

# paths through academia: opportunities after college & grad school

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# outline

- planning final years of college and beyond (“post-bacc”)
  - research experience while in college and after you graduate
  - how to find post-bacc opportunities and what to expect
- brief overview of careers after the PhD
  - reflections on skills, values, and interests you develop through the PhD
- broader takeaways
- discussion & questions throughout!

# planning next steps for final years of college & beyond

college

“post-bacc” opportunities



PhD



## post-bacc examples:

- 1- to 2-year full-time research assistant position
  - clinical research coordinator, technical assistant, lab manager, etc.
- other possibilities: master's

# ways to get research experience while in college

- join a lab at your undergrad institution (or neighboring institutions, virtual opportunities, etc.)
  - opportunities may be available for course credit, work-study, volunteering, etc.
    - funding may be available to assist you with your research!
    - check out umbrella research organizations for undergrads
  - an independent project is a plus (look into options for doing an **honors thesis**)
    - could lead to participation in academic conferences (e.g., giving a poster presentation) or manuscript

# ways to get research experience while in college

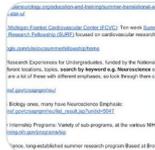
- apply for summer research programs
  - e.g., MindCORE's Undergraduate Summer Fellowship Program
  - NSF-sponsored Research Experience for Undergraduates (REU)
  - note: keep track of deadlines, and constraints like specific eligibility years



**Aizenman Lab**  
@AizenmanLab

...

Are you looking for paid summer research opportunities in Neuroscience? I've compiled a list of programs that you can apply for. Let me know if you know of others not on the list.



docs.google.com  
Paid Undergraduate Summer Research Opportunities  
Paid Undergraduate Summer Research Opportunities in Neuroscience (and other life sciences) 2021 Note: Some ...



**Maureen Ritchey**  
@maureenritchey

...

A list of summer undergrad and post-bacc research opportunities in cognitive neuroscience:  
[docs.google.com/spreadsheets/d/...](https://docs.google.com/spreadsheets/d/...) Applications due soon!



docs.google.com  
Summer Undergrad & Post-Bacc Programs in Cognitive Neu...  
Programs Title,Type,Location,URL,Stipend,Application deadline,Year Added to List Columbia Bridge to PhD ...

# ways to get research experience while in college

- skill development (not required but could give you a helpful leg up!):
  - programming, statistics, R (LOTS of free online courses)
  - research methods & experimental design
  - writing – check out [The Writing Workshop](#) by Barbara Sarnecka
  - communicating about science to the general public
- take advantage of the increase in publicly shared datasets, tutorials, & analysis tools

# some factors to consider

- college → PhD

- applications would be due ~December of senior year

clinical research coordinator  
technical assistant  
lab manager  
research fellow  
etc.

- college → post-bacc → PhD

- job postings frequently appear online around early/mid-spring with summer start dates, full-time, last 1-2 years (2 years will allow you to gain more experience)
- variety of possible job titles, generally all refer to the same thing
- some are “9-to-5” jobs, others are structured research training programs like the [NIH IRTA program](#), but usually all are implicitly understood to be stepping stones to grad school (but may vary in their opportunities for independent research)

**bottom line**: you know yourself best! we’ll go over some helpful aspects of having post-bacc research experience, but each of these paths may have their own personal benefits

# why consider a post-bacc research assistant position

- learn more about the field and hone your research interests
- increase your confidence that you want to apply
- gain research experience and strengthen your application
- gain mentors who can help you with the application process
- get a chance to catch your breath (you'll have just finished college!)
  - time to explore your own personal interests, experience a working environment and think about your work-life balance priorities, etc.

# how to find post-bacc positions?

- websites for job postings
  - crowd-sourced sites and forums like predoc section of the [Psychology Job Wiki](#), [Clinical Psych Grad School](#), [Psychology Job & Internship Opportunities](#), [Pathways to Science](#), Yale's Psych Undergrad Outreach Listserv
  - department websites, e.g., [Post-Graduate Psychology Research Jobs \(Harvard University\)](#)
  - listservs through academic/professional societies, e.g., [CogDevSoc listserv](#)
  - HR sites at universities and other research organizations
  - job sites, e.g., [HigherEdJobs](#), [Indeed](#)
    - try a combination of search words: "Psychology", "Neuroscience" (or other field of interest); "Research Assistant"; "Lab Manager/Coordinator/Technician"
  - websites of professors or labs you are interested in
- [NIH RePORTER website](#) – shows actively funded projects (i.e., PI may be more likely to be hiring)

# how to find post-bacc positions?

- network connections & social media
  - tell your lab professor that you are looking for jobs so they can keep an eye out!
  - “cold emails” - reach out to faculty to express interest and ask if they are hiring
    - email: brief, show you have looked into their work, include your resume

*this template is geared towards seeking out undergrad RA positions; for post-bacc inquiries you would just want to make it clear that you're interested in full-time job openings*

Subject: Possible **undergraduate research** opportunities

Dear Dr. **Professor**,

I am a **(year, major)** at **(university)** and I am writing to ask about opportunities for undergraduate research in your lab beginning **(time period)**. I have conducted undergraduate research on **(topic)** with **(names)** in **(program or class)**. **(Expression of interest in the topic)**. I would like to continue a path of research on **(topic)** and would ultimately allow me to **(career goal)**. I am especially interested in your previous work on **(describe a paper or talk)**.

