Lab Dynamics

Best foot forward, Part 1 Interviewing Skills for Postdocs

Exercises



Carl M. Cohen, Ph.D. Science Management Associates www.sciencema.com carlmcohen@gmail.com 617 965 1826

Exercise 1.

- Form groups of 4-5.
- In your groups answer the following questions:
- 1. What are the top 5 characteristics that an academic search committee is looking for?

What are the top 5 characteristics that a private sector company is looking for?

- 3. What are your three biggest nightmares when you think about a job interview?
- 4. You have 10 minutes: 3.33 minutes per topic.

Exercise 2: Body Language

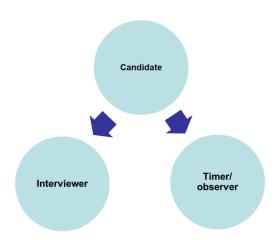
In pairs (one is "A" the other is "B"):

- A tell B what you did for fun last weekend; B shows positive body language. Then..
- A tell B what you will do for fun next weekend; B shows negative body language
- Then switch roles.
- Total time: 5 minutes

Exercise 3: Pitch exercise

In groups of three each of you will play the role of "candidate," "interviewer," and "observer and timer" in sequence.

The person to the right of each candidate is the interviewer and the person to the left is the timer.



Each candidate gets a maximum of 7 minutes: Up to 2 minutes for their pitch and up to 5 minutes for feedback from all.

Scenario: You (the "candidate") have just been introduced to the "interviewer" at a social hour at a scientific meeting by a mutual friend. The "interviewer" is someone who either might have a job for you or who might know someone who does. Tell them about yourself in 60-90 seconds.

- A. Interviewer: Greet the candidate and ask them to tell you about themselves.
- B. All: Give candidate feedback
 - What they did well
 - What they could do better
- C. If there's time, do it again.

Total time for exercise: 25 minutes.

Candidate: What you need to convey in 60-90 seconds.

1. Your current position (Message: I have a responsible job that's very interesting and I love it.)

- 2. VERY brief history of your career (Message: I've advanced in my field and have been recognized for my contributions.)
- 3. ONE SENTENCE about your expertise and passions.
- 4. Why you are at this event or talking to them (Message: I want to meet people, explore opportunities and broaden my horizons. NOT "I'm looking for a job")
- 5. As the conversation is winding down..."Can I follow up with you? Can we get together for coffee? Is there anyone you know you think I should talk to as part of this process? I'd love to meet some of your connections just to educate myself."

Guide to Networking

1. You need a 60 second intro or pitch:

What is your story?
What you bring to the table.
Your big strengths.
Highlight positive achievements and your goals.

2. Your most valuable contacts are people you already know and who know you:

Start with them. Scour your contacts for anyone and everyone who you can talk to. People who know you will give you your best leads, and your best references. And those leads will come in unexpected ways that you will not predict. So don't over-filter who you talk to. Get reacquainted if necessary. Have lunch, coffee (face to face is best) – phone calls second best, emails last. The more time they spend with you the more committed they will be to helping you.

3. It's still early:

"Right now, I'm just networking. Looking at options, talking to people." You're not calling looking for a job. You want to hear about others' experiences.

4. Keep positive:

Don't be negative. About anything. Not your job, your department, grants. Nothing. You love what you do. But you're beginning to think it's time to move on. "It's a bad funding environment. Everybody's hurting". Everyone will know this.

5. What you're looking for: don't limit your options ever:

You are passionate about what you do and willing to be open minded about exactly how you can contribute. You're willing to be entrepreneurial. Willing to work hard, learn, adapt.

6. Ask them questions;

What do you like about your job? What's not so great? How did you get it? What do you see as your future?

7. Geographic preferences:

Too early to discuss.

8. Leave them with:

They need to be left with the impression that you're upbeat, enthusiastic, energetic, fun to work with.

9. Follow up:

Help them keep you in mind. Keep in touch periodically. You will need them again. Send them an email thanking them. Follow up with info about something they're interested in. If someone gives you a name and you follow up with that name, let them know you did it and thank them . Follow up with some piece of information relevant or interesting to them.

