



ASPIRE

# ASPIRE Guide for Career Planning

2021-2022



VANDERBILT.

Biomedical Research Education and Training  
Office of Career Development

Visit us online at <https://medschool.vanderbilt.edu/career-development/>



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# Introduction

Career and professional development is critical for everyone's long-term success, but career planning is often overshadowed by day-to-day activities and near-term deadlines, like finishing an experiment, acquiring data before the next lab meeting, or preparing for a presentation. Setting specific goals to engage in career and professional development activities will help you commit to developing your professional self alongside advancing your research.



# What's Inside

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This workbook is designed to help you identify ASPIRE activities to pursue during the upcoming year. These ASPIRE activities will help you:

- **Make progress in your professional development:**  
Acquiring the competencies and skills needed to complete your training as a biomedical scientist (Page 6)
- **Make progress in your career exploration:**  
Learning about career options for scientists (Pages 7-8)
- **Build professional relationships and conduct informational interviews:**  
Identifying and connecting with people who can tell you about their career path, provide advice, and help you connect with other professionals (Page 9-10)
- **Test your interests and build skills:**  
Engaging in activities that help you test your interests in various careers, and improving upon skills and knowledge which are needed to enter the career field that interests you (Page 11-12)
- **Conduct a job search or apply for postdocs:**  
Writing a tailored resume or polishing your CV, preparing for interviews, identifying potential employers or postdoc opportunities, and applying for positions (Page 13)

On Page 14 of the workbook, you will synthesize your selections into an academic year timeline so you can view your professional development plans alongside your research and PhD program activities.

# Getting Oriented

Circle your current career stage:



## Pre-Qualifying Exam:

Establish a strong foundation for your research project and PhD program. Focus on career exploration, informational interviewing, and building professional relationships. Participate in activities that help you meet people and develop leadership and communication skills.



## Post-Qualifying Exam:

Execute your research project. Continue career exploration, informational interviewing, and building professional relationships. As your career interests crystalize, test your interests and build skills related to the career paths that interest you. Begin applying for postdocs and preparing for your job search about 12 months before you finish.

## Scientific Society and Professional Organization Membership

Many scientific societies and professional organizations offer robust career and professional development resources for members. List your professional memberships here and make note of their career exploration or professional development resources that you may want to pursue. If there are specific events or workshops you would like to attend, enter the date into the academic year timeline on Page 9.

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# Career Plans

## **Plan A: First-choice career**

## **Plan B: Second-choice career**

If you struggle to name your Plan A and Plan B interests, view a list of potential career paths for PhD scientists on the next page. You can also use the [free career matching tool](#) from AAAS ScienceCareers to find careers that may be a good fit for your skills, interests, and career-related values.

State your Plan A and Plan B career interests here:

“Plan A” career interest:

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“Plan B” career interest:

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Other careers that you haven't ruled out:

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# Career Paths for Biomedical PhD Scientists

Select your level of interest for each career area. Careers you mark as, “Will Definitely Pursue” or “Strongly Considering” are candidates for your “Plan A” and “Plan B” careers. Careers you mark as “Not Familiar” are careers you should learn more about.

	Will Definitely Pursue	Strongly Considering	Moderately Considering	Not Considering	Not Familiar with Career
Academic or Nonprofit Administration					
Business Development					
Consulting					
Clinical Research Management					
Data Science/Analytics					
Entrepreneurship					
Government Administration					
Government Defense or Intelligence					
Healthcare Provider					
Industry Scientist					
Intellectual Property, Law, or Tech Transfer					
K-12 Science Education/Outreach					
Manufacturing/Process Development					
Medical Science Liaison					
Medical Testing or Forensic Science					
Medical Writing					
Principal Investigator/Professor					
Professor - Teaching					
Professor - Teaching + Research					
Research Staff/Nontenure Faculty					
Regulatory Affairs					
Science Journalism					
Science Policy					
Software Development or Programming					
Technical Sales/Support for Scientific Products					

# Professional Development

Acquiring the competencies and skills needed to complete your PhD training.

