Searching for a job

1. Long before the interview.

In order to be competitive for postdocs and industrial postions, your record must stand up against your competition. This is not the people down the hall at OSU; this is the top graduate students and postdocs in the US. You are competing with the best of the best at MIT, Berkeley, CalTech, etc. Professors looking for postdocs, companies, etc. are thinking "who's the best applicant", they are not generally thinking "who's the best applicant from OSU".

As a guideline, you should have multiple (at least 2, >3 is best) first-author papers in top journals (Analytical Chemistry, the Analyst, Analytical Methods, Talanta, Sensors and Actuators, etc.). However, there are other factors that can be more important than number of publications.

- Being a "closer" is highly desirable: someone who can drag a project over the finish line especially a difficult project. Finishing a project is much better than starting a project.
- Having made major intellectual contributions to the project is also very powerful; for example, if the project is your invention from your oral exam, or if a significant aspect was your idea.
- Training undergrads is a great thing to list on your CV (note whether they enrolled in a PhD program), as it shows leadership, and the ability to work with others.
- Making connections with faculty during their seminar visits can also be quite powerful for getting a postdoc if you maintain contact with them.

2. Prepare to apply for jobs.

You will need to have these documents:

1. Cover Letter. This should be on the letterhead of your current employer (e.g. OSU Letterhead). It should have proper letter formatting (address, date, salutation, etc.). State that you are responding to an opening or a job search (include the search number if appropriate). State that you are enthusiastically applying for the position. Briefly list your qualifications. If the position description states what qualifications they are looking for (e.g. creativity, synthetic skills, experience with chromatography, electrophoresis, method development, demonstrated collaborative projects, etc.), enumerate and address each one in the letter. If you have friends/contacts at the employer, be sure to list them. State how many other documents you are including, for example, "Please also find my CV and research summary with this letter. My transcript will be sent to your attention electronically, and references with contact information are listed below".

2. CV that contains your contact information, academic background, your publications (include conference abstracts), and any awards you have received. You may choose to include other activities such as those classes that you've taught, students mentored, or outside activities (only if relevant). I have a CV you can use for a template – just ask. Don't include hobbies on your CV. List 3 or 4 professional references (professors, collaborators, etc.).

3. A 3 page (approximate) research summary. Focus on the intellectual merits of the project, what's new and never-before accomplished, rather than the details (% ee, step counts, optimization strategies, etc. are meaningless). Make the summary concise, with a short introduction, and heavier on figures and schemes than a paper. Make sure there is color on the document (e.g. pictures of instruments, diagrams showing methods, etc.) You have 3 pages to lure a potential employer, so don't dwell on meaningless facts.

4. Ask 3 or 4 professors if they would be willing to provide a letter of recommendation, if asked. Mention that they won't need to write the letter unless they're asked. Get this set up in advance. Industry/Pharma jobs may not inquire with your references. Postdoc advisors will definitely want at least one letter from your PhD advisor – coordinate with me to have it sent as you apply for postdocs.

3. Apply for a job.

There are many ways to find available jobs:

i. The internet. You can search employment websites (e.g. monster.com) for jobs, but conversations from industrial people on hiring committees suggests that these applications are too numerous (i.e. thousands) to sort through by hiring committees. Remcho group alumni that have used these sites generally have not gotten called back from these submissions. These sites still might be worth using, but I see them as a long-shot for success. The best information you'll get by searching the internet is knowing who is hiring (e.g. "It seems like Intel is hiring – they have an ad on monster.com" – who do we know at Intel?)

ii. Friends/group alumni. You should maintain contact with OSU alumni who have gone into industry before you. These people are on the inside and know of available positions at their companies and at others.

iii. Your advisor. I get various emails from people who have postdoc and industrial openings. Most come from either previous co-workers of mine from my postdoc or PhD days, or they come from the ever-increasing number of companies that have hired our alumni. I will forward these opportunities to you.

NOTE: since many of our group opportunities come from our alumni, keep this in mind when you are employed at a company: think of our group, email me potential openings, and above all else: behave/achieve like a representative of the Remcho group. iv. (Searching for postdoc positions) Target professors who have recently started or recently moved. The biggest barrier to hiring a postdoc is money. When a faculty member starts his/her career or if they have recently moved to a new university, their home university gives them a large "start-up" package.