I have attached my **CV and unofficial transcript** to this e-mail, but if there is additional information that I have not included that you would like, I would be happy to provide it to you. Thank you for your consideration.

Sincerely,

*a resume is likely to be sufficient at the post-bacc stage, unless they specifically ask you for a CV; also probably won't need to provide a transcript, PIs will generally be more interested in your relevant research experiences and skills*

reference: <https://ugr.ue.ucsc.edu/email>

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  - academic twitter
    - lots of compiled documents and lists out there by grad students and postdocs
    - follow scientists and labs that you are interested in
    - hashtags/accounts like [#AcademicTwitter](#), [#AcademicChatter](#), [@PsychResList](#) (shares psych & neuro resources), [@ASecretMenu](#) (hidden curriculum of academia), [@PsychChatter](#) (compiles monthly job postings)

# what to expect for post-bacc applications

- job posting will have expected and preferred qualifications
  - ok to apply even if you feel you aren't qualified!
- resume or CV (resume probably more common for post-bacc)
  - what makes a CV different? more detailed, includes sections like: education, research experience/skills, presentations/publications, honors and awards, volunteer or service work, teaching, clinical experience, professional affiliations
- interviews
  - chance to chat with the PI, hear more about current research of the lab, expectations and responsibilities of the job position, etc.
- ask peers & mentors for advice / feedback / practice / samples!

# what to expect from post-bacc experience

## examples of responsibilities

conducting literature reviews  
drafting/submitting IRB  
recruiting participants  
administering assessments  
wet lab procedures  
managing and coding data  
conducting statistical analyses  
assisting with posters, talks, manuscripts

- consider the job responsibilities, expectations – what will you likely get out of the job? is it aligned with your professional development needs?
- seek out ways to do independent work, great to take initiative to acquire skills

what about after the PhD!

## diversity of options

## *examples*

<b>academic positions (or “academic adjacent”)</b>	tenure-track professor leading a lab teaching faculty at a liberal arts college research scientist grants program officer
<b>industry</b>	user experience (UX) researcher data scientist (e.g., “data science for social good”)
<b>policy, advocacy, non-profits</b>	research analyst for a foundation or thinktank policy staffer at federal or state level behavior change scientist
<b>science communication &amp; outreach</b>	science journalist (or editor) director of museum & outreach initiatives
<b>clinical work</b>	therapist (if clinical psych PhD)

*\* certain PhD skill sets may better prepare you for certain career options*

# reflection activity

1. jot down your broader goals and values
2. how might a PhD help with achieving those things?

(sites like [myIDP](#) offer assessments for thinking about these things in a science careers context)

skills developed  
during a PhD

critical thinking	data analysis
problem solving	team work
integration of literature	mentorship
writing skills	public speaking
project management	

# communities that provide support at all academic stages

dedicated to amplifying & empowering trainees, and to sharing community stories



@BlackInNeuro



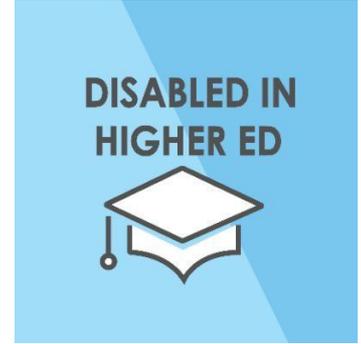
@ReclaimingSTEMI



@500womensci



@blackinxnetwork



@DisInHigherEd



@SocietySpark



@LGBTSTEM



@LatinxInPsych

# broader takeaways

- the path leading up to and following a PhD will look different for everyone
- **a PhD has its challenges:** e.g., difficulty of finding a faculty position, mental health and imposter syndrome struggles, issues with diversity and other institutional problems, the hidden curriculum
- getting additional research/life experience (i.e., through a post-bacc) can be very valuable
- **a PhD has its positives:** many of you love science & learning and are really curious about your research area, and/or have a career path you are passionate about that requires a PhD — you all absolutely belong in science, and would develop many transferable skills
- try to **center your personal needs, values, and goals** — we want you to succeed in whatever way that looks like to you