10. Remember:

You're selling you, not your work.

11. Networking is your new project. Treat it like one:

Set call or contact targets for each week. Make a networking plan, make lists of calls made, attempted, scheduled, etc. set call or contact targets for each week or two week period. Keep notes from every contact, conversation or phone call. Keep a spreadsheet of people you have spoken or met with. Find a way to update them on your progress periodically (once every three-months)

12. Body language and mind set:

Smile while you're on the phone even though they can't see you. Like who you're talking to even though you may not know them.

13. The conversation's not over until you ask this question:

"Can you think of one or two people who I could talk to more about their experiences, or opportunities? Perhaps people you know who have made similar transitions?" If they can't think of names at that instant all the better because it gives you the opportunity to ask them if you can call or email them to follow up.

Interviewing preliminaries

- Read the job description!
- Customize your resume, and your interview answers for each position.
- Have your three-year research plan, budget, space and equipment needs ready.
- Que up your references.
- Get your interview schedule in advance.
- Prepare cue cards or a list of everyone you will meet, with their photographs.
- Do your research on all of them know what they work on and prepare questions for them.
- Make sure you're watching your time during interviews.
- Bring extra printed cvs.
- Don't ask about other candidates
- Dress professionally but be comfortable.
- You are being interviewed the entire time you are there and by everyone you spend even 30 seconds with.
- Spend time preparing answers to every one of the questions in the pre-workshop exercises.
- Don't be negative. About anything. Not your job, your department, grants, boss. Nothing.

Questions for you to ask during your interview. *

Questions for the Dean:

- 1. Why is the Department hiring at this time? Is it in an expansion phase? Are more future openings anticipated? If so, in what areas?
- 2. Is the size or composition of the student body (graduate or undergraduate) changing over time?
- 3. Are there any jointly appointed faculty members, cross-listed courses, or joint degree programs involving partnerships with other units?
- 4. Are there core research facilities or topical research centers that are cosponsored with other units?
- 5. How are new faculty oriented and mentored during their first year?
- 6. What is the long-term plan for this school/institution?
- 7. How does this department fit into the long-term plan?
- 8. Sabbatical Policies: Are sabbaticals available? If so, how do they work? Do benefits continue during sabbaticals?
- 9. What is the outside perception of this department? Strong? Unified? Interactive?
- 10. What is your indirect cost rate?

*Taken from "Questions to ask (and be prepared to answer) at academic job interviews, collected from diverse sources Kathryn L. Cottingham, Dartmouth College Dept. of Biological Sciences" http://disccrs.org/files/job-interview-question-list.pdf

Questions for the Department Chair

- 1. What sorts of programs are available for new faculty members? Formal mentoring? Orientation? Written faculty handbook?
- 2. Beyond my startup package, is there department research support available? Of what kinds?
- 3. Is there support for summer research by undergraduates?
- 4. Are competitive, within-institution seed grants available beyond my startup?
- 5. Undergraduates: who applies? who is accepted? who comes here? Where do they go after graduation?
- 6. Graduates: who applies? who is accepted? who comes here? Where do they go after graduation?
- 7. What are the expectations for the summer? On campus? Is field work ok?
- 8. What is your vision for the department/school? Where is it going in the next 5 years? 10?
- 9. Is the department growing or shrinking? Which subfields?
- 10. What are current plans for future hires?
- 11. How often does the department meet to discuss departmental business?
- 12. How are departmental decisions made?
- 13. How is chairmanship determined? How long is the term?
- 14. What non-teaching expectations are there?
- 15. If you were coming to this department, what would you like to know?

Questions for faculty members

- 1. I read about your fascinating research. I'd love to hear more!
- 2. What do you like best about this place?
- 3. How do you think this place could improve?
- 4. What are you looking for in this new hire? Is there unanimity in the Department or search committee about this?
- 5. What are your hiring priorities for the future?
- 6. What does a newcomer here need to know?
- 7. What do you teach?
- 8. What is the general teaching expectation through time? How many courses?
- 9. What would you like this person to teach over the next 3 years?

