

# Getting an independent faculty position

Ken Poss and Akankshi Munjal

Duke Regeneration Center  
Duke School of Medicine



DUKE  
REGENERATION  
CENTER



Why discuss this?



# Disclaimers



# Today's discussion

1. Postdoctoral training
2. Qualifications - what's important?
3. The application and application process
4. The interviews
5. (Negotiation)



# Be optimistic

**Many schools including Duke attempt to fill multiple open faculty positions each year.**

**The process is inefficient but works.**

**A university or research institution is looking for the right PERSON, not the right topic or paper**

**Do great science, have a good attitude, and make good decisions, and there is a strong chance you will land a position.**



# Choosing a lab for training

You might well **not have a second chance to make the right decision**

Name of the Institution is not overly important. Place yourself in the best position to make key discoveries and be successful.

Complement the strengths from your PhD training. Change of field is not necessary but diversifying skill set is.



# Choosing a lab

## **Committees care about your postdoctoral lab**

Many committee members and departmental chairs label their candidates and hires by lab and lab reputation.



# Choosing a lab

**Examine the mentoring record of the faculty member.**

Make sure they are willing to support scientific independence after the postdoc period.

1. Record of producing new faculty
  - Different criteria based on years of running a lab
2. Clear intention and record of allowing transfer of research project and tools.



Pizza



# Qualifications: Publication Record

**This is the most important factor:**

Most decisions to apply for a faculty position are made and timed based on publication record.



# Publication Record

1. First-authored papers are key.
2. Fancy journal names can be helpful to get a foot in the door.
  - They are not absolutely necessary. Some sophisticated committees intensely scrutinize these papers.
  - The USA does not recognize IMPACT FACTOR metrics
3. Preprints count. AM was shortlisted for the Duke interview based on the preprint.



# Publication Record

1. Number is important. Try to co-author a paper every year.
2. Clarity that **work was directed by first author** is helpful.

First author on a 2-author paper implies more of a contribution than first author or co-first author on a 50-author paper.



# Fellowship/Grant funding

## **Postdoctoral fellowship:**

1. Having a postdoctoral fellowship is good for you and good for your advisor. Financial stability helps you take risks that might pay off.

@International postdocs: This helps your visa too!

2. This is a plus for applications. Johns Hopkins University Website has an excellent list. Check your eligibility early! You can apply for some postdoc fellowships during your PhD



# Fellowship/Grant funding

Many search committees strongly emphasize **transition funding** (e.g. **K99/R00**), essentially a second fellowship applied for within 4 years of PhD.

Transition grants can be huge for you but they are not essential:

1. Good: Money for late postdoctoral phase (up to \$90k/year). Money (up to \$249k total/year) for startup.

- Evidence of effective **grant writing**. Acts as an additional **criterion**.

2. To note: The 4-year period might limit applicants who are **taking risks and longer periods of time to make their discoveries**. Be wary of institutions that require K99's; this is suggestive of limited internal support.

There are online and institutional resources for K grants, and you should start thinking about this from Year 1 of your postdoctoral training.



# Fellowship/Grant funding

**Postdocs, actively engage in writing R01 or foundation grants with your faculty advisor.**

This helps your advisor and gives her ammunition for a reference letter.

You typically do not get formal credit, but it is more a “real” grant application that committees with appreciate.



# Professional references

Plan on needing **4 letters**

Advisor, PhD advisor, 2 collaborators or faculty familiar with you

- Balance senior, well-known references with those who know your work best

**Find these references early** in your postdoc so there is no end rush

- Present at meetings
- Initiate collaborations
- Find local faculty supporters
- Talk to people...



# Networking

Communicate with leaders (Chairs/Directors) in your field, so that you are on your radar.

For example, introduce yourself at that person's seminar visit at your school.

Improve your PI's national and international talks with great slides, so your work will be advertised.

Give talks and posters at national meetings. One per year and more near job search phase. Just do it.

For better or worse, **X** is a great networking platform



# \*Networking

There are several meetings now that are directed towards senior postdocs either planning to be or on the job market

- 1) ISFS organized by Yale
- 2) Duke Next Generation Leaders
- 3) Leading Edge Symposium
- 4) Rising Star Symposia at University of Utah

Future PI Slack Channels



# \*Mentoring experience

Work towards gaining mentoring experience

- 1) Mentor rotation students, Duke undergrads and summer research trainees directly
- 2) Some summer programs select students from URM creating great opportunities to improve diversity and inclusion in STEM
- 3) Start thinking about your mentoring philosophy and statement



# \*Other contributing factors

Demonstrate collaborative and collegial nature during the training period

Identify collaborators and/or co-mentors as early as possible

Form a mentoring committee (helpful for K99 letters too!)



