RUTGERS UNIVERSITY
Interdisciplinary Job Opportunities for Biomedical Scientists

iJOBS Workshop: Applying to Biomedical Faculty Jobs

Teaching Intensive Positions

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Panelists

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Topics to be covered today:

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
Deciding R1 vs PUI
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
Service to the school
Preparing for tenure and expectations
Applying for K99/R00 grants

How to select a postdoc that will eventually help you land an academic career (P. Melloy)

- Choose a mentor friendly to researchers who also love teaching
- Choose a model organism that undergraduates could handle too – thinking ahead
- Choose a project that can be followed up with small spinoff projects tailored to undergraduates

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How do you develop your own research program during your post doc?

- What interests you?
- Meet with your PI to brainstorm ideas early on
  - Are there gaps in knowledge that you can fill?
  - What would your first grant look like?
- Form a committee and develop a career development plan with timeline
  - Consider what technical experience you will need and make a plan to acquire it

Deciding Teaching vs Research Intensive

- Identify moments of joy during your day-to-day

- Academic faculty positions found on a spectrum of research-intensive → teaching intensive
  - Depends on type of institution (PUI, R1)
  - Depends on type of position (lecturer, teaching-track)
  - Ask about % effort during interviews

- Consider: job security (or not?), salary differences (or not?)

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

3 faculty components: Research / Teaching / Community

Lots of free experience building opportunities

- Take advantage of seminars as much as you can, especially the professional focused ones
- Get started with community involvement.
- Start writing, Reading and Prepping
- Network / make collaborations AND Grow your mentor base

- **If R1 focused –**
  - Grant writing/training groups
  - Lab Management training
  - Mentorship of others

- **If PUI focused –**
  - Teaching seminars, especially with an online focus
  - Teaching / Mentorship courses/seminars
  - Find programs and support for exposure to teaching and mentoring

- **If unsure / open to R1 & PUI –**
  - All of the above as able and available

Networking (P. Melloy)

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- Connections through LinkedIn
- Network locally with other postdocs who may get a teaching position before you
- Network with professors at any small colleges in your town or region
- Offer to guest lecture or present a research seminar in a class for anyone in your network
- Attend any biology education poster sessions at meetings to connect with others interested in teaching
- Some researchers working with a particular model organism (budding yeast) have separate meetings or sessions geared towards teaching with that model– attend those meetings

Finding Jobs to Apply For:

- Your Network
- Google Search
- Academic Specific Sites
- Fishing!

Finding Jobs to Apply For:

- Your Network – USE YOUR CONNECTIONS!
  - Your alma mater
  - Mentor's and committee's network (word of mouth?)
  - Networking at Conferences (job boards, ask around, visit posters, talks)
  - Social Media or SLACK (New PI Slack, PUI Slack, Drosophila Slack)
  - Your Societies (they have job website job boards)

Finding Jobs to Apply For:

- Google Search
  - Try different combinations of words
    - “PUI, SLAC, Teaching-intensive, teaching-focused”
  - Search often
  - Be open to NEAR matches
    - Biochemistry vs Molecular Biology
    - Cell Bio vs Developmental Bio
    - Genetics vs Molecular
    - etc

Finding Jobs to Apply For:

- Academic Specific Sites
  - Chronicles of Higher Ed (jobs.chronicle.com)
  - Higher Ed Jobs (higheredjobs.com)
  - Inside Higher Ed Careers (careers.insidehighered.com)
  - USAJobs
  - Academic Positions (academicpositions.com)
  - Academic Jobs (academicjobsonline.org)
  - Times Higher Ed (timeshighereducation.com)
  - Academic Keys (academickeys.com)

Finding Jobs to Apply For:

- Fishing!
  - Is there a school you WANT TO WORK AT?
    - Email them and ask!
  - See a position that is KINDA but not really close?
    - APPLY!