10. How much flexibility is there in what an individual teaches?

Questions about promotion & tenure

- 1. What is the schedule and mechanism of faculty review?
- 2. How much of the department is already tenured? Is there a quota?
- 3. Who decides tenure and how?
- 4. What kind of guidance is provided about the tenure and promotion process?
- 5. Are there annual reviews before tenure?
- 6. On what criteria are decisions made?
- 7. Are the criteria written down and handed out to new faculty?
- 8. What are the unwritten criteria?
- 9. What percent succeed?
- 10. When do people come up for tenure?
- 11. What are the criteria for promotion to full professor?
- 12. How is faculty performance assessed each year? Does this relate to the evaluations for reappointment and promotion?
- 13. How is teaching quality evaluated? What kinds of evidence are considered?
- 14. How are interdisciplinary efforts assessed? What about activities that cut across the research, teaching, and service missions?
- 15. What separates a good faculty member from a great one at this institution? What kinds of attitudes or work habits make people successful here?

Questions about teaching

- 1. What administrative or secretarial help is available for working with courses? With grants/papers?
- 2. What is the teaching expectation through time? How many courses?
- 3. Which courses?
- 4. What would this person teach over the next 3 years?
- 5. How much flexibility in what an individual teaches?
- 6. How much flexibility in when courses are scheduled (within a week, within a year)?
- 7. How big are classes? Are teaching loads weighted by the number of students in the classes?
- 8. How much time will I have to prepare my first course?
- 9. Can I teach a seminar the first semester/quarter?
- 10. Are TAs available? For what courses?
- 11. How are TAs trained?
- 12. How much funding is there for courses, particularly new ones?

- 13. How do ideas for new courses get processed?
- 14. What are the teaching labs like?
- 15. Are there computer teaching labs? Software? Support personnel?
- 16. What are typical teaching opportunities, across the college?
- 17. How much variation is there across departments?
- 18. Are teaching training opportunities available? What kinds? How often?
- 19. Can one buy out of teaching obligations?
- 20. How does undergraduate advising work?
- 21. How does graduate advising work?

Questions about students

- 1. What kind of graduate students do you attract?
- 2. Where do they go once they finish their degrees?
- 3. What support is available for graduate student research? Who pays for graduate students? Are there any training grants?
- 4. What support is available for undergrad research?
- 5. Do students have a say in faculty search decisions?
- 6. Do students have a say in department administration?
- 7. What interdisciplinary collaborations are already in place? (Are there any training grants, for example)
- 8. How many undergraduate majors come through the program each year?
- 9. Are students motivated? What do they do after graduation?
- 10. Are work study students available?
- 11. Is there student travel support? How often? How much?
- 12. Do all majors do research? Do they have to submit a thesis?
- 13. Are there any curriculum changes in the works?
- 14. Do grad students who TA have time to get their own research done?
- 15. How are most grad students funded?

Other details

- 1. Can I see the available research lab space?
- 2. How much office space, lab space, offices is there for graduate students?
- 3. How long to remodel my lab? Who pays?
- 4. Ethernet? Networks? Email? Who pays?
- 5. Reprints? Page charges? Who pays for these?
- 6. Important for your sanity: When will a decision be made?

Exercise 4. Mock interview

In groups of three each of you will play the role of "candidate," "interviewer," and "observer and timer" in sequence.

The person to the right of each candidate is the interviewer and the person to the left is the timer. Each candidate gets a total of 8 minutes: 5 for the interview and 3 for feedback from all.

- 1. Interviewer: Ask the candidate as many of the questions below as you have time for you may choose the questions and the order don't use the order in which they're listed below.
- 2. Timers: Each candidate has a total of 8 minutes: 5 for the interview and 5 for feedback. At the end of 5 minutes end the interview and start the feedback phase.
- 3. All: At the end of 5 minutes everyone gives feedback (up to 5 minutes) to the candidate.
- 4. Give the candidate feedback on:
 - i. What was done well
 - ii. What can be improved
 - iii. Body language
 - iv. Enthusiasm

General Interview Questions

- 1. Why are you looking for a job?
- 2. Tell me about your current job.
- 3. What are our greatest strengths?
- 4. What is your biggest weakness?
- 5. What do you think are the key skills that you bring to this job/opportunity?
- 6. How would your current boss describe you?
- 7. How would your friends and colleagues describe you?
- 8. Tell me about a work-related challenge you faced and how you handled it.
- 9. Tell me about your management style.

