Welcome to the NGG

Chair: Josh Gold jigold@pennmedicine.upenn.edu

Directors for Admissions: Judy Grinspan grinspan@email.chop.edu

> Amelia Eisch eischa@upenn.edu

Coordinator: Christine Clay

cclay@pennmedicine.upenn.edu





Why go to grad school?

- Are deeply committed to research
- Want to work independently
- Do NOT need to know exact research topic
- Do NOT need to know your expected career path





Am I ready for grad school?

- Ready to do independent research
- Ready to transition away from directed classroom-based learning towards constant experience-based learning
- Ready for both successes and failures
- Ready to immerse yourself





Academic background

- We prefer biology, chemistry (incl. organic chemistry), physics, math, statistics, and neuroscience majors
- Psychology majors are welcome to apply, but a basic science background is helpful





Personal statement vs. research statement





Personal statement vs. research statement

Personal statement: why do you want a PhD in neuroscience, and why in our program?

- How did you develop an interest in neuroscience?
- How have you prepared yourself for a career in neuroscience?
- Why do you want a PhD in neuroscience?
- What area of neuroscience interests you most at the moment (not binding, and not used to fill quotas!)?
- Why is Penn NGG right for you?
- Personal statement should be *personal*
- We value diversity in all its forms.





Personal statement vs. research statement

Research statement: your research experience as an undergrad or post-undergrad

- What labs did you work in and where? For how long?
- What do those labs study? What topic did you work on?
- What <u>hypothesis</u> did you test in your work and what were the results (negative results are important, too)?
- If this research experience part of a larger program (SUIP, Prep program, MARC fellowship), how did the program contribute to the experience?
- If you had more than one lab experience, discuss all or pick one that was the most meaningful to you





Grade-point average (GPA)

- We have <u>no GPA cut-off</u>, but our applicants tend to have been very successful in their classes
- <u>Type of class matters to us</u>. We realize if you have taken really hard sciences, your GPA may be lower.
- We like to see <u>GPAs improve with time</u>. We understand academics on the college level can take some adjustments.





Research experience

(undergrad, post-undergrad)

- Minimum: several summers as undergrad and hopefully also during academic year.
- None as undergrad? Post-college is great, if worked full-time as tech or post-baccalaureate student
- Definitely helps: earned publication, abstract, or presentation co-authorship





What should be on my CV?

- Your lab experience. Provide full name of PI, department, institution, city, state, along with 1-2 sentence brief description of what you did and precise dates (elaborate in research statement).
- <u>Any publications</u>, including manuscripts *under review* or *in preparation*, abstracts, posters, or other presentations.
 Coordinate with PI to ensure info is same in their letter.
- <u>Honors, special achievements, special program involvement</u> (with explanation if not universally recognizable)





CV myths

- No, it does not need to be fancy or professionally done.
- No, laboratories taken for credit (e.g., organic chemistry) do not count as "lab experience". OK to put on CV, but don't list as "lab experience".
- Yes, CV can be more than 1 pg.
- Yes, extracurricular activities and achievements are welcome
- Yes, we look <u>very</u> carefully at the CV





Graduate-Led Initiatives and Activities (GLIA)





Slide 12/17



We offer personal and professional development opportunities and support to all neuroscience graduate students.

GOAL: Enhance our doctoral training through extracurricular opportunities

- Teaching
- Volunteering
- Engaging in community outreach
- Increasing public understanding of neuroscience
- Preparing ourselves professionally for our next career steps





Outreach

- Grades K-8 education We bring basic concepts in neuroscience to provide young students for early exposure to our emerging field
- Grades 9-12 education We facilitate a neuroscience summer course (<u>Neuroscience</u> <u>Upward Bound</u>), independent research projects with students (<u>Research Fridays</u>), and a neuroscience competition (<u>Brain Bee</u>)
- Community Outreach We host booths at the annual <u>Philadelphia Science Festival</u> (lectures, debates, hands-on activities, special exhibitions, and informal science education)
- Student-run publications We publish short, digestible summaries of the latest published neuroscience research from NGG graduate students (<u>Brains in Briefs</u>) and articles about hot topics in neuroscience (<u>PennNeuroKnow</u>)
- **Penn Neuroscience Public Lecture** We organize three 15 minute <u>TED-style talks</u> from Penn faculty to teach the community about interesting neuroscience topics





Professional Development

- Fuel for Successful Scientists (FSS) A career-development workshop with an informal style. Penn faculty answer questions about their journey through academia. These sessions help students make the most of their time in graduate school and think about potential career paths
- The Return of NGG Alumni (RNA) Aiming to bridge the gap between current and former NGG students, these 1-hour sessions feature a short talk by the alumnus about their current work followed by a Q&A session with current students
- Student invited Seminar Series (SISS) Dissertation-level students invite and host Neuroscience faculty from around the country to campus to give lectures as part of the MINS seminar series
- **NeuroNet** Website for perspective, current, and former students to access the student and alumni information and maintain connections
- Other opportunities hosting TA training, workshops, and a teaching certificates; Career Services (offices at Penn to help graduate students with career planning and decisions); BGS Career development page; Penn Policy Group; Penn Biotech Group (PBG) and Penn Data Science Group





Community Building

- Student retreat Our student-run retreat features student research talks and panels, a photo scavenger hunt, first-year Family Feud, and raffles
- Chalk talks NGG students volunteer to give an informal half-hour talk with only a whiteboard, dried up markers, and illegible handwritten notes
- Data Eclipse This student-led seminar encouraging students to view mistakes as learning experiences, become more resilient to failure, and grow as people and scientists
- Social nights casual gatherings to promote community and provide fun and excitement





Public relations

Alumni affairs initiative

Recruitment*

Website management

*Recruitment weekends rely heavily on the enthusiasm and dedication of NGG students

Check out our webpage and social media accounts!