Preparing the Diversity Statement

- 1-page first-person reflection
- Consider
  - Mentorship
  - Outreach programs
  - Teaching workshops
  - Course design
  - “Future directions”
- Share identity, acknowledge privilege if you are comfortable doing so

Preparing your Teaching Statement:

- Use “catch words” or “buzz words”
  - Authentic research experiences
  - Critical thinking skills
  - Interactive learning
- Use SPECIFIC examples from your life (even if you haven’t taught a class)
- You really need to have taught a class.
  - Guest Lecture, adjunct, etc
- Ask people to read it. Lots of people.
- YES it should be tailored to EACH SCHOOL
  - Their mission statement, their courses, etc

Preparing the Research Statement

- Three main points to communicate
  1. Interests
     - List the specific research questions you wish to address, this is a nice place to discuss your grad/post-doc work and how you will build-off-of your studies at Rutgers.
  2. Affordable and feasible
     - PUIs have more limited budgets and facilities, so much of the research that you are doing at an R1 might be beyond the scope of your new institution. Communicate that you can scale projects to fit the institutions budget and infrastructure.
  3. Engaging students
     - How you will advertise your lab to undergrads? Discuss potential roles and responsibilities in your lab.

Preparing the job talk (P. Melloy)

- Know your audience
- Take special care to present the necessary background needed for students to understand your work– including explaining all acronyms and avoiding lab jargon
- Research the facilities at the institution so you know what research organisms and techniques can be used there with existing resources
- Give real examples of how an undergraduate could become involved in the work

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Preparing the Chalk Talk

- 30-60 minute demonstration
- Topics: research, course proposal, DEI
- Optimize organization and flow
  - Research aims
  - Timeline
  - Frameworks
- Practice speaking, writing, & drawing out your talk
- Prepare a “skeleton” / outline of your chalk talk

Preparing for Interview:

- RESEARCH THE SCHOOL
  - Mission Statement
  - Majors
  - Courses
  - Big programs
  - Strategic Plan
  - People in the department
  - What facilities do they have
  - Check out the area

Preparing for Interview:

- Common Questions
  - Strengths & Weaknesses
  - How to deal with disengaged students or how to keep their attention
  - Summary of your teaching philosophy
  - What courses do we have that you could teach?
  - What courses do we not have that you would LIKE to teach?
  - Why are you interested in a PUI or SLAC or THIS SCHOOL?
  - How do you get students excited about (your field)?
  - How would you advise a student who is failing your class?
  - What does it mean to have a commitment to DEI and how would you develop that?
  - Do you have any questions?

Preparing for Interview:

- Common Questions
  - How do you plan to secure funding?
  - What resources/equipment do you need in order to be successful here?
  - How do you plan to mentor/support research students in your lab?
  - With whom in the department would you collaborate with?
  - What types of interdisciplinary research will you do?

Preparing for Interview:

- You SHOULD HAVE QUESTIONS
  - It shows you are engaged and that this matters and that you are prepared
  - What is the biggest struggle your students experience?
  - What do your students do after graduation?
  - What do your students do outside of class?
  - What skills not discussed are important to you in a colleague?
  - What are you most hoping someone in this position can do or bring?
  - What is the area like?
  - What is the campus community like?

Preparing for Interview:

- What are they looking for?
  - Do you convey enthusiasm, a desire for the job?
  - Are you competent and able to communicate your ideas clearly?
  - Can you work well with others (specifically those in the department)
  - Are you friendly?
  - Will you add something beneficial to their department?
  - Do they want to work with you for a long time?

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After the Interview:

- Relax
- Reflect
- Make Notes
- Send thank you emails with BRIEF bullet points or extra questions.

