

Tools and Takeaways from ISSCR2023 Career Panel Boston, MA USA

o General Tips for Early Career Scientists

- Clarify what you don't know and find people who can help you, build a mentor list, build a sponsor list
- Certainty is not promised, thrive even in uncertain times, and this will lead to growth
- Make sure that you are actually interested in the job that you think you want to do.
 - $\circ~$ Find people who do what you want to do.
 - Take classes in the in the thing you want to do.
 Do your best to be most prepared. People are more willing to help you get where you want to go than you realize.

Transitioning to a new position Whether supported by a mentor (or not):

- Have a strategy for your transition
- Make a plan for what you can take with you.
- Assess needs and build a mentor 'team'
- Communication: make sure you have a conversation with your PI, avoid burning bridges
- Focus on finding solutions
- Be the driver of your own vision, your mentor is there to support you, but it is <u>your</u> journey Interview tip: don't speak ill of your former employer

$_{\rm \circ}~$ Negotiating your position

- Always negotiate
 - Ask about source of funding for position
 - Ask others at institution/company/lab about accessories/benefits and use this information to negotiate
 - Parking spots and other "soft" benefits can be added to your initial offer (but need to be aware of these first – so ask around!)
 - Consider- what is your goal for the role and for the negotiation itself?
 - What would you need to bring to the table to be successful?
 - Get a second perspective on what the salary should be
 - GET IT IN WRITING
 - Get your own grant funding to show for yourself

Panelists

Megan Mayerle, Baxter Laboratory for Stem Cell Biology, Stanford University, USA, Associate Director of Finance, Administration, and Research Development

Nathan Palpant, Institute for

Molecular Bioscience , The University of Queensland, Australia, Associate Professor/Group Leader

Athanasia Panopoulos,

Cedars-Sinai Medical Center, USA, Assistant Professor/Research Scientist II

Filipe Pereira, Lund University

Stem Cell Center and Wallenberg Centre for Molecular Medicine,

Sweden, Professor/Wallenberg Fellow in Molecular Medicine

• Avoiding Common Early Career Mistakes

- Overcompensating at the beginning, trying to be overambitious and take too much on in terms of responsibilities.
 - Be careful to edit (saying "no") so that you can reach your goals
- Running out of funding from having too narrow of a scope.
 - Still possible to move forward through other avenues. Stay flexible in your thinking.
- Not appreciating the number of responsibilities as a new faculty member.
 - Need to rewrite protocols, which takes more time than one realizes.
 - Roles change when you start a lab. You have to become a manager, not just an individual contributor.
 - Consider prioritization of projects. Have a bank of stable projects to sustain the lab and also have some that are more experimental – high risk/high reward.

• When Things Aren't Working Out (+ need to transition labs/positions)

- What could go wrong?
 - Fear lose funding, kicked out
 - Fear not getting into a second lab

• You have to just make a decision

- Based on your goals/career assessment
- Build a sponsor team, find support not just in supervisory roles, but get information from administrators, program coordinators, staff
- Ask questions! how to move forward, what options they know of for specific problems/issues.
- The institution is multi-faceted and people in different roles can help you move forward

• Incorporating Family Concerns

- Make sure you have a good foundation + clear strategy
- Do your homework.
 - What is the culture of the new space like?
 - What are the benefits offered?
 - Are there opportunities for everyone in your family? Highlight those.
 - Will your pay be enough to sustain you and your family in a crisis situation?

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• Showcasing "soft skills"

- The CV is yours to tailor to the position you want. Add whatever headings you want in your CV
- Use the CV to highlight ALL the skills *that make you the best fit for the job*, not just all your skills.
- Include the most relevant information for the position, not just everything you have accomplished.
- Illustrate your collaborations to highlight leadership
- Highlight organizational opportunities that have been successful
- Do your best to quantify your contributions as much as possible. This will help you illustrate your tangible value

• Additional Resources Based on Discussion

- Career resources for PhD stage researchers:
 - https://www.nature.com/collections/dhbegcaieb/
 - Career resources for postdoctoral researchers:
 - <u>https://www.nature.com/collections/hjbhfhcece</u>
- Career advice articles across the spectrum
 - <u>https://jobs.sciencecareers.org/careers</u>

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- Questions attendees submitted that were *not* able to be answered during the session:
 - Answers in longform by Panelists MM= Dr. Megan Mayerle ADP= Dr. Athanasia Panopoulos

How to keep in good terms with your PI and how to handle unfinished projects ?