# The application process

1. Advertisements typically in August and September, with deadlines October 1 - December 31.
2. Look for off-season positions. This might suggest multiple faculty position opportunities at one place. (e.g. a new Chair or Institute)
3. Science, Nature, Cell, Society websites, X, etc.
4. FuturePI Slack Channel has advertisements and tons of other resources
5. Most standard, advertised open searches get 100-300 applicants, though there are exceptions for specialized searches. Plan to apply to 40-50 places or even more!



# The Package: Cover Letter

1. One exciting page
2. Don't be modest - indicate your training, accomplishments, cited papers, and future interests. Use "I" not "We". (AM mentioned positive manuscript reviews in the cover letter ). Include a statement about your mentoring philosophy and core values.
3. Tailor to the Institution. Mention faculty with whom you would interact and collaborate.
4. **Have someone read one of your cover letters and your research plan, etc.**



# The Package: The CV

## Key elements (look at examples):

1. Education and Research Experience
  - postdoc training over 6-7 years might make some committees nervous
2. Awards and fellowships.
3. Publications. Use asterisks for shared contributions. Listing submitted manuscripts are fine but of limited help - advisor letter should cover this.
4. Conference presentations – fine to just list talks.
5. Other professional experience (reviewing, mentoring, organizing)
6. List of professional references



# The Package: The Research Proposal

## **General:**

1. This is important.
2. Typically 3 pages. 1 to 1.5 pages describing research accomplishments (typically just postdoctoral or only brief mention of PhD work) and the remainder describing future plans.
3. Get feedback/editing through the process from your colleagues and share with your advisor (for advice).



# Research accomplishments:

## The most effective descriptions:

1. Clearly describe the gaps in the field and the importance of the discoveries. Why it was done and what the findings mean to the field.
2. Have some visuals (figures).
3. Demonstrate skill in one or more **cutting-edge technologies**.
  - Faculty in a department value expertise that is not currently represented
4. Indicate **project and program ownership** - not a cog in a machine. You should make it clear you developed an independent line of research.



# Research plans

## The most effective plans:

1. Organize into enumerated Aims, Projects, or Directions
  - Sub-Aims possible but risk appearing dry
2. Extend from your postdoctoral work. **Don't completely change!**
3. May have a blend of hypothesis-based (factor X does process Y) and exploratory work (using this new platform, I will screen for...)
4. Indicate **exciting** future directions, which may include disease relevance if not mentioned earlier in the proposal
5. Refer to mechanisms for **funding** the work. NIH R01 grant submissions and timing (mention specific NIH institutes), or private foundations like American Heart Association



# The Package: Reference letters

## **Advisor letters are heavily scrutinized!**

3-4 pages description of accomplishments, skills (science, writing, speaking), and personality.

Committees look for descriptions like “star”.



Clarity that you developed an independent line of research that you can take with you, and that you **WILL NOT COMPETE**.

Sometimes you may need to offer to draft this yourself. This is not ideal, but it is better than a middling letter of support.



# \*Mentoring and DEI statements

## **Most universities ask for these statements**

Engage in mentoring within your postdoc lab

Personal statement/narrative of your core values, past experiences, current efforts, and future plans

If institutional efforts don't currently exist, try to take the initiative. Solicit help from colleagues (especially from senior faculty within your department).



# Where/how to apply?

Make it easy for your references with a list of places/deadlines (with 2-4 weeks notice or more). Reminders and confirmations are fine.

Some universities use online submission websites.

AcademicJobsOnline is a general submission site used by many institutions.



# Less formal mechanisms exist

**Clinical departments** can financially support research start-up packages but often use target-of-opportunity mechanisms.

In this case, you can directly write to clinical department chairs or program leaders, or (even better) **ask your advisor** to share your CV.



# A little help

**Phone calls or emails from advisor to search committee or departmental faculty are extremely helpful in the process!**

Ask your advisor to advocate on your behalf!

Ask your advisor to open emails and respond to inquiries about faculty candidates on your behalf!

I contact people at 5-10 favorite schools indicated by postdocs in my lab.



# Getting an interview

Interview committees have a Chair and ~5 other members.

They typically score and rank all applications. Possibly, **only 5 minutes** are spent on each application - sometimes more, sometimes much less.

The top 10-20% are discussed in more detail. 10-20 applicants will be contacted for a 10-15 minute **Zoom interview**



# Zoom interview

1. The idea is to quickly assess whether the applicant is as good as they seem on paper.

Did they **drive** the work intellectually?