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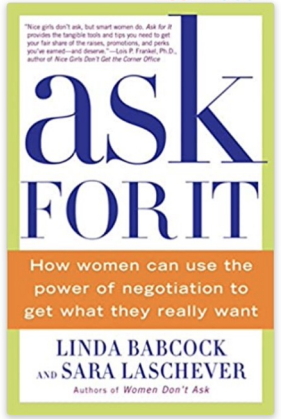

Negotiating offers

Be Prepared and Know your worth

- Look up (if you can) what the listed salaries are for your job title in your specialized area (and at the college/university
- Know the average going rate for your job title everywhere (R1 and PUI)
- Compare with what your job title is requesting
  - Keeping same course vs. expanding vs. developing new
  - What level of research are you bringing and will be developing
- What other competing offers have you received?
- Are you willing to walk away from the offer?
- Other opportunities (course overload, summer teaching, research student funding)
- If you have a record as a “instructor of record” use that for extra steps on pay scale, if they have that.

More than just salary

- Research funding (start-up)
- Moving costs
- Housing
- Course release
- Equipment/Services
- Faculty/Professional development funds
- Benefit expansion
- Office stuff (rising desk, new desk/chairs, location)

Ask for it! All of it!

- They will not take away the offer because you asked for something So ask for it! Worse case, they say no.

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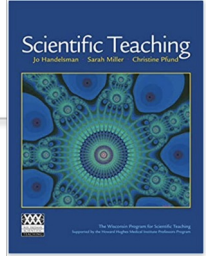

Teaching for the first time and preparing classes

- Look back at your favorite/worst classes (find the syllabus, lecture slides, notes, etc.).
  - What did you love/loath about this class?
- Ask yourself ”what is the most important things my students NEED to learn from my course?”
  - Select a medium to help you in facilitating the learning of these needs (book, online, nothing)
  - Create your overall course learning goals to facilitate learning these needs
- Pick a book or find resources you can use to help you teach. (Good figures, easy to read through, good resources).
  - Lots of MOOCs and open resources available now, BUT… don’t be afraid to go with a book you know and like for a year or two while you develop your dream course.
- Outline a syllabus (ask for your new colleague's syllabus/school templates!)
  - Start laying out your modules/sections and keep filling in weekly, then by lecture/lab
- Try to stay at least 2 weeks ahead (lectures, assignments, etc).
  - Lab staff will likely need the semester planned out. 1st year they usually work with you more loosely.

- **1st year will not be perfect (or 2nd or 3rd!).**
- **You may not be ready until 1 minute before class.**
- **You will learn as much if not more than your students.**

Setting up the lab

- Materials List
  - List everything you use over a few months and get prices
    - Equipment, reagents, consumables, core facility, etc.
  - Prioritize materials by immediate, intermediate, or long-term need
- What does your space look like?
  - Get a schematic of your lab if possible
- When can you spend the money?
  - Check how startup funds are distributed (by semester or yearly)
  - Large purchases usually require multiple quotes

Filling your labs with students

1. Advertise in your classes and tell other faculty members
2. Screen for fit:
   - Require application/ interview process
   - Set clear expectations – hours/week, reports/presentations (especially if for credit)
   - Probationary Period
3. Meet with students regularly to monitor progress

- Hiring postdocs & techs??

Service to the School

- Two main qualities to consider for service
  1. Effort
     - Service is selfless and takes “extra energy” to get done!
     - Volunteer vs elected committees
       - Volunteering to serve on committees is the easiest way to get service
       - Running for elected committees is important, even if you do not receive the position
  2. Creativity
     - Use your networks / *Educate* the public
     - Setting up events is (in my opinion) the most fun way to get service!

Images Related to Sustainability Committee

Service to the School – Field Events

Service to the School – Supporting Events

Service to the School – Holding Events

Preparing for Tenure and Expectations

- Each institution is unique
  - Some institutions have an up-or-out policy with an expectation to publish. Depends on both the student pool and hiring pool for the institution.
    - It is important to be honest about what you will need from the institution to meet those expectations (i.e.; startup funds)
    - Local journals and undergraduate journals are great!
    - Present at conferences
    - Keep a detailed log of your contributions to the university in teaching, service and scholarship
    - It is important to “brag” well when the time comes to apply for associate professor