ADP: Focus on the science and getting papers out, which is a win-win for you and your PI, and do what you can to help train the next people/transition your projects, within reason. It's not necessarily your job to do this, but it is part of any positive lab culture to pass on your knowledge as best you can. Be mature and professional, and they will treat you as such.

Do you have any advice for navigating the end of a PhD with respect to wanting to move on to a new position and your PI wanting you to stay?

MM: Finish up your outstanding projects and then just start applying. Once you have a job offer you want to take, take it.

ADP: If you can get your paper(s) out the door, it becomes harder for the PI to justify to both themselves and to your PhD advisory committee why you need to stay any longer. Identify specific opportunities, have a realistic exit plan, and then apply when you can. If it is to a postdoc especially, you will need their support, but if they see you are ready the good PIs know it's wrong to stand in your way. PIs are sometimes afraid of losing valuable people, so helping train people to take over can also be helpful in enabling a smooth transition.

How important is doing a postdoc position in regards to career progression within industry?

MM: Speaking from a US perspective, you don't need to do a postdoc to get into industry. If you are certain that you want to go to industry after you finish your PhD, do that. If you are unsure, up to 3 years of postdoc experience will still be beneficial. After that, it doesn't really help much, if at all.

ADP: I agree. It used to be that you couldn't really get an industry job without a postdoc, but that has changed. But from what I have seen the starting roles are initially more hands-on benchwork (although this is company specific), and then people grow into more scientific leadership positions as they progress.

What skills are desired to transition from academia to industry?

MM: I assume we're discussing doing bench science in industry? If that is the case, it's very technique driven. They usually have a skillset they're looking for. Something that not absolutely everyone knows how to do is most useful.

What are some common interview errors you've seen when academic scientists are transitioning to industry?

ADP: I've been told that people sometimes will send academic CVs to industry job ads, and that this is a big no-no. Industry resumes have their own format.

Is working for new startup companies (less than 5 employees) beneficial to your career path or should you look for employment in larger companies?

MM: It depends. People will often prefer either a startup environment or an established company, and tend to advance within their preferred type of working environment. If you want to work in the startup space,

work experience at a startup will help your career the most. If you want to be in a more established group, experience there will help.

For graduate students with a broader range of interests, what's a good way to go about deciding the right postdoc position?

ADP: If you are thinking about having your own lab someday, it is essential to pick an area that you would consider doing long-term, as your postdoc research will lay the foundation for your independent research program. Pick a PI whose research you respect, and whose lab respects them. Depending on what kind of job you want in the future, you may need to pay more attention to the place, paper impacts, track-record of training, etc. But it is also very important to go somewhere where you think you could be happy both personally and professionally.

What makes a person a competitive postdoc candidate? Number of publications? Grants? Fellowships? Other skills that could be beneficial on our resume?

MM: In my experience, number and quality of publications is most important. Strong Letters of Recommendation also are critical. That will usually get you an interview. At the interview, you need to emphasize clearly what your project was, why it is an important question, what you did (don't say "we performed" if you did all the work yourself), and what the impact of your work is (both in terms of publications and how your data inform the field).

ADP: Publication(s) quality reveals scientific ability, but what usually separates candidates is their ability to maturely and confidently talk about their work, how it fits into the bigger context, etc. If someone has a Nature paper but their PI told them what experiments to do and so they can't have a good discussion, it shows. And someone else may have a respectable paper in a lower impact journal, but they can articulate what it means and think on their feet and weave in new ideas, etc. I would hire them over the other, as would many. Grants and fellowships can certainly help, but in my opinion they are not as important as talking to the candidate about their work and reading what their references have to say. And when you apply to a lab, be sure to articulate why you want to work in THEIR lab, not just "I am interested in stem cells". And don't make typo mistakes in emails and in CVs, because if you are not careful there, it makes people think you may not pay attention to details and could be sloppy in the lab.

