ. of Michigan (offered), Auburn University (offered), Carnegie Mellon (offered), Cornell University (offered), UC Berkeley (not offered), Princeton (not offered), MIT (offered), Univ. of Illinois-Urbana Champaign (offered)

Below is a list of preparation techniques and strategies that should help you when interviewing for an academic position. Unless otherwise noted, all of the items mentioned are things I implemented during my interview process.

1. Before the interview (3-7 days)

Ask about the specific FORMAT for the interview. Is there only a job talk? Or will there be a 'chalk talk' or 'research proposal' as well. Some schools require one talk that is open to the public (faculty, students, etc.) that focuses on your past research; this is the traditional job/interview talk. This talk is usually 45 minutes, plus 15 minutes for questions. Sometimes schools ask for a SECOND talk that focuses only on what you plan to do in the future. This talk is closed and should consist of 10-15 slides (depending on your level of experience) outlining your future research program and a few specific ideas. This second presentation could take 1/1.5 hours because faculty will ask questions throughout the talk. If the format for the interview only includes the first talk, you should devote the last 10 minutes of your one interview talk to FUTURE work. Start with your overall vision (one slide), then move on to 2-3 specific topics you'd like to explore. Ideally, you should identify a funding agency (or even a specific call for proposals from the last 6 months) that would be interested in each project/topic you propose. You should also add 1-2 slides on your teaching interests (current classes you'd teach and ones you'd develop).

Give two practice talks, one to experts in your field (or those familiar with your work) and another to people with technical degrees that have never seen you work before. The experts in your field are needed to ask penetrating questions and test your depth of knowledge. The second group can tell you the confusing parts of the talk and help you with organization. Job talks typically involve mixes of people in your field and out of your field, but ALL of them have to feel that they learned something from your talk. The objective of your talk is to show that you can tell a convincing story (background, meat, conclusion and implications, future) and communicate your research results and ideas effectively. The job talk is NOT the time to prove that you've done a lot of work, your letters of recommendation and publication list say this. They wouldn't invite you to campus unless they believed you were a highly productive scientist/scholar. Present less material if that allows you to tell a more convincing story. You can always mention the other work in your one on one meetings.

Obtain a copy, as soon as possible, of your interview schedule. Look at the website of EVERY professor on your schedule. Sometimes you'll be asked if there are any special people you'd like to meet, be sure to let the committee/interview coordinator know who these people are ASAP. Once you obtain your meeting schedule, for faculty within your research area be sure you're at least mildly familiar with their work (general field, a couple recent papers). In all cases, you should prepare a list of technical topics to discuss with each of them, ideally about THEIR research or potential COLLABORATION. People love to talk about their past work, and the only thing they love more is to talk about future work. You should be able to do this for everyone on your schedule, even if they aren't in your field, you only need 1-2 topics to fill up a 30 minute time slot (typical one on one meeting).

Prepare two powerpoint presentations. One is your job/interview talk, which was mentioned above. The second is a 5-8 slide summary presentation of your job talk. This should easily flow from your main presentation. Go to Kinko's and make a nice, color, print out of your summary slides. Often, certain members of the faculty (or worse, the hiring committee), can't make it to your talk but will want to hear about your research during their 20-30 minute one on one with you. You will look impressive if you whip out a 5-8 slide, color, summary of the main points of your presentation. Plus, this helps you explain your research in a concise manner when asked 'I can't make it to your talk, can you quickly tell me what you've worked on'. I would also add 2-3 slides outlining your future ideas, these will be useful during many of your one on one meetings.

Prepare a one page list of questions about life in the department and in the city the school's located in. Inevitably, some of your one on one meetings will move quickly and some faculty will ask 'do you have any more questions?' In order to avoid that awkward silence, you might as well have some very important, non-technical, questions to ask. Sample questions I used are listed at the end of this document.