4. On-campus / Skype / Phone interview

If you are a postdoc at a top university or if a company representative is coming through our department at the right time, you may be lucky to do on-campus interviews. If this is the case, you'll have approximately 30 minutes to discuss your research, answer any questions, and make a good impression. A company will typically invite the top one or two candidates for an on-site interview. If you do not have an on-campus interview then you will likely have a Skype or phone interview before a company (or a postdoctoral advisor) hires you.

You should identify how long the interview will take. They will typically tell you. Expect approximately 30 minutes of a powerpoint talk plus 5-10 minutes of questions. **Be on time (be ready 5 min early) for the interview!** You should rehearse your talk and **make sure you don't exceed the time**. Industry runs on a tight schedule, and if you go over, it will cause problems for the interviewer.

A friend has shared the following 5 criteria that they use to evaluate potential candidates:

- i. Communication. They will be evaluating how you speak, how you explain concepts, how you organize the talk. Have clean slides, speak slowly and clearly, use proper chemical terminology.
- ii. Collaboration/Teamwork. You should show that you can work with others. Industry is MUCH more collaborative than PhD groups, with multi-person teams. They are going to be interested in how you work with others. Mention that you trained undergraduates or collaborated with 1st year students.
- iii. Innovation. Communicate how your project is the "first-ever example of XYZ..." and say things like "when we got started, there was no known way to do XYZ..." Explain how you tested controls, used the literature, and invented a NEW solution to a complex problem.
- iv. Leadership/Mentoring. Industry is very hierarchical. You will mentor BS/MS associates, and you will answer to group leaders. You want to show that you can both lead and mentor others, and that you can be led and mentored. If you have worked with undergrads or 1st year graduate students, this is something to highlight.
- v. Problem Solving/Depth of Knowledge. You should sound like an expert of your project. Someone interviewing you likely has very little knowledge of your project, and you should be able to answer their questions with confidence and expertise. In the question-andanswer portion, using named literature reference is particularly powerful, "The Winefordner article is a landmark describing how limit of detection is defined and

determined..." or "Nancy Albritton published that polymeric surfaces can be modified such that they perform in the microfluidics substrate role much like silicates can..."

During a Skype or telephone interview, as well as the on-site interview (see below) you should be ready for HR questions. Search the internet for: "common HR interview questions". You should be ready for these with prepared answers. Questions like "what are your strengths?" and "what is your biggest weakness?" shouldn't trip you up. Just practice with a friend, they're easy to prepare for.

You should have looked up some information about the company that's interviewing you. *How many employees do they have? When was this company founded? What product is their biggest seller?* You should also have some questions about the company, as they're likely to ask "do you have any questions for us?" I suggest having some professional and personal questions ready to go. For professional examples, "How much of a typical day is spent at the bench vs. in meetings?" or "Does the company support educational activities like attending conferences?" For personal examples, "How are the public schools in the area?" or "Where do most of your new hires live, and how long is the commute from there?"

A tip for Skype and (especially) phone interviews: Prepare note cards or cheat-sheets with answers to HR questions, prepare questions you are going to ask about the company. It's not "cheating" to have prepared materials to look at.

Finally, and perhaps most importantly, you want to sound enthusiastic, excited, and fun to be around. Nobody wants to work next to someone who's burnt out, exhausted, and has a bad attitude. Even if you're nearing the end of a long PhD career, don't communicate your exasperation.

5. On site interview.

If you have been asked to come to a company (or a potential postdoc lab), congratulations, because your qualifications are already enough. They wouldn't be interviewing you if you didn't "look good on paper". Try not to worry about having enough papers, knowledge, etc. The in-person interview is certainly about intelligence and prior accomplishments, but it's also about personality.

First and foremost remember that: the interview starts the moment you get off the plane and ends when you're on the plane back home. Everything you do (dinner, taxi rides, 1-on-1 meetings, etc. is part of the interview).

Your main interview day will probably start early (7 or 8am local time) be mostly short (30-60 min) meetings with people where you discuss science (or anything else), a 50 minute talk (10 min for questions), and a dinner with the recruiting committee. Wear a suit and tie (or similar business attire for women), leather dress shoes. Put your phone away and leave it put away for the day. A printed schedule is handy as a reference – looking at your schedule for the day on your phone opens to door to doing other things on your phone, which is a bad idea. Put it away for the day and focus on your hosts.