What are your top tips when finding a good postdoc supervisor and mentorship?

MM: Look at where their recent postdocs have landed, and pick someone who tends to get people into the type of position you want to be in. Also, consider location, both from a personal preference position and from a career perspective. If you have an interest in participating in science policy, the Baltimore-Washington area will provide you with opportunities. Boston and the Bay Area are major biotech centers. It's not impossible to move, but there are just many more opportunities for exploration.

ADP: Yes to above. Look at their track-record of training, and always talk to people in the lab currently. Most people will be honest.

How to balance the time contributing to job searching vs time spent in the lab/on the project?

MM: Excluding the faculty search process, which is a totally different thing, do your lab work job during work hours and your future job search on your own time.

Question for Dr. Mayerle: What factors influenced decisions to turn down faculty positions? Were there any major concerns you didn't initially anticipate?

MM: My spouse, though not an academic, is also very career-focused. He defines himself by his profession, as I define myself as a scientist. Most areas would not have opportunities for him, and he'd already spent 8 years stuck in a position he didn't enjoy and wasn't challenging while I completed graduate school. I know that he would not take a role where I couldn't pursue my interests, so I couldn't justify taking a role where

he couldn't pursue his. I knew I'd be able to find a fulfilling career in my current location, so we chose to do that.

Do we need special skills/ certifications for the transition? If yes, what are those? Like people in business/ IT do certifications to upgrade their profiles.

MM: This is very job/industry specific. A job posting will tell you what certifications are required, if any. I will say, if you have the option to actually demonstrate a skill, that is more valuable in most circumstances than a certification. For example, I'd hire someone who could clearly describe several complex projects they'd managed over someone with a certificate in project management who has no actual experience.

What type of skills could we be already trying to develop during PhD/postdoc that will help the transition?

MM: For bench science, it's the techniques. For other positions, anything demonstrating leadership is helpful, teaching is helpful, and managing a project is helpful.

What path would you take if you were interested in joining a lab with little experience.

MM: You mean you have little experience in the research area that the lab focuses on I'm assuming? Not that the lab doesn't have much experience? In your cover letter specifically say why you are interested in moving into that area of research, and what you can bring from your previous field that would be a benefit.

Would you advise transitioning to big pharma or small start up early in your career? Where will you grow quickest?

MM: You'll grow different skills in each type of role, so pick whichever appeals to you the most.

How to enter industry if some time already passed, e.g. because of pregnancy and maternity leave. When is the best time to become pregnant?

MM: (US perspective) Enter industry whenever you are ready to enter industry. Your childbearing has no impact on being hired. If you feel you still want more time home with your baby, stay home with your baby. If you feel ready to come back, and want to move to industry, do so. As for the best time to become pregnant – that is also whenever you want to become pregnant. Having a kid is a challenge, and there isn't really an ideal time to do it. Do it when you and your partner are ready and want to start having kids.

How to find unofficial mentors??

MM: Define clearly what you want out of the relationship, and identify people who can provide what you want. When you approach someone, don't open with "will you be my mentor", open with your actual question. "I'm hoping you'll have some time to talk with me about how you switched into the role of Sr Scientist in industry" or "I'm looking to get into Science Communication, and would like to gain some experience writing short format articles for the general public. Can I talk to you about the type of work you do?" will work better because the person understands what they're committing to.

ADP: Your science: are there any faculty who either work in similar areas, or who you respect as scientists even if they don't, who you can reach out to to ask some specific questions about your data/new ideas? If so, perhaps start by asking if you could have a brief meeting to get their opinion on something that you think they could help with. Be prepared and specific in what you are asking. Most are very willing to help, but they need to know what you need from them to be able to help. If you feel like it is helpful, keep checking in with them as your project progresses.

•Another approach is to perhaps ask a PI to present at their lab meeting sometime if you feel their lab could be a good source of advice - but I would suggest only doing so with your PI's permission.