2. One day before the interview

Try to get as much sleep as possible. You're preparing for a long day, don't let your nerves keep you working all night. At some point the extra work won't help as much as the lack of sleep will hurt.

Obtain phone numbers for the people coordinating your interview (administrators), just in case there is a problem with your schedule (your flight is delayed, someone doesn't show up for a meeting, etc.).

Practice your talk at least once the night before your interview. Do this to ensure that your timing is ~45 minutes. You do not want your talk to run over, you'll look unorganized and immature.

3. The day of the interview

Along with your laptop, job talk, summary slides, and supplemental questions, be sure to bring a pen and pad of paper. During the day, take notes on the answers professors give you to your questions and write down notes from interesting meetings. Sometimes (not often but it happens) collaborations can form from people you meet during your interview.

Usually, most interviews start with a breakfast meeting with someone on the hiring committee or even the committee chair. Ask them who on your schedule is a member of the hiring committee! I found that people were more than willing to tell you who was on the committee. Oftentimes the chair is excited you've come to interview and wants you to be successful so they're more than willing to share this information.

4. After the interview

Email every professor you met and send them a quick 'thank you' email for taking time to meet with you. If they asked you a question during the interview that you couldn't answer, you might also send a brief reply, i.e. 'When we spoke you asked about XX and I mentioned technique YY, here's a paper by *so and so* discussing what I meant'.

As you obtain information from other universities, be sure to keep the professor that coordinated your interview informed. As you get offers from other schools, let the professor know that you have new offers. If they are no longer considering you they'll let you know. If the university/department is still considering you (and interviewing others), they'll let you know and give you a timeline for their formal reply.

5. Common questions you'll be asked

You should have answers to these questions right on the tip of your tongue.

- Can you explain your research to me in 5-10 minutes?
- How will you distinguish your research from your PhD advisor?
- What are the first 2-3 research projects you plan to pursue?
- How large of a research group do you think you'll have?
- If you apply for an NSF Career award, what topic might you explore?
- Approximately how much \$\$ and space will it take for you to get started? (if the interview goes very well, you may be asked this question before you even leave campus)
- What classes would you be interested in teaching within our department (existing and those you'll create)?
- What will you become famous for? (this is a loaded question, but I was asked this 2-3 times)
- 6. Additional questions you can ask
 - Research
 - o Administrative support, how many administrative personnel per faculty
 - Cost of graduate students
 - Quality of graduate students, how many admitted per year
 - o Overhead costs
 - Availability of laboratory space
 - Fabrication and other shared facilities (quality and cost)

- Ease of travel to conferences (through local airport), many direct flights or lots of connections
- Teaching
 - Average teaching load and buyout clauses (if applicable)
 - Availability of TAs and graders (how many students in class before the department funds a TA)
 - New course development (encouraged or not big deal)
- Tenure
 - o Timeline
 - Tenure rate (official numbers reported by the Dean)
 - Steps in the process (packages you submit, # of outside letters, etc.)
- Family
 - Cost of living/housing
 - Benefits for spouses (academic and otherwise)
 - o Benefits for children (some schools waive tuition, others do not)
 - Quality of local public schools

• Commercial activities and IP

- Licensing and royalty rights
- Help from on-campus licensing office
- Consulting rights (how many days per week)

• Departmental Values

- How does the department value Single PI vs Multi-PI grants
- Do some faculty put more weight on agency (i.e. NSF) vs industrial/private funding
- Value of collaboration (some stress this more than others)
- o Bureaucracy/hierarchal structure within the department
- Quality of life for young faculty

• State and University

- Volatility of state funding (if public university)
- Department's place within University and College mission (is the department highly valued, or a second class citizen)
- Style of the Dean and Department Chair (very hands on and supportive, aloof, too busy for young faculty, etc.)
- Salary/Compensation (probably should save these questions until after offered)
 - Competitiveness with other universities
 - Raises and performance based bonuses
 - Retirement plans
 - Health insurance, child care, and other benefits