The Vanderbilt Individual Development Plan (IDP) describes seven core competencies to be mastered during biomedical PhD training. You will develop many of these competencies by completing the requirements of your PhD program, and the ASPIRE Bistro series and ASPIRE modules provide opportunities to supplement your PhD training. View our website for full descriptions, registration information, and application deadlines. The stamp indicates whether the session is for early-stage (blue), mid-to-late stage (purple), or all (yellow) students.

**Circle the Bistro Sessions and ASPIRE Modules you want to attend in 2021-22.**

## 2020-21 ASPIRE Bistro for PhD Students

Date		Topic (Speaker)
September 2	ALL	ASPIRE for Career Planning (ASPIRE team)
October 7	MID-LATE	The Next Step: Applying for a Postdoc or Your Post-Grad Job (Kathy Gould)
November 4	EARLY	Applying for Fellowships and NSRAs (Kim Petrie)
December 2	ALL	Savvy Science: Professionalism Strategies for Success (Kate Stuart)
February 3	ALL	Informational Interviewing (Ashley Brady)
March 3	MID-LATE	A Fair Look: How to Review a Paper (Kathy Gould)
April 7	MID-LATE	The Next Step: Applying for a Postdoc or Your Post-Grad Job (Kathy Gould)
May 5	MID-LATE	Preparing to Mentor (Beth Bowman)



Spring semester modules will include: Biomedical Research and the Media, Clinical Laboratory Medicine, Management and Business Principles for Scientists, and Practical Strategies for Strong Writing.

## 2020-21 ASPIRE Modules for Professional Development

Semester		Topic
Fall	MID-LATE	Networking Pacing
Fall	EARLY	Maximizing Your Potential
Fall	MID-LATE	EQ + IQ = Career Success
Fall	MID-LATE	Practical Strategies for Strong Writing

# Career Exploration

## Learning about career options for scientists.

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If you were easily able to identify a Plan A and Plan B career interest on Page 4:

- Select career exploration activities that help you develop a deeper understanding of these careers, industries, and potential employers. You may discover new, related careers to explore by approaching this process with curiosity and an open mind.

If you are an early-stage graduate student...

If you struggled to name both a Plan A and a Plan B career...

If your list of, "Other careers that you haven't ruled out" is lengthy...

- Start by learning more about a broad range of careers. Take notes about what you find appealing (or not) about each one. Patterns may emerge to help you clarify a Plan A and Plan B interest. Keep in mind that two people may have similar job titles, but do very different work, and the context of work is important. For example, a research scientist in academia may have very different experiences than a research scientist in a government or industry lab or a startup company.

You can begin to explore career options online. This ASPIRE blog post lists our [Top 6 online resources](#) for exploring career options, one of which is our [Beyond the Lab](#) video and podcast interviews with VU alumni.

**Find 3 (or more) [Beyond the Lab](#) interviews to listen to:**

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Another helpful avenue for trainees to explore career options is through the "Career Options" tags on the [BRET ASPIRE Blog](#). Explore 28 different career options through individualized tags that each lead you to applicable blog post archives. Search for a specific career option or look through them all to learn more about what jobs are available in that field, specific job descriptions, companies to look into, and upcoming events pertaining to that career. Using the tags can also help you identify funding or externship opportunities that also provide opportunities for further exploration.



# Career Exploration

Learning about career options for scientists.

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The ASPIRE Program offers two opportunities to hear directly from professionals about their career journey and ask questions relating to your specific interests.

(1) Annual Career Symposium: The next Annual Career Symposium will be June 3, 2022, and the theme is **Science Careers that Put Your Communication Skills to Work**. The Annual Career Symposium is a day-long event held annually at the end of the spring semester to showcase a variety of career opportunities in science.

(2) Monthly PhD Career Stories: Monthly seminar series about career options for PhD scientists. Speakers from a diverse range of exciting scientific careers present their career paths and share insights from their professional experiences. Come hear about the career journey from Vanderbilt Alumni and professionals working in the field, and see if this is a career path that could suit you.