•Ask your current PI if you could help with any existing collaborations, or with any grant applications that involve collaborators. This is also a good way to meet people.

•Offer to help faculty who are in charge of organizing seminar series, symposiums, etc. People usually always want help, but if you offer, be sure to make the time and do a good job! If you feel like there is a seminar series that is missing (even perhaps for internal trainees), you with some faculty can help start one!

•Go to seminars, give seminars, go to department happy hours/social events, don't just stay in your lab all day every day without meeting the people around you.

How do you recommend prioritizing working in a topic / field that you're interested in versus working with a PI that you really connect with?

MM: The goal of a postdoc is to complete a body of work that shows that you are capable of obtaining funding for and successfully running your own research group. You can always transition topics later, once you have your own position.

ADP: Yes, you can transition later, but if we are talking about a postdoc, it will serve as the foundation for your independent lab, if that is your path. In this case, in my opinion, you should have interest in the research of the lab you choose.

Is it better to focus on a specific topic or run several lines of projects focused on different topics as an early career investigator?

ADP: This really depends on how risky or broad the projects are. I would seek advice from people who can understand the specifics.

How, as a government postdoc, to get your work published when your mentor has been sitting on papers for years because they aren't an agency priority?

MM: Offer to manage the entire submission process, and produce documentation that you are ready to do this. Have the paper completely ready to go, have responses to all the questions asked by the journal when you go to upload your manuscript written out, and then write the cover letter for your manuscript identifying potential reviewers. You want to shift things so that the energy required to get the manuscript submitted is low enough that it offsets the work involved.

What should be some of the considerations when looking for a postdoc position if you have the ambition to become a PI.

MM: Make sure any potential mentor has 1) successfully placed people in academia, 2) publishes regularly in good journals, and 3) has a good reputation in their field.

Tools and Takeaways from ^{Additional contributions from Dr. Athanasia Panopoulos} ISSCR2023 Career Panel Boston, MA USA

• NUTS AND BOLTS: Starting Up In Academia

- Timing: Your job really starts when you sign, not necessarily when you get there
- People will contact you about grants/etc. It's a very busy time, but make the time to be a good colleague; this will also help you later
- How much time do you have until you arrive? Until your lab is ready? Consider that some equipment can take several months to receive
- Your start-up money: Does it expire? (i.e. 3 years, tenure clock, or can you save it indefinitely)
 - Will you get it all at once, or in increments?
 - Do you have any additional named professorship/discretionary money, and does it expire?
 - The power of start-up money vs. grant money is that there are significantly fewer restrictions on start-up \$
 - Is there any paperwork to access your money/training required before you can start buying equipment?

• Your start-up money:

- o Renovations separate or included in start-up?
- Are you inheriting any equipment?
- Amount of salary in your start-up

How does your salary work?

- o 9 month vs. 12 month?
- Summer salary?
- Hard money vs. soft money?
- Amount of salary in your start-up?
- Salary expiration from your start-up?
- Salary usually increases % each year from where it began (something to think about when negotiating; a few more thousand initially can add up to even more money over the years)

• Equipment

- Take pictures of major equipment, including it as a whole, close-ups of catalog #s, and electrical outlets
- Take pictures of things in your lab with catalog #s; and also just pictures of things you like that might not have catalog #s, so you can remember what you need
- Many pieces of equipment are discontinued more quickly than you realize; sending a sales rep a picture will enable you to get what you want without having to sift through hundreds of catalog # items

