



**RUTGERS**

School of Graduate Studies

# **iJOBS Workshop Series: Applying to Biomedical Faculty Jobs**

Research Level 1 Institutions

Panel 2

July 22, 2022



# Topics to be covered today:

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| How to select a postdoc that will eventually help you land an academic career  |
| Discussing with your postdoc PI the project that you will take with you and getting them to help you advance your career |
| What other things you should be doing during your postdoc to be ready to apply for faculty jobs                          |
| Applying for K99/R00   |
| Networking   |
| Finding academic jobs to apply to  |
| Preparing the research statement   |
| Preparing the teaching and diversity statements  |
| Preparing the job talk   |
| Preparing the chalk talk   |
| Preparing for the interview itself and tips  |
| Negotiating offers   |
| Setting up the lab   |
| Filling your lab with students, postdocs and techs   |
| Teaching for the first time and preparing classes  |

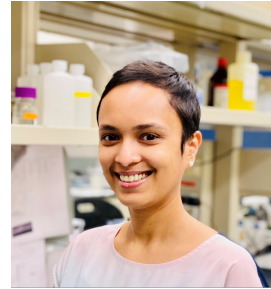
# Panelists



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# How to Select A Postdoc For Academia

- There is no one size fits all answer
- Big-name vs new lab
  - Prestigious labs can help with networking, and funding, but people get lost.
  - No one will ever fight harder for you than a starting PI for their early postdocs
- Pick your postdoc strategically.
  - Seek out new techniques, new scientific domains, new networks of people to improve your value
  - Don't repeat your grad experience
- Think about your story.
  - On the Job Market, you're selling a story about you as a scientist. Link where you started, with what you gained in your postdoc to draw a straight line to your lab. Pick your postdoc with this story in mind.
  - Demonstrate agency, and success in multiple domains.
- Don't neglect the non-science aspects
  - The rest of your life matters! Cost of living, social/family isolation, and quality of life matters a lot in your experience and your productivity.

# Discussing career advancement and taking projects with you

- Your postdoc PI benefits from your success; it's a 2-way relationship
- Have the conversion with your P1 early
  - Think long term prospects when selecting/starting projects
  - Keep the long term prospects in mind throughout your postdoc
  - Have the conversation about what will be done in the future (ie your lab) early and consistently
- Project ideas will evolve throughout your postdoc
  - A single project will not get you a job, you need an overall vision for your lab
  - Compromise. What aspects of your project is your PI most attached to?

# What ~~else~~ should you do during your postdoc?

- Do Good Science.
- Discussing science with lots of people
- Network!
- Mentor others, Give back to your community

# Applying for K99/R00 grants

- Pay attention to deadlines and Eligibility!
- The K99 (as well as most fellowships) is funding a person as much as a project.
  - Put as much thought into the parts describing yourself (career trajectory) as the project.
- Think hard about how you are the perfect person to do the project.
  - What is the intersection between your grad work and your postdoc work?
  - What will make you different from your mentor?

# Applying for K99/R00 grants

- Structuring your proposal
  - Every subaim of every NIH Grant needs: 1. Hypothesis, 2. Experimental Design, 3. Caveats and pitfalls, 4. Interpretation. Make it obvious, reviewers are lazy
  - Each Aim needs to be independent.
  - Include what you learn if everything works.
  - Overall narrative should be clear: 1. Interesting phenomena, 2. Important question about phenomena, 3. Technological/Conceptual Limitation, 4. Path to Overcome Limitation, 5. Insight gained by project. 6. Broader implications for field based on it working.
  - Be ambitious with your independent phase. Even if you're realistic with your Mentored phase
  - If you have multiple independent aims, imagine them being run at the same time by entirely different grad students.



# Applying for K99/R00 grants

- Where to send it?
  - Make sure you think about the right institute, and if the institute is appropriate for a project.
  - Institutes are flexible, but only to an extent
  - Fund rates are not the same everywhere [https://report.nih.gov/success\\_rates/](https://report.nih.gov/success_rates/)

# Networking

- Start long before you become a PI, the earlier the better
- Piggyback on your PIs network during your postdoc
- Social media – Twitter
- Attend and participate during seminars and conferences
- Teaching and service within your University – this can also be a great way to attract students

# Finding academic jobs to apply to

- Great article on applying to faculty jobs <https://www.nature.com/articles/s41386-021-01225-w>
- Journals
  - Nature Careers ([www.nature.com/naturecareers/](http://www.nature.com/naturecareers/))
  - Science Careers (<https://jobs.sciencecareers.org/>)
- Job Boards
  - Herc (<https://www.hercjobs.org/>)
  - Academic Jobs Online ([www.academicjobsonline.org](http://www.academicjobsonline.org))
  - [www.higheredjobs.com](http://www.higheredjobs.com) <https://academiccareers.com/>
  - (I never tried these)
- Societies
  - SFN ([www.neurojobs.sfn.org](http://www.neurojobs.sfn.org))
  - FENS ([www.fens.org/careers/job-market](http://www.fens.org/careers/job-market))
- Informal Groups
  - Neurorumblr (<http://neurorumblr.com/>)
  - Future PI Slack (<https://futurepislack.wordpress.com/>)
- Direct going to department websites!