Watch what you say, don't associate with negative aspects of the trip. For example, imagine the taxi from the airport is late and then takes a circuitous route through town, making you even later. Do you think your host would rather hear "I've never been in such an awful taxi, this guy tried to cheat me..." or "The taxi ride was great! I've never been to the Boston area, so I loved seeing some of the city." Try not to associate yourself with anything negative.

<u>The Lecture</u>: Turn your phone off and put it away. You will likely have a prepared talk, and have practiced it before your trip. Make sure the 5 criteria from item 4 (above) are clearly on display in your talk. Save a few versions of the powerpoint (ppt, pptx, pdf, etc.), and email yourself your talk in case you lose your computer. Make sure you check the file on a mac and a PC (what industry uses). Bring your own pointer so you're comfortable using it. In short, make every possible effort to avoid problems setting up the lecture.

Your talk should start with the words "Thank you for that kind introduction. I've enjoyed hearing the wonderful and exciting science on display here today, and I'm excited to tell you about what we have been working on at OSU." It should end with the words: "Thank you, and I'd be happy to take any questions you may have." Make appropriate eye contact with the audience. It is especially powerful if you can connect conversations from earlier in the day with science your showing. For example, "Earlier I was speaking with Kathy about an sample preparation strategies for complex matrices, and I was struck by how similarly we approached this issue with one of our samples." This shows you're not too rigid and practiced, and it shows you remember an interviewer's name.

<u>The 1-on-1 meetings</u>: Put your phone away and leave it put away. During the day you'll have 30–60 min meetings with people. Some people will talk about only science, and some people will talk about the weather. You should have scripted questions for people in the 30-60 minute meetings. "What's your typical day like?", "Do you live close enough to bike to work?", "Do you go to any conferences?", "What do you like about working here?" Don't let the conversation stall too much. Try to seem genuinely interested. Make a couple comments during the day like: "This would be a great place to work." or "Wow, it would be very exciting to be here." This communicates that if they made an offer, you would come.

The day is long, you'll get burnt out, and need a 5-min break. Carry a bottle of water and a snack like a granola bar in your pocket. Ask to go to the bathroom, take a couple minutes, and quietly eat a granola bar in peace (make sure you don't come out chewing your food).

<u>Dinner</u>: Dinner is a very, very important part of the interview. They're looking for a colleague as well as an employee. They do not want to hire into their team someone with a challenging or incompatible personality. Tips for dinner:

i. Follow your host's lead. It's fine to ask "have you been here before?" and "what do you recommend?" Do NOT order the most expensive entrée on the menu.

ii. Feel free to order a drink if others do, but do not drink too much. If you drink alcohol, you can have a drink at dinner. Sharing a drink at dinner puts people at ease. If they offer you the wine list, I suggest you avoid picking the wine if possible. Politely look at it, then ask

the host to choose on the grounds that you don't know any of these wines. Drink what they drink (beer if they are drinking beer, wine if they are drinking wine, etc.) You should drink less than whoever is drinking the most. Expect to have 1 or 2 drinks and then stop.

iii. Be a polite but engaging dinner guest. You should be an active participant of the conversation, but you should not dominate the conversation. Do not use your phone at the dinner table – put it away and leave it put away. Don't chew with your mouth open or violate any other western dining rules. Start and finish your meal at the same time as your host (i.e. don't eat too fast or too slow). Enjoy the dinner, and comment that the food is delicious. Thank your host.

iv. Be positive. No matter what happens during the conversation, don't say anything negative. No gossip! Don't complain about co-workers or advisors, it only makes you look bad.

v. When you get back home, follow up with your host by email thanking him/her and stating that you had a wonderful time. If you have email addresses, send a short thank you message to people you've met during the day. Emphasis on short – just "thank you, I very much enjoyed the visit and interview".

Final travel tips: Get a haircut before you go. Learn how to fold a suit in a suitcase to minimize wrinkles (youtube). You can steam your clothes to remove many wrinkles by hanging it on the back of the hotel bathroom door and steaming up the entire room with hot water (30 min, closed door, no fan). Get a good night's sleep before your interview day.