Purchasing

- Does your university have a preferred vendor?
 (Can be significantly discounted on top of new investigator status)
- O How long can you receive your new investigator discount?
- Now long can you receive your new investigator discount?
 My 2 cents: I first bought small amounts of things I needed, to make sure that what I
- My 2 cents: I first bought small amounts of things I needed, to make sure that what I received is what I wanted, then I bought in bulk
- $\circ\;$ It takes so much more time than you think to find the items you want, deal with quotes, and place orders
- Generally equipment costing more than 5K requires additional paperwork and approval; make sure you find out as quickly as possible how to do this
- $\circ~$ Do not officially finalize paying the big bills until you have the equipment in hand and you know things are working
- For big equipment like expensive microscopes, ask to demo it first; then buying the demo can also be cheaper
- o Don't forget to incorporate the cost of service
- o contracts in the cost of big pieces of equipment -they can be quite expensive
- Buy things that don't expire in bulk since you will receive a big discount as a new investigator; keep available storage space in mind though
- My philosophy: It's ok to lie to vendors! They don't need to know that you intend to buy their product; use their competitor to lower quote
- My experience: do not let vendors have your phone #; as the new investigator, you will be visited by every vendor in town, and some can be quite aggressive

• Hiring: Things to consider

- When will your lab be ready for you? Does someone have to move out of it? Are there any renovations? For either, chances are there will be a delay.
- Best to not have someone start before you have a lab; even if your guess is a bit off as to when things are ready, it is better to have a little time for yourself to get organized and get some orders/etc done.
- The moment you have your first employee requiring training, your schedule no longer belongs to you.
- Are you teaching, and if so, how much time do you have before you have to start? This will also determine your lab preparation schedule and when you can train people.
- Are you able to hire someone from the department? If they are the right person, this can significantly streamline things for you and your lab setup
- Are you bringing someone with you? They can streamline training and help decrease the time you need to spend to get things running
- Lab tech vs. postdoc vs. grad student?
- Organization!!!
 - An unorganized lab wastes money!
 - Take the time to organize everything from the beginning
 - it will be so much harder to do later if you don't start out that way, and doing so early sets the tone for what level of organization you expect
 - Your protocols are likely for postdocs, not for graduate students (or undergrads); write them again in extreme detail now, while you are doing the experiments if you can; include reagents and catalog #s; this will save you so much time later!
 - Write down everything you touch in the lab so you know everything you will need to order!

• Projections

- It will be hard to get an idea of your projected lab spending/month in the beginning; when the equipment is 'ordered' and the lab is ready, calculate how much you are spending per person
- Projections from published sources will often say expect to spend ~500-2K per person per month on

lab supplies (I do not think this is always accurate; for example, in the stem cell field things cost way more)

• For general salary amounts when budgeting for your hires, ask your institute, and be sure to include their benefits (which you pay).

• Your First Six Months

- If you have to finish up papers, try to use these first training months to do these experiments; this will also help get your staff on the papers (and motivate them for resubmissions) which will help you with tenure better than if they weren't on the paper(s)
- Focus on preliminary data for first grants; keep in mind generating new data will take a lot longer now

 \circ Do stuff in the lab too if you can, you are the best hands you have

Internal Grants

- Even very competitive internal grants are less competitive than any other type of external grant
- If your Chair/Department Head/Dean strongly suggests you apply for something, no matter how busy you think you are, apply
- Look to see what grants your colleagues have received and see which would be a good fit for you; politely ask if anyone is willing to share some successful examples.

• Pilot Grants

- Many pilot grants are often worth your time, and are not too small to consider because:
 - they help you get your ideas in order for bigger grants
 - they don't jeopardize your new investigator status
 - it looks good on future grant applications that you have received funding
 - you can propose risky experiments, that can help you get the data needed for larger grants

• Grants

- Note that a lot of the foundation or smaller grants will not let you use any awarded money for your salary; keep this in mind if you have to attain a certain level of your own salary through grants
- If you are collaborating on someone else's grant, be sure to ask to see the cover page; If you are listed as a co-investigator (rather than a collaborator as you thought), depending on where you are applying for your own grants, you could lose your NIH new investigator status, even if it the amount you are receiving as a co-investigator is minimal
- Plan: Make a list of grant deadlines, projects for each, preliminary data required for each, and where there is potential project overlap; make it realistic, and stick to it
- Focus on New/Young Investigator grants in the beginning (Y1-Y3/4), in addition to internal and/or pilot grants
- Talk to colleagues and program officers. Be aware of resubmission rules.
- Note that a lot of the foundation or smaller grants will not let you use any awarded money for your salary; keep this in mind if you have to attain a certain level of your own salary through grants

