Applying to Research-Intensive Faculty Jobs
iJOBS July 10, 2025

- Bridget Matikainen-Ankney, Department of Psychology
- Sara Di Rienzi, Department of Neuroscience and Cell Biology
- Donald Nyangahu, Department of Pharmacology
- Ahmad Cluntun, Department of Biochemistry and Molecular Biology
- Jay Serebrenik, Department of Biochemistry and Molecular Biology
- Jackie Yang, Department of Genetics

Teaching vs Research Intensive

- Your decision!
- Decide early!
- Talk to people in both careers to understand the job requirements and lifestyle
- Certain PhDs might be more amenable to one vs the other but still flexible
- Understand the job market
- Research-intensive will likely still include teaching and vice versa

How to select a postdoc that will eventually help you land an academic career

- Publication record
  - Does each grad student or postdoc have at least one 1st author paper?
- Funding
  - PI funding for the lab
  - Training grants – F31, F32, K01, K99
- Networking
  - Do they know people in the field?
  - Will they introduce you at conferences? (For that matter, will they send you to conferences?)
- Are the people in their lab happy?
  - If not, don't work in that lab.

Transitioning Projects & Leveraging Your Postdoc PI

Before Postdoc

- Talk to current/former lab members about project transitions.
- Identify 2-3 viable projects your PI would support.
  - ➢ select projects you're passionate about, are fundable, publishable, and will differentiate your future lab

With PI

- Collaboratively propose and discuss projects.
- Agree on several projects you will lead and possibly continue independently.
- Clarify expectations on independence, authorship, and resources.

During Postdoc

- Use your PI's network to secure 1) collaborations, 2) talks, & 3) interviews.
- Involve your PI in fellowship proposals (letters, ideas, co-mentors).
- Lead paper writing to maintain momentum and ownership.

What other things you should be doing during your postdoc to be ready to apply for faculty jobs

- Papers
  - Storyboard to have an idea of narrative even as you are collecting data
  - If multiple niche papers (as opposed to an NCS), think about how to link them in a research statement
- Funding – K99, K01, private foundations
  - Talk about funding in your CL (scores, re-submissions, etc)
- Chair a panel or two at a conference
- Practice your chalk talk with 2-4 faculty (twice if you can)

Applying for the K99/R00 grants

- Pathway to independence award (Very competitive and prestigious)
- Minimum 1 year of K99 (up to 2), 3 years of R00 (institute-specific)
- Max $125K/year for K99, and $249/year for R00 phase
- No more than 4 years of postdoc experience
- No citizenship requirement
- Will take at least 3 months to write one (usually Feb, June, and Oct)
- Differentiate yourself from your PI, but also highlight what you will be taking with you
- Training grant, what will you learn in the K phase? (Co-mentor?)
- Will guarantee job interviews

Finding academic jobs – **Cast a Wide Net**

- **Key Message:** Apply broadly to gain experience and maximize opportunities.
- **Strategies:**
- **Use multiple resources:**
  - Google Jobs alerts, LinkedIn/X/Bluesky, Science/Nature Careers.
  - Niche platforms: *Interfolio* (stores ready-to-use recommendation letters, and hosts academic opportunities).
- **Prioritize volume early:**
  - First cycle: Apply to *all* positions that *roughly* fit to build interview skills.
  - Second cycle: Tailor materials for "perfect fit" roles.
- **Assume openness:**
  - Many searches are flexible—submit a generic package if unsure.
- **Pro Tip:** Interviews feel awkward at first; practice makes perfect!

Building and Using Your Academic Network

Existing Network

- 1) Mentors' networks, 2) colleagues at your institutions, 3) past interview contacts.
- Stay in touch with those you meet.

Individual Outreach

- Invite speakers to seminars.
- Establish collabs.
- Cold emails:
  - Brief intro, shared interests, links to papers, CV.
  - Be clear about your ask: advice, connection, feedback.

Conferences

- Attend frequently in the 1-2 years before job applications.
- Present posters and talks, and introduce yourself to speakers.
- Follow up with connections after.

Tip: Relationships grow from authentic curiosity or need. Don't just "network," connect.

Preparing the research statement

- 2-3 pages long
- Walk the search committee through the evolution of your research
- Past, present and future vision (how are they connected?)
- Short term, middle term and long-term goals convey vision
- Tailor to the dept and the Job search (what are they looking for? How do you fit? What instruments or cores would you need? What do they have?)
- Ideally, a continuation of your postdoc work that your PI will not work on, but will provide you with all the reagents (mice, etc…)
- How will you distinguish yourself from your mentor
- Details about possible grants, projects for students vs postdocs
- Ask for feedback! Keep polishing

Preparing the teaching statement

- Spend the most time on the research statement!
- Write as if you are speaking to someone, these topics will come up during your interview
- Teaching philosophy:
  - What you think is the goal of teaching
  - What teaching methods you think are effective in achieving that goal
  - Experiences you have that demonstrate the above two
  - How you would execute these at the school you are applying to (several specific examples)
- Address the above in the context of teaching, research training, and mentoring
- Be objective