6. Negotiating (industrial offers).

If you are receiving an industrial offer, you should be enormously happy. When you get the offer, you'll have some amount of room to negotiate. However, there are limits to what you can get. When you first hear that they're going to make you an offer: Be sure to sound excited, say thank you, and say something like, "this is great, I can't wait to start. I need to [speak with my spouse; look into some details; etc], of course, but I'm very excited." Don't accept the offer immediately, and be sure to review the written offer before you agree. Once you get the details in writing, you can negotiate the terms of the offer.

i. The first rule is to never make anyone feel abused by negotiating too hard. Negotiation is best done when you have more than one offer, and you can show one company the other's offer details, and work with a company to find a common agreement. Approach negotiating with a good-natured attitude; there's no reason to play "hardball". Don't worry too much about not getting the maximum salary, benefits, etc. Over time, inequities will be sorted out when you get promotions. Offers are hard to get, so you want to make it work.

ii. Salary used to be highly negotiable, but lately industrial HR groups have been pretty reluctant, even unwilling, to negotiate salary. Be very careful when talking about money

because it makes people uncomfortable, and it can make you seem greedy. In 2023, you can expect to make approximately \$95–\$115K starting at the big companies (HP, Intel, Amgen, Abbott Labs, Novartis, Merck, etc.). Candidates with a postdoc will usually make a few thousand more. You will likely make less at smaller firms, but you could also receive stock in the company, or other benefits like signing bonuses, or simply be in a work environment and/or location that is preferable to you. It is not a competition, you are looking for the best for you.

iii. Moving expenses – Oddly, companies will pay large sums to move people, but grad students and postdocs can likely move for much less. Most grad students don't have a lot of expensive furniture, big households, or a lifetime of stored things. I suggest asking if you can transfer any moving expenses (usually around \$5K to 10K) to a small hiring bonus that you can use to (1) pay for the move yourself, and (2) use towards a deposit or first month or two of rent, especially if you can sell your current stuff and simply drive or fly to your new city with a couple suitcases.

iv. Hiring bonus. Prior years had big hiring bonuses – these are largely gone. You might see these at smaller companies.

v. Consider negotiating for things that don't cost money. For example:

Are they hiring in an area your significant other works? Getting a partner employed is a huge financial benefit for a couple.

Does the company have a child day-care on site or nearby?

...and can they help you secure a spot for your child? Day care is expensive (can be >\$2K per month) and competitive in big cities. If you can secure spot in a close, safe, educational day-care or get a discount, this is a big financial benefit for you.

Do they have a commuter bonus for people who carpool or bike?

... or a parking spot? This seems silly in Corvallis, but in Boston, New York, and San Francisco parking is a huge hassle. Depending on where you live, you may want to drive to work.

Do they have company temporary housing for you to live in while you look for a new home? In big cities, rent can be horribly expensive. If the company will provide temporary housing, this is a big deal.

Can the company match charitable contributions to non-profits, etc? Do they have any community events (e.g. Eli Lilly's "Day of Service") where you can contribute? Do they provide passes to cultural events in their city? Does the company have season tickets to sporting events?

Final thoughts on negotiating: you're negotiating with people who will be your bosses and your coworkers. You don't want to irritate them and get off to a bad start.

7. Final Thoughts

Science speaks the loudest. Having a better publication record, being an expert on the literature, and being comfortable discussing scientific problem-solving is going to be your best asset. Start preparing early, and every day.

Maintain a good attitude. You absolutely must be positive, enjoyable to be around, and not perceived as anything other than a kind, knowledgeable, hard-working person who would make a great colleague. You don't have to be the most popular or cool person, but you must seem like someone who can be part of the team.

Be prepared. Eliminate potential problems by not getting ready at the last minute. Get your travel squared away promptly. Have a well-practiced talk ready and saved in multiple formats. Get a laser pointer and know how to use it, and be prepared in the event that it is a large monitor, rather than a screen, that is used for your presentation – how will you point out details on your slides in this event? Prepare questions to ask during 1-on-1 meetings and phone interviews. Practice HR questions.

Take interest in the position. Learn about the position and the area before you interview. Be curious and let yourself consider the possibility of actually being there. Ask questions about the company and area.

Remember that an interview works two ways. They are interviewing you, but you are also considering a position with them. Everyone is trying to show their best. Yes, you are competing with the top candidates; however, industrial firms (and national labs, and academic institutions) are always looking for a diverse group of employees that have a variety of life experiences to contribute to the "knowledge trust" – they don't desire or benefit from a "cookie cutter" collection of employees. Be confident knowing that you, like our group alumni, are well respected.

You can do this!