Additional contributions from Dr. Athanasia Panopoulos

• THE MONTHS BEFORE YOU LEAVE

- Get all protocols, plasmid/cell/other stocks in order
- Make list of things you will need (if you are the type to email yourself things, then either create a new email for your new lab info, or put the same subject line for all emails having to do with the same things so you can consolidate later)
- Take all pictures of relevant equipment, the lab, catalog #s
- Get copies of animal protocols, safety protocols; start any paperwork you need to
- Finish making any necessary constructs, cell types, expansions/freezedowns, so you can start up again easier when you get to your new lab

Applying for a faculty position

Sites to check for job postings (<u>these sites include industry, postdoc, and other jobs too</u>): <u>https://www.nature.com/naturecareers/</u> <u>https://jobs.sciencecareers.org/</u> <u>https://jobs.chronicle.com/</u> <u>https://jobs.chronicle.com/</u> <u>https://jobbank.jsscr.org/</u>

When you apply for jobs many will do so through a system called **Interfolio**. It is worth paying to become a member, so you can have your references upload their confidential letters directly to this site, and then you can send them to whatever jobs you would like (and the letters remain confidential, you never see them). You can even use this site to email them to email addresses or chairs of departments directly, even if the school isn't using Interfolio for their applications.

This is much easier for both you and your references, and will save you from worrying if people sent in their reference letters, or having to bother people with reminders/etc. So it is worth spending some time to figure this site out, if you are applying to many job listings. And if you do have your references submit to this site, remember to only use generic reference letters (i.e. not mentioning any specific school in their letter) so you can send to many places. <u>https://www.interfolio.com/dossier/</u>

It is a long process to apply to faculty positions. Be sure to get feedback on your research plan, CV, and cover letter (although your cover letters will be similar, they ideally should be tailored to include a couple of specifics about each place you are applying somewhere in the letter). Many academic deadlines are typically in the Fall, but there are job postings throughout the year so always keep checking. But how it typically works in academia is apply in the Fall, interview in the Spring, start job in late summer/early Fall, at the beginning of their academic calendar.

Remember as you apply and interview for jobs it is important to think about what is the right job for you. And timing is important. It's not just about your ability to work independently...are you ready with enough projects/ideas to start your own independent research program? Have you had a conversation with your boss about what you want to do next and what you can take with you? This will not only come up in your interviews, but you also want to make sure you are helping yourself to set up a successful research program.

What if you do not have a good relationship with your boss, and/or not feel like you are getting training in certain areas from your boss, or even if all is well, just want some outside mentoring? <u>How do you identify 'unofficial mentors' who can help provide some advice?</u> (Not only for postdocs, helpful for grad students to think about too).

• Your science: are there any faculty who either work in similar areas, or who you respect as scientists even if they don't, who you can reach out to to ask some specific questions about your data/new ideas? If so, perhaps start by asking if you could have a brief meeting to get their opinion on something that you think they could help with. Be prepared and specific in what you are asking. Most are very willing to help, but they need to know what you need from them to be able to help. If you feel like it is helpful, keep checking in with them as your project

progresses.

- Another approach is to perhaps ask a PI to present at their lab meeting sometime if you feel their lab could be a good source of advice but I would suggest only doing so with your PI's permission.
- Ask your current PI if you could help with any existing collaborations, or with any grant applications that involve collaborators. This is also a good way to meet people.
- Offer to help faculty who are in charge of organizing seminar series, symposiums, etc. People usually always want help, but if you offer, be sure to make the time and do a good job! If you feel like there is a seminar series that is missing (even perhaps for internal trainees), you with some faculty can help start one!
- Go to seminars, give seminars, go to department happy hours/social events, don't just stay in your lab all day every day without meeting the people around you.