**Visit the PhD Career Stories website to view the upcoming events for 2021–22. List the dates and topics you are interested in attending:**

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# Informational Interviewing and Building Professional Relationships

Identifying and connecting with people who can tell you about their career path, provide advice, and help you connect with other professionals.

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Professional relationships are key to career success whether you land in a job inside or outside academia. Your contacts and colleagues can provide insight into career options and advice for navigating your career, and they can become collaborators on projects or champions of your professionalism and accomplishments.



When it comes to investing time in building professional relationships, the sooner you begin, the better. Building connections earlier gives you time to nurture those relationships and to be helpful to others. It's important to build your network both inside and outside the institution.

Make a point of getting to know the faculty, postdocs, and other students in your department when you attend journal clubs and retreats. Ask your advisor or program faculty to introduce you to former students and postdocs who pursued careers relevant to your interests. Take advantage of the opportunity to meet seminar speakers to learn more about doing research in different environments. Build your network by joining (and being active in!) student organizations, volunteering to help organize events in your department, and serving on the Annual Career Symposium planning committee. Before you attend scientific and professional conferences, investigate who will be there and arrange meetings in advance so you can be intentional about meeting new people.

The ASPIRE program provides opportunities to expand your professional network and develop informational interviewing and networking skills. ASPIRE builds time for networking into most PhD Career Stories seminars and Annual Career Symposium events. Stick around after the event to meet speakers personally, then follow up with an email to thank them for sharing their story. Connecting with speakers on LinkedIn is another way to follow-up after you have introduced yourself at the events. For speakers whose careers are of particular interest to you, ask them to do an informational interview so you can learn more about their career path and whether it is a good fit for you.





# Informational Interviewing and Building Professional Relationships

Identifying and connecting with people who can tell you about their career path, provide advice, and help you connect with other professionals.

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**Review the list of PhD Career Stories topics on Page 8.**

Which speakers would you like to send thank you notes to?

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Which speakers would you like to ask for an informational interview?

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Want to build your network in a particular career field or industry?

Start by reaching out to alumni of your lab, PhD program, undergraduate institution, or Vanderbilt on LinkedIn. Join our LinkedIn group for current and former biomedical PhD and postdocs, the “Vanderbilt University Biomedical Research Graduate and Postdoctoral Trainees and Alumni” group.

Date you joined the LinkedIn Group: \_\_\_\_\_

List people from your Plan A or Plan B career options you would like to connect with on LinkedIn: \_\_\_\_\_

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# Testing Your Interests and Building Skills

Engaging in activities that help you test your interests in different careers and improve upon skills and knowledge which are needed to enter the field that interests you.

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Think back to the time before you came to Vanderbilt for grad school. Why did you decide to apply for PhD programs? Very few people decide to go to grad school without "testing" their interests and building research skills through an in-depth research experience like a summer internship or employment as a lab assistant.

Similarly, it is important to test your interests and develop skills for your post-PhD profession. If you intend to pursue a research-intensive faculty career, your PhD training itself helps you build skills for that career. If you intend to pursue other careers, find ways to test interests out to gain confidence in your decision and accomplishments you can highlight in your CV or resume.

Testing your interest may be a time-intensive endeavor compared to career exploration. On the next page you'll find descriptions of three activities designed to help with the challenging task of exploring your potential interests. Pursue these experiences after you have passed your qualifying exams and thoroughly investigated career options. They will provide a more in-depth and Intensive view of how your current interests may align with your future career in practical, tangible ways.



# Testing Your Interests and Building Skills

Engaging in activities that help you test your interests in different careers and improve upon skills and knowledge which are needed to enter the field that interests you.