Apply to everything remotely relevant

# Preparing the research statement

- Find the right balance of catchy/exciting/simple/general and specific/jargony/detailed.
- Grab attention in the first line.
- Tell what you've done only to the extent that it reveals what techniques you know, what discoveries you've contributed to, and how it has prepared you to ask new questions.
- Aims 1 – 3, but not like a grant proposal. Imagine each aim is the main 3-5 year project of one student or postdoc, but explained in only 1 paragraph. None should read like a project that is likely to be done in your previous lab.
- Drop in where you already have funding for a project.
- Figures should be diagram-y, and self-explanatory. They should add to the narrative and replace entire paragraphs of explanation!
- Make clear the big picture theme that unites your aims and how impactful it will be to solve these important problems that cannot be solved without your unique approach.

# Preparing the teaching statement

- What to include within a teaching statement?

(1) Experience teaching, i.e. courses/classes you have taught

(2) Courses you are **qualified and interested** in teaching

And courses that you think **will be a good fit for the university** you are applying to

(1) Experience mentoring (all levels)

(1) Feedback from past teaching/mentoring

(2) Your teaching/mentoring methods

(3) Any teaching/mentoring challenges you faced and how you overcame them

# Preparing the diversity statement

- What to include within a diversity statement?
  - (1) Why is diversity important to you?
  - (2) Familiarize with the university's diversity goals
  - (3) Share your outreach/mentoring experiences
  - (4) If you don't have substantial past activities, focus on future plans focused on diversity, equity, and/or inclusion
  - (5) Ideas on how you will tailor your teaching and mentoring approaches to be more inclusive
  - (6) Take a look at some examples but make an honest attempt based on your own experiences (should not be generic)

# Preparing the job talk

- Do not show every figure of every paper you've ever published.
- Assume each slide will take  $> 2$  minutes. For a 1 hour seminar to leave room for questions you want no more than 20 slides. Keep a few extra after the acknowledgements in case someone asks a question and wants more detail.
- Make simple diagram figures and use them to teach! Don't assume anyone knows anything about any of your techniques or model system or how the data you generated should be interpreted. Hold the audience's hand throughout everything.
- 5 slides of introduction and setting up a big question
- 10 slides to tell 1 good story in detail
- 5 slides to set up your plans for the future – again emphasize how impactful it will be to solve these important problems that cannot be solved without your unique approach.

# Preparing the chalk talk

- It's not as scary as it might seem!
- They want to see how deeply you've thought about your research program and how you think on your feet
- Start with the big picture question your lab will focus on, then zoom in on specific projects
- Consider presenting projects as grant opportunities
  - Grants already awarded are a home run
- Almost guaranteed they'll ask about your first R01 proposal



# Preparing for the interview itself and tips

- For every person on your interview schedule, visit their websites, read their bios and CVs, and skim 1) their most recent preprint, 2) their most recent published paper, 3) a review they've written, and 4) their most highly cited paper from the past. Write down one or 2 ice-breaker questions that relate what they've done to what you do.
- Don't suggest "we should collaborate" – but talk about your work and ask questions about their work in such a way that makes them say, "we should collaborate!"
- Everyone will ask you if you have any questions. You may have 1 or 2 that will be answered early in the day, and then you will want to awkwardly smile and say, "Not really!" It's probably better to just ask those same 1 or 2 questions to everyone (especially the Dept. chair) so they all have the experience of you being prepared and thoughtful and with your own priorities for what will be the right environment for your research, teaching, and mentoring.
- Be yourself. You're looking for a place that will accept you as you are. If they're looking for someone else, that's great to know. That means you're looking for somewhere else, too!

# Negotiating offers

- Before a 2<sup>nd</sup> visit, put together a detailed spreadsheet of every item you plan to buy in your first 5 years. Include the salary and benefits of the staff that you want to hire during that time. Include all equipment, consumables, and animal costs.
- Include your own salary, and any perks that you can dream up like a zero interest loan for a home purchase. Public universities and sites like glassdoor can help you ballpark guesstimate a reasonable starting salary. You know your cost of living, ask for what you need to thrive. You will show them your number first.
- If they offer you everything you asked for, take it. If they go low, evaluate whether or not you can succeed with that offer. If you can, take it. If you cannot, write a detailed explanation of how your success requires the missing component.
- You'll often hear, "Get everything in writing. Nothing is guaranteed unless it's in writing". But the reverse is also true. Lack of progress can result in resources being re-prioritized. And exceptional progress can often result in additional resources being allocated. Your offer is just a place to start! Aim for an appropriately planned and sized springboard.

# Setting up the lab

- Goal is to get your experiments up and running as quickly as possible
  - Prioritize experiments
  - You don't have to order everything at once
- Organization is key
- New lab startup promos
  - Sign up for as many as you want
- Get help if possible
  - A research tech, for example, can save you a lot of time
- Backorders are a problem – plan ahead

# Recruiting students, postdocs and techs

- You're not just hiring individuals, you're building a team
- Be practical but don't settle, good people will come
- Advertisement and self-promotion
  - jobRxiv
  - Social media – Twitter
  - Leverage your contacts within your institution and outside
  - See “Networking”

# Teaching for the first time and preparing for classes

- Don't be scared to develop a fresh new course; **teach what you want to teach if possible!**
- Familiarize yourself with the typical teaching loads for your department
- Talk to colleagues and/or previous instructors about their teaching experience
- Prepare in advance for each lecture
- Key is to get student engagement: generate discussion-based assignments, create discussion forums
- Prepare a clear and detailed syllabus outlining various policies on attendance, class participation, late submission of assignments, plagiarism etc.