- 10. Where do you want to be in five years?
- 11. What's your ideal job?
- 12. What are you passionate about?
- 13. What accomplishment are you proudest of in your career?
- 14. What do you love most about your current or previous jobs?
- 15. Give me a brief outline of your career.
- 16. Why are you interested specifically in this job/company/position?
- 17. Are you willing to relocate?
- 18. What kind of salary are you looking for?

Domain-Specific Questions

Academic job

- 1. Have you ever chaired a committee? Have you even been on a committee? Tell me about it. What did you contribute/accomplish?
- 2. Tell me about your teaching experience. Have you ever had to create a course or teaching unit on your own? Tell me about that.
- 3. What is your teaching philosophy?
- 4. Which of our existing courses can you teach? (You need to have read their course catalogue!) What new courses could you develop?
- 5. What experience do you have mentoring students?
- 6. How will you engage undergraduates and graduate students in your research program? What kinds of projects would they work on?
- 7. Have you been involved in diversity, equity or inclusion efforts? Tell me about that.
- 8. Why are you applying here?
- 9. Who will you collaborate with?
- 10. What will your first grant proposal be on? Where would you apply for funds? What will you do if it's rejected?
- 11. How much space will you need? Do you need specialized equipment?
- 12. Why do you think you are a good fit for this department?
- 13. How does your research address the big unanswered questions in your field?
- 14. How will your research be different from your current adviser's?

Industry or private sector job

1. Have you ever worked in a team? Did you enjoy it? What was your biggest challenge when working on a team?

- 2. Have you ever had to drop a project because it wasn't working out? Tell me about that.
- 3. Why are you applying to our company specifically?
- 4. You've spent your career in academia. What makes you think you'll be happy in a company and in ours specifically?
- 5. What would you do if your boss made a decision you strongly disagreed with?
- 6. How would you handle an employee who was underperforming?
- 7. How do you hold people accountable?
- 8. Tell me about your management experience.

Exercise 5.

Face to face interview: Situational interviewing.

- 1. In groups of three each of you will play the role of "candidate," "interviewer," and "observer and timer" in sequence.
- 2. The person to the right of each candidate is the interviewer and the person to the left is the timer. Each candidate gets a total of 12 minutes: 7 for the interview and 5 for feedback from all.
- 3. Candidate: Be yourself.
- 4. Interviewer: You are interviewing candidates for either a faculty position at a research institute or a senior scientist position in a biotech company (candidate's choice). You have already reviewed the candidate's resume and heard their seminar and have determined that they are well qualified scientifically.
- 5. Interviewer: Using the interview form that starts on p17 below, assess the candidate's "personal characteristics" by asking any the questions from the form in any order you wish. Record your observations and score for each answer on the form. You have a maximum of 7 minutes to interview the candidate.
- 6. Candidate: Be yourself. Answer pointers are below on pages 21-25.
- 7. Interviewer and Observer: Listen to the candidate's answers and indicate the candidate's strengths and areas for improvement as well as their scores in the space provided in the form.
- 8. Interviewer and Observer: At the end of the interview you have 5 minutes to review with the candidate what they did well and what they could have done better. Also comment on their bidy language and enthusiasm. Then move on to the next interviewer/candidate pair.
- 9. Total time for exercise: 38 minutes.

Face to face interview scoresheet

Candidate name		
Hame	Parameter	Score 0- 10
1	Background and skills verification	
	A. Technical skills and know how	
	B. Relevant background and experience	
	C. Speaking and language skills during interview	
2	Their preparation	
	A. Interest in and knowledge about lab or project	
	B. Quality of their questions	
3	Seminar	
	A. Clarity and organization	
	B. Speaking skills	
	C. Thinking on feet	
	D. Responsiveness to questions	
	E. Relevance/novelty of topic	
4	Personal attributes	
	A. Feedback	
	B. Manage emotions	
	C. Team mindset	
	D. Problem solving	
	E. Conflict management	
	F. Independent thinking/autonomy	
5	Managerial	
6	"Fit" with the group	
7	Strongest characteristic	
8	Red flags	

