Postdoc Planning

Long-term career goals

Clearly defining your goals can insure that a postdoc is a valuable experience and make your application documents stronger.

What are 2 or 3 career paths you're interested in? Why?

What type of organization do you want to work for? Why?

How are you preparing for these different career paths (gaining experience, building skills, developing a network)? What opportunities at Duke can you use to prepare?

How can a postdoc prepare you for each of these different career paths?

STUDENT
AFFAIRS
Duke
UNIVERSITY

Why do you want to do a postdoc?

Pros	Cons
• Required for most tenure-track academic careers and some jobs in industry R&D and government research	• Not required for many jobs in industry R&D, policy, science writing, higher ed administration, consulting, clinical research, education, finance, data science, or most other career paths
• Gain experience in research, grant writing, publishing, and networking	• May not have time to gain experience needed for non-academic careers
• Potentially time to transition toward non-academic careers if you did not find these opportunities during grad school	• Exploring careers is not the focus of a postdoc, so you will have to make time and actively seek out opportunities
• You are familiar with academic careers and have a more robust academic network	• Academic careers may not suit your skills, interests, or values
• You are still interested in research in your field and you want to keep pursuing it	• You haven't made decisions about what you want to do next

Read this article from Nature about the effect of a postdoc position on your career, http://www.nature.com/nbt/journal/v35/n1/pdf/nbt.3766.pdf.

Exploring career options

Talk to professionals in your desired field to see if a postdoc is a necessary step or more of a side-step. Ask them if they recommend having postdoc experience, or ask what skills and experience should you build during a postdoc. Here are some ways for you to start exploring potential career options while at Duke:

- Versatile PhD is a collection of stories and resumes of PhDs who have transitioned to non-academic careers, https://gradschool.duke.edu/professional-development/access-versatile-phd
- myIDP can also help you examine your skills and interests to better understand the types of careers you may want to pursue, myidp.sciencecareers.org
- Watch recorded career panel discussions from the Duke Office of Postdoctoral Services' YouTube channel, https://www.youtube.com/user/DukePostdocServices
- Attend events at Duke in the Academic Job Search Series, https://sites.duke.edu/academicjobseries, and the Careers Beyond Academia Series https://sites.duke.edu/careersbeyondacademia, to participate in a career discussion or workshop

A postdoc can be a transitional position in many ways, and there are other, more direct ways to transition into different career paths. For instance, if you are interested in jobs in industry, not just R&D but also from the business and leadership sides, many companies have rotational and leadership development programs targeted toward graduating PhD students, https://www.careereducation.columbia.edu/resources/leadership-development-programs. Industries such as policy, non-profits, and clinical research also have various routes for entry for PhDs that do not involve a postdoc. Talk with current professionals in these areas or a career adviser to learn more.

Career advisers at the Career Center are available to talk with you about your career options. You can make an appointment by logging onto CareerConnections, http://careerconnections.duke.edu.

Goals for your postdoc

"…postdocs who plan their experience with their advisors at the outset of their appointments fare substantially better than those who do not. Postdocs with a written plan submit papers to peer-reviewed journals at a 23% higher rate, first-authored papers at a 30% higher rate, and grant proposals at a 25% higher rate than those without a written plan." (Davis, Sigma Xi 2006)

Gain experience outside of your primary projects

Consider attending professional development opportunities, writing for a local paper, teaching, mentoring students, serving on committees, or participating in outreach to the local community. No matter if you stay in academia or not after a postdoc, these experiences will be important to obtaining and thriving in your next position.

Talk to people in your field or in different fields

Networking is key to looking for academic and non-academic jobs. Tell people about your work and ask about their work and experiences. Reach out to people who wrote an article or book you enjoyed. Ask a few of these people to be your career mentors, and build relationships with them over time. Contact Duke alums through the Alumni Association Directory, https://alumni.duke.edu. Meet with other researchers and employers at conferences.

Skills & credentials to build during a postdoc

1. For the lists of skills below, determine if each skill is important for your career path(s) of interest (check the box).
2. Next to skills you chose as important, score on a scale of 1 (very) to 5 (a little important) how important those skills are for your career path(s) of interest.
3. Use the results to evaluate how potential postdocs suit your goals. Talk with potential postdoc mentors and postdoc offices about how they can help you grow in these areas.

Many of these skills are based on core competencies identified by the National Postdoc Association, http://www.nationalpostdoc.org/?CoreCompetencies. For example skills that are highly valued on the academic job search at various types of institutions, see this Academic Career Readiness Assessment from UCSF, http://tinyurl.com/AcademicCareerAssessment.

Broad research skills
- [ ] Identify research opportunities and challenges
- [ ] Define question
- [ ] Design and manage research project
- [ ] Gain additional knowledge of current research areas
- [ ] Gain knowledge of new research areas

Technical research skills
- [ ] Learn new techniques and methodologies
- [ ] Read and critically analyze the literature
- [ ] Analyze and interpret data
- [ ] Design research protocols (IRB, IACUC, etc.)
- [ ] Facilitate safety inspections
- [ ] Conduct research with human subjects
- [ ] Conduct research involving animals
- [ ] Conduct research using mathematical modeling

Gain credentials
- [ ] Build a body of research
- [ ] Create a unique research niche
- [ ] Publish papers
- [ ] Create unique resources or materials
- [ ] Become a respected expert in the field

Service
- [ ] Serve on grant review panels
- [ ] Participate in advocacy or advisory boards
- [ ] Review manuscripts for a journal
- [ ] Serve on a committee
- [ ] Organize a conference
- [ ] Organize a speaker series
- [ ] Create professional development events or resources

Network

- [ ] Attend conferences
- [ ] Meet people at institutions or organizations where you may want to work in the future
- [ ] Develop relationships
- [ ] Find people to write letters of reference

Explore career options

- [ ] Create an individual development plan
- [ ] Conduct informational interviews
- [ ] Gain experience in non-faculty career path(s) of interest
- [ ] Utilize mentor's network
- [ ] Gain exposure to the life of a faculty member (e.g., going to faculty meetings)

Interpersonal &management

- [ ] Select new lab members
- [ ] Recruit, hire, and terminate personnel
- [ ] Train students and staff
- [ ] Manage people
- [ ] Develop and manage a budget
- [ ] Administer grants
- [ ] Leadership
- [ ] Motivate and inspire others
- [ ] Mentor others
- [ ] Conduct a performance review
- [ ] Demonstrate professionalism
- [ ] Establish and maintain collaborations
- [ ] Partner with government agencies, foundations, and nonprofits
- [ ] Identify and manage conflicts of interest
- [ ] Work with people from diverse backgrounds
- [ ] Practice responsible authorship
- [ ] Conduct a meeting
- [ ] Delegate

Communication

- [ ] Write manuscripts for publication
- [ ] Navigate peer review and publication
- [ ] Write grant proposals
- [ ] Present to scientific audiences
- [ ] Present to non-scientific audiences
- [ ] Provide constructive feedback
- [ ] Prepare job application documents
- [ ] Prepare for job interviews and job talks
- [ ] Negotiate
- [ ] Resolve conflicts
- [ ] Communicate with the news media
- [ ] Teach courses
- [ ] Learn teaching methods/pedagogy
- [ ] Design courses

Project Management

- [ ] Maintain records of experiments, results, and materials
- [ ] Manage time
- [ ] Manage resources
- [ ] Manage data storage, integrity, and ownership
- [ ] Set and meet deadlines
- [ ] Manage multiple priorities

Other

- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____