A selection of undergraduate research opportunities in Psychology & Neuroscience at Duke for Spring 2019

Background

It’s never too early or late to get involved in research. As an undergraduate, you play a critical role in labs in Psychology & Neuroscience: many labs rely on undergraduates to run participants and process data. And researchers are often looking for motivated undergraduates who are ready to implement their original research ideas – similar to what you already have practice doing with your R&W project!

Types of research opportunities available

Some labs will pay you for your help, and may be selective for work-study students.

You can also receive course credit for participating in research, with the most demanding course being year-long course for seniors that culminates in an honors thesis.

What’s the difference between a research practicum, independent study, and the Graduation with Distinction program (honors thesis)? Find out more on the P&N website: https://psychandneuro.duke.edu/undergraduate/independent_study

Finding more research opportunities

Our collection of research opportunities is not exhaustive! Here are some more ways to explore research opportunities:

- Many labs post opportunities online: https://psychandneuro.duke.edu/undergraduate/research-opportunities-jobs
- Review faculty biographies to learn about their research, and consider emailing them to see if there are research assistant positions available
- Keep an eye out for emails to the listserv for psychology majors and minors
- Talk to your TF and other teaching staff in PSY101 – we may know of opportunities!

The 101 teaching staff would be happy to have a conversation about research opportunities – reach out to us!
• Looking for 2 undergraduate researchers
• Time commitment: 5 to 10 hours/week
• Opportunities available: Practicum, Independent Study, Volunteer, Honors thesis
• Other criteria: junior or younger; willing to work out of our lab space in Brightleaf Square at least 2 hrs/week

Contact: Savannah Erwin (savannah.erwin@gmail.com)

*What will you be doing?* At a minimum, you will have the opportunity to be involved with writing IRB protocols, organizing and analyzing quantitative and qualitative data from Qualtrics surveys, and coding video data. If you are interested in developing your own project, I would be happy to work with you to integrate your ideas with my ongoing projects! I have several projects that you can choose to work on -- all related to the general topic of eating disorders.

If interested: send list of classes, any special skills, why you're interested, and whether or not you would be potentially available to participate in VIP over the summer.
Tomasello Lab with Michael Tomasello (Developmental Psychology)

- Looking for 3 undergraduate researchers
- Opportunities available: Practicum, Paid, work-study, Volunteer
- Time commitment: 10 hours/week
- Contact: Amanda Nafe (amanda.nafe@duke.edu)

*What will you be doing?* Help interact with kids and manage data for studies related to communication, joint attention, social norms, and more.

If interested: send resume with your email
www.bergelsonlab.com for info

Looking for 2 undergraduate researchers

Time commitment: 10 hours/week

Opportunities available: Practicum, Paid

Other criteria: Preference for sophomores and juniors. Experience with infants and toddlers a plus. Should be detail oriented, and excited about language/cognition.

Contact: Hallie Garrison (hallie.garrison@duke.edu)

What will you be doing? Running lab visits with infants and their families. Recruiting participants for infant language studies. Annotating audio and video data of infants at home, specifically looking at nouns (and their relationship to receptive and productive vocabulary).

If interested: Email current CV, unofficial transcript, and cover letter explaining any relevant experience and why they feel they are a good fit for our lab.
Christina Williams Lab (Development, Neuroscience)

- Looking for 2 undergraduate researchers
- Opportunities available: Practicum, Independent Study
- Time commitment: 8-15 hours/week, depending on whether they are doing a practicum or independent study.
- Contact: Sara Maurer (sara.maurer@duke.edu)

What will you be doing? Post-operative cognitive dysfunction (POCD) is the phenomenon in which subtle but long-lasting learning and memory deficits develop after surgery, and is associated with heightened neuroinflammation. Our lab seeks to mitigate the cognitive deficits after surgery using dietary choline supplementation in a mouse model.

We are seeking a highly motivated student to assist with any and all tasks associated with this project, including: handling mice, running behavioral tests, dissection, slicing tissue on a cryostat, staining tissue using immunohistochemistry, counting cells, and analyzing data.

We are looking for students who will commit to being in the lab for at least two semesters. We have high expectations for our undergrads, such as being on time and asking many questions.