9	Position specific questions verification.	
Total		0-60

Interviewer/Observer's interview guide

Personal attributes	Score (0-10)
A. Feedback	
"Tell me about a time when you were told that what you were doing wasn't correct or needed to be done differently? What was the situation? How did you handle it?"	
Listen for: Openness to feedback, desire for feedback or seeking feedback. Lack of defensiveness.	
Notes:	
B. Manage emotions	
"Tell me about a time when you got angry or upset about something in the lab. What happened, and what did you do?"	
Listen for: Ability to manage feelings of anger, frustration, etc without 'acting out,' losing temper, blaming. Listen for ability to self-reflect ("I thought a lot about why that happened, and learned a lesson.")	
Notes:	

C. Team mindset "Tell me about a time when you worked as part of a team on a project. Was any part of that difficult for you? Explain that to me." And "Do you prefer to work as part of a team or on your own project? Why is that?" Listen for: Whether candidate expresses a preference for working independently or as part of a team. Your evaluation will depend on the role for this person. **Notes:** D. Problem solving "Tell me about a time when you were stuck on a difficult problem." Let them tell a story. "How did you resolve it?" "Tell me about a time when you made a mistake. What happened?" "Have you ever felt that you were at a dead end in a project? How did you handle that?" Listen for: Whether they asked for or sought out help or just persisted in trying to solve it themselves. **Notes:**

E. Conflict management	
"Can you think of a time when you had a serious disagreement or conflict with someone in the lab? Tell me about it. How did you handle it? Whose fault was it?"	
"Have you ever disagreed with a decision that your supervisor or organization made? Tell me about that time and how you managed your disagreement."	
Listen for: Ability to negotiate solutions, ability to see the other persons perspective, ability to be able to manage a conflict in order to get work done. Be alert to: A tendency to 'blame' others, attribute fault, bear grudges.	
Notes:	
F. Independent thinking/autonomy	
"What do you when you get to a point in a project where you need to make a decision about direction or strategy? Can you think of an example?" "Can you think of a project where you came up with the focus, strategy or approach?"	
Listen for: An ability to arrive at independent conclusions. A comfort level with taking a risk through independent thinking.	

Notes	
Total score (0-60; Divide by 6 and enter value into Excel interview worksheet)	
Candidate strengths:	
Candidate areas for improvement:	

Candidate's interview guide

Candidate name	
Checklist items 1	Background and skills verification
	They may review the organization, the responsibilities and or department and the requirements for the position and ask you why you are a good fit. Focus on appropriate background and technical skills.
Checklist item 2	Your preparation
	A. Interest in and knowledge about lab or project.
	"Tell me about your interest in our lab/group/department/company."
	"What questions do you have for me?'
Checklist item 4	Personal attributes
	A. Ability to hear and use feedback
	Them: "Tell me about a time when you were told that what you were doing wasn't correct or needed to be done differently? What was the situation? How did you handle it?"
	You: Show that you're open and responsive and seeking feedback, No defensiveness.
	Watch how you respond to questions and critiques during your seminar or interview. Are you open to hearing critiques ("Yes, that's definitely an alternative explanation. Thanks for the suggestion." Or are you defensive ("No, we thought of that. It's not likely. Let me keep going"). Goal: You seek and are open to feedback

B. Ability to manage emotions

Them: "Tell me about a time when you got angry or upset about something in the lab. What happened, and what did you do?" and "Have you ever felt that you were at a dead end in a project? How did you handle that?"

You: Talk about your ability to manage feelings of anger, frustration, etc without 'acting out,' losing temper, blaming. Show your ability to self-reflect ("I thought a lot about why that happened, and learned a lesson.") Show that you seek input and guidance when stuck.

Watch your reactions to interview schedule changes, delays, unexpected occurrences etc.

Goal: You have high emotional intelligence

C. Team mindset

Them: "Tell me about a time when you worked as part of a team on a project. Was any part of that challenging? Explain." And "Do you prefer to work as part of a team or on your own project? Why is that?"