Interviewing for Faculty Positions

Some potential questions you may be asked:

- During your 'Chalk Talk', you will be asked about your research plan. Specifically, what are your projects and what is your grant plan? This typically means what if your first R01 going to be (with specific aims), what projects you plan on pursuing and how you plan on obtaining funding for them, etc. Most places will let you prepare slides for this, but ask in advance, some want you to draw it all on a whiteboard.
- How are your ideas unique from others working in this field, including your own advisor, and how will you be competitive?
- How could you collaborate with other colleagues here?
- Do you need any specialized equipment to do your research?
- If teaching: what types of classes could you teach?
- Some other questions that are not as common but I have seen include: how will you incorporate undergrads (if relevant where you are applying), how will you mentor/what is your training philosophy? What type of position will you hire first? What experiments will you do first?
- Also, be prepared as to how you want to answer personal questions, even though (in the US) they are illegal to ask. These include things like: Are you married? Do you have kids? Do you plan on having kids? You don't have to answer them, but if you don't want to, it is helpful to think about how you want to handle this in advance, as it can be a bit disarming when asked during an interview which is already stressful enough.

Starting Your Own Lab:

- Many institutes often have lab management courses you can look into taking if available. But if not, this is a helpful book by the HHMI that is often used during these courses. A lot of helpful info in this book: <u>https://www.hhmi.org/science-education/programs/resources/making-right-moves</u>
- Do as much organization as you can before you leave. This means getting your cell stocks (and backup stocks) in order, getting protocols ready by including details for people who don't have a lot of experience, making a list of catalog #s of things you need, etc. Idea to help: take pictures of equipment you use (to help you when you order you own), reagents you use, your lab bench to know what you need, etc. and email them to a new email account you create for the specific

purpose of keeping track of all of this. Usually it's easy to take a quick picture while you are working and email it then to remember to write it down later. This way you have all of the pictures, and you can catalog the details all at one time later. If your current lab has a spreadsheet of orders, take a copy with you!

- If you have ongoing projects that are not fundamental to your own research program, it is best to hand them off to your other postdoc colleagues if you can. If not, and you have to bring them with you, finish them as soon as you can. In the US (and in many places abroad), having your postdoc advisor on your papers will not carry the same weight as your own independent lab research papers.
- Listen to your gut when hiring. If you feel like someone is not going to be a good fit with you and your group, it's usually your experience warning you that they really may not be.
- Grants: Take grant courses if they are available to you. Start early on grants and get feedback before submitting. Also, NIH grants have so many sections that are in addition to the research proposal itself. It is best to ask your mentor, other faculty and colleagues, for as many examples of grants as you can get, and to ask for examples of these additional sections. It is hard to write them without seeing examples. The NIH also has a helpful book for grants, called the "NIH Grant Application Writer's Workbook", found here: https://www.grantcentral.com/workbooks/national-institutes-of-health/
- The NIH also has a program where new investigators can sit in on study section panels to learn about the review process, called the Early Career Review Program: https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR
- If teaching: ask any faculty at your former (before you leave) or new institute if they would be willing to share their lecture slides/class materials. Often it is best to get syllabus examples from colleagues at your new institute, as every university may do things a little differently. Do not underestimate how long it will take you your first year to prepare the lectures, exams, etc! It is a lot of work! The more help you can get in the process, the better. And note that many textbooks come with teaching guides and basic slide layouts to help prepare, so be sure to look into what is available for whatever book you may be using.

A couple of points friends in Industry told me about applying to Industry Jobs

- Academic resumes and Industry resumes are very different in their structure and appearance. <u>Do not</u> apply to industry jobs using an academic resume. It can look like you are applying as a backup in case you don't get an academic job, and they will not take your application seriously. Seek out resources at your current institute for help with proper format (or search on-line) to structure your resume accordingly.
- A while ago at a career panel for industry, someone who oversees hiring told the group a tip to get past the initial screening. [For big companies, this is often an automated process, and only the resumes that get past this will be looked at by HR/the hiring department]. This was the tip: copy part of the job ad, add it to the bottom of your resume in very small letters, make it white to match the paper so it can't be seen. This will cause the automation when scanning your resume to 'select' your resume for further review. I don't know if this works, but it was said at a career panel, so I am passing it on.

And always remember, even on days when it may not feel like it: YOU ARE IN CHARGE OF YOUR OWN CAREER