Based on performance in lab, accepted students can expect one-on-one training, a letter of recommendation, and a possible author credit on a poster presentation (typically for Graduation with Distinction students with 2+ years in the lab).

We pride ourselves on using the lab as a classroom, and look forward to mentoring another student or two on this project. Please feel free to email Sara with any questions.

If interested: Please include any previous lab experiences and why you're interested in working in this lab.
Asher Lab (Developmental/Social/Clinical Psychology)

- Looking for 2 undergraduate researchers
- Opportunities available: Practicum, Paid (work-study)
- Time commitment: 4-6 hours/week
- Contact: Paula Yust (paula.yust@duke.edu)

*What will you be doing?* We are seeking research assistants for Spring 2019 for a project examining friendships and social and emotional well-being in adolescence. This opportunity would be ideal for students who are interested in gaining hands-on research experience relevant to developmental, social, and clinical psychology topics. Research assistants would be involved in reading published literature, finalizing measures to include in the assessment, assisting with Qualtrics survey creation, data collection and analyses, and report writing.

Research assistants will need to have weekday availability between 9:00am-5:00pm (at least 4-6 hours per week, preferably in 2-3 hour chunks) and demonstrate an interest and willingness to learn more about peer relationships in adolescence. A willingness to learn how to use research databases and software such as SPSS and Qualtrics is required.

If interested: Please send a brief statement of your interest, previous relevant experience (including relevant course work), and preference for practicum/course credit or work study/paid positions.
BRITE lab with Bridgette Hard (Cognitive/Social Psychology)

• Looking for 1 undergraduate researcher with computer science, text mining, and/or web application experience
• Opportunities available: Practicum, Paid (hourly), Consulting stipend
• Time commitment: ~20 hours over the course of the semester
• Contact: Brenda Yang (brenda.yang@duke.edu)

What will you be doing? In PSY101, we learned about the power of growth mindsets when contrasted with fixed mindsets, based on pioneering work by Carol Dweck. Our current project explores new ways of assessing people’s beliefs about intelligence using people’s open-ended responses to prompts. We are interested in developing automated approaches to this process, and seek technical expertise.

We would be happy to work with you as a collaborator to develop this project. This is a good fit for someone with technical skills, as well as an interest in: applying psychology to educational contexts, conducting research in classrooms, and/or establishing the validity and reliability of new measures. We are also open to discussing a “consulting” fee for your technical help.

Desired skills: Experience working with a versatile programming language such as Python or R. Experience developing simple applications for the web.

If interested: Please email a few sentences explaining your interest, and your experience with the technical aspects of this project. We will provide more details about the project over email or with a short meeting.
Egner Lab with Tobias Egner (Cognitive Neuroscience)

- Looking for 1 undergraduate researcher
- Opportunities available: Practicum, Independent Study, Honors thesis (note that honors thesis is NOT for next semester)
- Time commitment: 8-10 hours/week
- Other criterion: Junior or younger; experience with programming and statistics a plus
- Contact: Christina Bejjani (christina.bejjani@duke.edu)

What will you be doing? “Control-learning” refers to how humans learn to dynamically adjust their attention across changing contexts: for instance, driving down a main street with constant bottlenecks vs. a relatively less crowded side street. Via online data collection and computational modeling, the primary project an RA would work on seeks to understand the role that long-term memory can play in facilitating control-learning (e.g., driving down the main street with a higher attentional state, because of prior experience navigating that road). This would help us better understand control-learning in healthy and disordered brains as well as everyday interactions between attention and memory.

In terms of practical experiences, because this project has four separate aims, each with their own predictions and line of background research, it would be ideal for undergraduates who are looking to pursue independent study projects. Undergraduate students would not be responsible for data collection, as this is more easily performed online via Amazon Mechanical Turk, but would be responsible for data analysis, stimulus set generation, potential help with experiment coding, and manuscript preparation. An undergraduate involved with this project would receive deep training on running an experiment from start to finish, and would gain expertise across a wide variety of research angles (e.g., reliability vs. modeling).

If interested, please email: Resume, classes, explanation of why you're interested & what you want out of the experience we can tailor mentorship accordingly