Are verbal **communication** skills at the level of a faculty member?

Can that person operate outside of his/her advisor?

2. This will narrow down group to 4-8 invited for a formal visit.  
Groups aim for diversity.



# Zoom interview

1. Describe your accomplishments and plans concisely.
2. Explain why you are interested in the institution.
3. Come off as friendly, excited, and interested.
4. Ask questions. (e.g. What do you like most about Duke? What is the mentoring strategy for junior faculty? ...)
5. Even if you think you know the answers to predicted questions, writing them down and rehearsing them with your friends is very helpful



# The interview

Visits are 2 days, usually with a seminar and chalk talk

Going on 5 to 8 interviews is an ideal number. More if you expect additional factors (spousal hire, etc.)

Decline visit if under no circumstance would you accept the position



# The seminar

NOTES....



# The seminar

1. Number one factor in ranking candidates after visit. **Practice!**
2. 45 minutes ending with a few slides describing **future plans**.
3. Know your audience and level of background to give.
4. Be confident. Use “I” when more appropriate than , “we”.
5. Demonstrate collegiality. Highlight collaborative projects and appropriate acknowledgments.
6. Use high-resolution images, don't crowd slides, **reference others in the field by name**, etc. etc.
7. Receiving and answering audience questions is key.



A (tasteful) joke is fine





# Faculty one-on-ones

1. The interviews assess what type of colleague you are - how you will help the research of other faculty and interact with them.
2. Be yourself, but ramp up your **social, extroverted self**.
3. Research the faculty you will meet. Largely you will be talking about their science.
4. Don't ask about financial details of the position, but ask about the environment, students, internal funding opps, responsiveness of leadership, etc.
5. **Never** speak negatively of your advisor! Or any of your colleagues!



# The chalk talk– V1

1. The second most important aspect of your visit. You are pitching your research plan.
2. This is challenging. Go to faculty chalks talks in your department as a senior postdoc (ask permission first).
3. Bring visuals as you need (e.g. color handouts), but limit your slides to 0 or 1. Use the whiteboard - notes are fine.



# The chalk talk – V1

3. A grant format including Aims is not necessary, but can be safer. Explain your projects and their various components in an organized manner after a brief summary/recap of your interests.
4. Encourage questions, take suggestions well, and show you are open to new ideas or points of view.
5. As you describe your plans, incorporate the department's faculty as potential collaborators or advisors. Mention discussions from the day, etc.
6. Be prepared to describe how you will fund your work.
7. Be prepared to describe how your work will be enabled by the specific environment.



# \*The chalk talk – V2

Most universities give 7-10 mins for introduction and summarising plans). Here I used a presentation with a slide each on:

1. Introduction to my academic trajectory (I put a world map with pins on countries I lived in + what I did there)
2. A slide of what my future lab will be about (Title, Aims, Representative Schematics). I spent time making this slide clear, concise and eye-catching. It was recycled in my main research talk, chalk talk, and lab website.
3. Recap of postdoc findings (short and quick if soon after the research talk / more time if the research talk was >1 week ago.



# \*The chalk talk – V2

4. Gaps in the field (What will my niche be?)
5. How my expertise/skillset can fill these gaps?
6. 3 aims divided into long-term vision and 5 yr plans. I specified the composition of potential lab members (including numbers) & grants. I recycled the future lab slide and used schematics wherever possible
7. 3 aims for my first R01 (if asked)

*If allotted this time, I used it efficiently and practiced 1-on-1 on 5 different kinds of audiences (field & career stage) to gauge clarity and impact.*



# Symposium-style

1. Six to 8 candidates give 30-45 minute talks in a single symposium
2. Interviews, meals, and chalk talks are individually scheduled.
3. Saves time for everyone. A high-quality seminar is now even more important.



# The second visit

- This is about recruiting.
- Chance to meet more faculty and core directors.
- Often, family will join, particularly if a spousal position is required.
- Lab space and startup packages are usually discussed.
- Opportunity to learn about housing.
- Know your requirements. Have a rough budget draft ready.



When you get an offer



# When you get an offer

1. KNOW THE MARKET!!
2. Prepare a detailed budget
3. Money is not the only form of a startup. Know which core resources you have access to, the exact space, solutions to two-body problem, green card
4. Most anything is negotiable. Negotiate housing assistance, signing bonus, and salary within reason
5. More than one big-ticket item may be difficult to receive
6. Ask for all terms to be included in the offer letter.