Preparing the job talk

- A good job talk should demonstrate that you will be a good researcher and colleague
- Tell audience what you are going to tell them then actually tell them (Outline for the talk)
- Start from the beginning and build into specifics you are working on
- Highlight why what you are doing is important (why do the research?)
- Talk should be broad (a lot of attendees do not have your expertise but are intelligent) and show depth
- Should cover your past research (the most impressive, not all) and highlight what your future research will be (70/30 split)
- What do you want the audience to learn at the end of the talk? Ensure this clearly comes out as you prepare and make your talk
- Eliminate as much text as possible and use diagrams and images
- You can highlight potential funding avenues and collaborators (keep it brief-you will discuss details in the chalk talk)
- Summarize main points at the end of the talk (take home message)
- Plan to talk for a max of 40–45 min if 1 hr is allocated for the seminar–leave sufficient time for QAs
- **Practice your talk multiple times with different audiences prior to attending your interview!!**

Preparing the chalk talk

- Important determinant of whether you get hired
- Can you think on your feet, communicate complex ideas and engage the audience?
- Do you have a vision? Can you attract funding?
- Not your typical ppt presentation–basically write your funding ideas on a board and discuss them
- **The key to a successful chalk talk is multiple rounds of practice!!**
- Develop your board layout ahead of time–eg, draw the layout on a paper and transfer/use diagrams rather than text.
- What proposal will be submitted first? Second?What funding mechanism (R21, R01)?–should show building of a coherent research portfolio (short,medium and long-term goals)
- Discuss background and write aims on the board for each of the proposals in the order you plan to submit
- You will be interrupted several times with questions–answer respectfully and maintain eye contact
- Show enthusiasm and passion for your work. You want faculty attending to see a long-term colleague in you.
- Be ready to defend your scientific position with data when challenged–practice will help anticipate these questions
- Refer to search committee members by name as you respond to the questions they have asked
- Show a clear distinction between your work and that of your PI
- **Very important to manage time spent discussing projects to ensure you discuss all projects within the allocated time**

Academic Interview Prep

Virtual Interviews

- **Format**:
  - 30-minute "screener" can vary widely: mini-talk + Q&A to you + Q&A to them, in any combination.
  - Clarify format and who's attending.
- **Prep**:
  - Identify attendees & research their work, especially potential collaborators.
  - Prepare thoughtful questions to ask.
  - Anticipate common questions. *E.g., Why this institution? Mentoring philosophy? DEI efforts?*
  - Practice your short talk if applicable.
- **Execution & Follow-Up**:
  - Be calm and flexible.
  - Send tailored thank you emails.

In-Person Interviews

- **Format**:
  - Typical: 2-day visit (Seminar + Chalk Talk), but formats vary (1-day combo, symposiums, etc.)
  - Make sure to get all details from contact.
- **Prep**:
  - Research all attendees: search committee, faculty, chair, potential collaborators.
  - Rehearse both talks extensively; tailor content to audience background.
- **Execution**:
  - Dress professionally; bring snacks, water, notebook, markers.
  - Every meeting is evaluative!
  - Ask both scientific and practical questions. *E.g., knowing operational/startup costs can help make more meaningful comparisons of offers.*
- **Follow-Up**:
  - Send personalized thank-you notes to all. Follow-up to gauge interest.

Negotiating offers

- Never accept first offer, always counter
- Everything is negotiable (what is important to you?)
- Not just salary, teaching load, summer salary, signing bonus, startup funds, etc…
- Starting date, office and lab locations, mentors, instruments
- Must-haves vs nice-to-haves
- Startup funds ($ 1million almost everywhere) Rutgers is better
- Having multiple offers does help
- Two-body problem
- In a good negotiation both parties are unhappy about some aspect
- Aim for win-win
- Do not feel pressured to rush to a decision, but don’t take too long

Setting up the lab

- Before you start:
  - IACUC protocols
  - Renovations
  - Recruiting
    - Lab manager/technician
    - Grad students/postdoc
- When you start:
  - **Prioritize first paper, first grant**
    - Minimum viable paper (my opinion, others go with high-impact)
  - Deprioritize collaborations (you need last author papers, not middle)
  - Track your hours (Toggle app)

Filling your lab – **Start Early, Act Fast**

- **Key Message:** Begin recruiting *before* your official start date.
- **Action Steps:**
- **Pre-start prep:**
  - Launch a lab website + social media ads.
  - Sign up for student rotations, attend recruiting events, and prepare videos.
- **Streamline hiring:**
  - Post university job ads early (process takes time! department admin can help).
  - Filter candidates and conduct online interviews proactively.
- **Target postdocs creatively:**
  - Leverage initiatives like *Postdoc Peek* (e.g., Janet's program).
- **Success Story:** Hired a research scientist + technician *before* day one!

Teaching for the first time and preparing classes

Preparing for class

- Define the goals and objectives for the lecture/course
- Well defined goals guide course content and learning activities
- Also help students understand what they should learn and what they should do
- Prepare slides that cover the defined content.
- Slides should be different from seminar presentation, content should be basic with clear definition of terms and illustrations
- Include links to reference publications, websites, books where students can learn more about the subject in your slides
- Have provision for active student engagement after covering particular topics.

Teaching

- On the first day, have students introduce themselves and what they know about the course/lecture to break the ice
- Set expectations on the first day, when you expect assignments to be turned in, in-class behavior, office consultations hours etc
- Establish student-faculty contact in and out of class–motivates students
- Use active learning techniques–pose questions to students to gauge understanding, encourage group work among them and classroom presentation etc
- Respect diverse talents and ways of learning-Students come from diverse backgrounds and gifted differently. Provide opportunities for students to learn in ways that work for them, then can be motivated to learn in new ways.

Service to the school

- Ideally, service is an activity you are:
  - Interested in
  - Qualified to do
  - Have time to do

- 5% effort
- Not a priority
- Will not advance your career
- Try to be strategic, say **No** when needed
- Have fun!