You: Describe a satisfying team project and why you liked it.

Pay attention to your use of "I" vs "we" when describing group or team projects.

Goal: Show you're a team player.

D. Problem solving - accessing help.

Them: "Tell me about a time when you were stuck on a difficult problem." "How did you resolve it?" "Tell me about a time when you made a mistake. What happened?" You: Show that you asked for or found help rather than persisting in trying to solve it yourself. Be honest and show that you can learn from mistakes.

Them: "Do you know anything about analyzing hemihaplotype associated retrotransposon patterning? What would you do if you needed to do that in a project?"

You: Tell them how you would seek help an answering this.

Focus on: Being open about what you don't know and having a plan on how to get the information you need.

E. Conflict management

1. Interviewer: "Can you think of a time when you had a serious disagreement or conflict with someone in the lab? Tell me about it. How did you handle it? Whose fault was it?"

"Have you ever disagreed with a decision that your supervisor or organization made? Tell me about that time and how you managed your disagreement."

Focus on: Your ability to negotiate solutions, ability to see the other people's perspective, ability to be able to manage a conflict in order to get work done. Be alert to: A tendency to 'blame' others, attribute fault, bear grudges.

Goal: Disagreements are natural, and you try to understand the other side's viewpoint.

F. Independent thinking/autonomy

1. Interviewer: "What do you when you get to a point in a project where you need to make a decision about direction or strategy? Can you think of an example?" "Can you think

of a project where you came up with the focus, strategy or approach?"

Focus on: Show you can able to arrive at independent conclusions and that you have a comfort level with taking a risk through independent thinking. Show that while you're a team player and seek input you're also capable of independent thinking.

They may ask "Now that you've had a chance to meet with the lab members and hear what we're working on , do you have any ideas for us?"

You: Have some ideas!

Checklist item 5.

Managerial

1. Interviewer: "How would you describe your management style?" (Answer: collaborative) This is a slow ball question. Once you answer it, they may ask, "Can you give me an example of a management challenge that you faced with an employee and how you handled that?"

"Tell me about a time when you had to discipline someone or when you had an employee who wasn't performing to your expectations. What did you do? How did it turn out?"

You: You're goal directed and understand that different people need different management approaches. Some need more guidance and direction, some less. You hold people accountable but give them the guidance and tools they need to be productive.

Focus on: Demonstrating a comfort level with setting goals, giving people feedback and not ignoring performance issues.

Checklist item 6

"Fit" with the group. Several dimensions. Technical fit; personal /interpersonal fit - can they imagine working with you? Do they foresee challenges?

Checklist item 7	Strongest characteristic. What stands out as your greatest strength of this applicant?
Checklist item 8	Red flags. Did anything you did or said stand out as concerning, inappropriate, or worrisome? Gaps in your technical knowledge? Insensitive comments? Ignoring certain people in the group?
Checklist item 9	Position-specific questions verification. Are there specific skills (technical, managerial, interpersonal, etc.) that you need?

Further Reading

"The Chicago Guide to Landing a Job in Academic Biology" Ray Chandler, Lorne M. Wolfe, and Daniel E. L. Promislow, University of Chicago Press 2007

"Lab Dynamics: Management and leadership Skills for Scientists" Carl M Cohen and Suzanne L Cohen, Cold Spring harbor Laboratory Press, 3rd ed 2018. Chapter 4.

"Pursuing Meaningful Work: A strategies guide for PhDs and Postdocs" A terrific and comprehensive guide to all phases of the job interview process from Stanford University: https://beam.stanford.edu/sites/g/files/sbiybj10361/f/stanfordphd_sg_17-18_singlepg.pdf (easier to get this by Googling "Pursuing Meaningful Work" - look for the pdf link)

A short article on questions you may get asked and for you to ask them: http://web.eecs.utk.edu/~azh/resources/facultyinterviewquestions.html

Great tips on phone/Skype interviewing: http://theprofessorisin.com/2011/10/31/thephoneorskypeinterview/

Another compendium of sample questions and tips on the academic job hunt: http://dunlap.utoronto.ca/~bgaensler/papers/gaensler_maddison_jobs_2012.pdf