ASPIRE offers three opportunities to test your interests and build skills:

(1) [ASPIRE on the Road](#) is a field trip program in which the ASPIRE team takes PhD students and postdocs to visit employers in certain industries. ASPIRE on the Road visits Washington, D.C., every other October for a science-policy focused field trip. Each April, ASPIRE on the Road takes a pharmaceutical/biotech-focused trip to destinations like San Diego or Boston. Airfare and hotel accommodations are paid by the ASPIRE program, and applications are competitive.

(2) [ASPIRE Internships](#) are part-time opportunities to gain hands-on experience in a professional work environment. Internships are offered on a rolling basis, and many employers have offered internships year after year. We advise students to plan a semester in advance if they would like to do an internship. A list of [previously offered internships](#) can be found online, along with a list of [internships outside ASPIRE](#).

(3) [ASPIRE Modules](#) are non-credit bearing short courses that offer exposure to specific career areas or skills not typically encountered in the lab. Many include a project component, making these an excellent way to test your interest and develop skills in a particular area.



**Circle the ASPIRE Modules that interest you in 2021-22.**

## [2021-22 ASPIRE Modules for Career Development](#)

Semester	Topic
Fall	SciComm for All
Fall + Spring	Data Science Essentials
Spring	Management and Business Principles for Scientists
Spring	Biomedical Research and Media
Spring	Clinical Laboratory Medicine
Spring	STEM Teaching in K12 Schools

# Conducting a Job Search or Applying for Postdocs

Writing a tailored resume or polishing your CV, preparing for interviews, identifying potential employers or postdoc opportunities, and applying for positions.

If you plan to do a postdoc, you should begin reaching out to potential postdoctoral mentors about 12 months before you plan to finish your PhD training.

If you plan to apply for jobs, you can begin to investigate potential employers (including reaching out to alumni and others for company insights and advice), write a resume, and prepare for interviews about 12 months prior to finishing. You can start actively applying for positions about 3-4 months before you finish.

Some companies hire year-round, but in certain industries, recruiting is cyclical. The academic hiring cycle for teaching-intensive faculty positions usually begins in the fall prior to the academic year a professorship would begin. Large management consulting firms recruit advanced degree candidates in the summer. Some pharmaceutical company postdoc programs recruit cyclically as well.

The ASPIRE Job Search series covers topics relevant to your job search process like interviewing and writing cover letters. Watch as well for Employer Information Sessions that are scheduled at varying times throughout the year, as requested by employers. We also post job and postdoctoral opportunities on our blog and Twitter feed, @VUBRETPhDJobs.

## [2021-22 ASPIRE Bistro sessions pertinent to job search](#)

Date	Topic
October 7	The Next Step: Applying for a Postdoc or Your Post-Grad Job
February 3	Informational Interviewing
April 7	The Next Step: Applying for a Postdoc or Your Post-Grad Job

## [2021-22 ASPIRE Job Search Series](#)

Date	Topic
September 16	Resumes/Industry CVs
September 30	Leveraging LinkedIn
October 21	Preparing for a Teaching Demo
November 18	Writing a Better Cover Letter
January 20	Interviewing 101
February 17	Behavioral Interviewing
March 17	Exploring and Preparing for Faculty Careers
April 21	Writing a Better Cover Letter
May 19	Resume/Industry CVs

# Putting It All Together

Map your planned career and professional development activities, and PhD program and research activities onto the calendar using the table below. Start by filling in activities that have a specific date. If there are "holes" in your calendar, that's a great time to work on building professional relationships or accomplishing activities that don't have deadlines. Read the [bimonthly ASPIRE e-newsletter](#) and [ASPIRE blog](#), visit our event calendar, and follow [ASPIRE on Twitter](#) for announcements about ad hoc opportunities.

Month	Career/Professional Development Activity	PhD Program/Research Activity
Example	ASPIRE Bistro: NRSA's & Fellowships (Nov 5) PhD Career Stories: Regulatory Affairs (Nov 6) Watch Beyond the Lab videos about Reg. Affairs	Journal Club presentation (Nov 17) Draft specific aims for NRSA application
September		
October		
November		
December		
January		
February		
March		
April		
May		
June		
July		
August		



# Notes

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