UNDERGRADUATE RESEARCH OPPORTUNITIES
Research Assistantship Directory (2020-2021 Academic Year)

Updated: 08/19/2020

Researcher

Name of Faculty: Irving Biederman
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Web: (lab web page): geon.usc.edu
Phone: (310) 614-3903 (Cell)

Current Research Topics Under Investigation
The current major projects in the lab are: 1. How we are able to identify people on the basis of their face or voice. This research includes a study of the neural basis of congenital prosopagnosia. 2. Understanding how a scene or object can be recognized in a fraction of a second, even when we have never encountered that image previously. 3. An investigation of the neural basis of perceptual and cognitive pleasure, based on a gradient of opioid receptors in the same pathway by which image understanding is achieved. 4. Creativity, in the specific domain of humor generation, based on tracking remote associations in the brain.

Specific and Desired Qualifications for Research Assistants
We seek bright, motivated students, the earlier in their academic career, the better. We have taken students with a variety of majors including Psychology, Neuroscience, Computer Science, and Biomedical Engineering. A science background and technical skills, such as programming, statistics, and math are pluses but we can train you. Taking my PSYC 440 or 540 course is also a plus. The ultimate goal is for the student to be able to make a scientific or intellectual contribution to the research that is sufficient for her or him to qualify as a coauthor on peer-reviewed journal publications and/or a presentations at world class conferences. We don’t want drones. Do look at recent students and alumni from the lab to see how much they have accomplished. The CVs of a number of undergraduates from the lab resemble those of new PhDs

Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?
As of now, Fall 2020 research will be conducted virtually.

Office Location: HNB 316

Office Hours: By appointment. Email bieder@usc.edu
Current Research Topics Under Investigation
Our lab investigates decision making in older adults through the Finance, Cognition, and Health in Elders Study (FINCHES). Older adults are often faced with important decisions in financial and health matters, and these decisions often have significant consequences on independence and wellbeing in old age. We use a multifactorial approach that includes cognitive, behavioral economic, and magnetic resonance imaging techniques to understand factors associated with financial exploitation in non-demented older adults.

Specific Qualifications for Research Assistants
- Able to commit to a minimum of 8 hours per week
- Minimum commitment of one semester
- Knowledge of Microsoft Office programs, especially Excel
- During work-from-home ordinance due to COVID-19: Must have access to internet to complete tasks
- Once it is safe to resume work in the office: Ability to commute to Alhambra campus location (1000 S. Fremont Ave., Alhambra, CA 91803)

Desired Qualifications for Research Assistants
- Independent, hardworking, with attention to detail
- Experience using statistical software such as SPSS or R is a plus.
- Strong interest in cognitive psychology and/or neuropsychology
- Strong interest in interacting with older adult research participants
- Interest in applying to graduate school in psychology, neuroscience, etc.

If you are interested, please email Caroline Nguyen (caroline.nguyen2@med.usc.edu) with a copy of your resume.

Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?
- During Fall 2020: Students will volunteer remotely/virtually
- During Spring 2021: Location for lab experience will be determined closer to the start of the term. If resuming work in the office has been deemed safe, we expect students to commute to the Alhambra campus and report in-person when necessary.

Office Location: Department of Family Medicine, Alhambra Campus; 1000 S. Fremont Ave., Building A-6, 4th floor, Alhambra, CA 91803
Office Hours: By appointment
Current Research Topics Under Investigation

1. Policy Decision Making
2. Public responses to extreme events, e.g., Pandemics, Natural Disasters, Terrorism
3. Lay perceptions of legal thresholds, e.g., Beyond a reasonable doubt (BRD), Presumption of innocence (POI), Probable cause (PC), Reasonable suspicion (RS)
4. Assessment and improvement of users’ ability to identify true and false content on social media

Specific Qualifications for Research Assistants

Curiosity about the topics listed above

Desired Qualifications for Research Assistants

Experience and/or familiarity with Qualtrics survey platform
Proficiency in using Excel
Experience using any statistics software, e.g., R, SPSS

Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?

Lab experience will be virtual until safe to continue in-person.

Office Location: SGM 713

Office Hours: Mondays 9:00-10:00
**Current Research Topics Under Investigation**

The Measurement and Multilevel Modeling (MMM) develop and apply data analytic, statistical methods to answer collaborative, substantive research questions. Currently, our methodological research topics include developing methods to detect biases in psychological tests (e.g., DSM criteria, cognitive tests) across people with different demographic and cultural backgrounds, deriving an optimal procedure to minimize bias in personnel selection, and building web applications to help applied researchers plan large-scale intervention studies. In addition, we apply data analytic methods to analyze data about behavioral and substance addiction, psychometric evaluations of neuropsychological assessments, and the relations between parenting and children's health behaviors.

**Specific Qualifications for Research Assistants**
- Interest in quantitative data analysis and/or psychological measurement
- Willing to learn new data analytic methods, such as data visualization, structural equation modeling, multilevel modeling, and item response theory
- Prior experience with data management and analysis using R, SPSS, or any other statistical software
- Able to commit 4-8 hours per week.

**Desired Qualifications for Research Assistants**
- Experience with programming (e.g., R, Python, Julia)
- Strong organizational skills

**Students will participate in this lab experience virtually during Fall 2020 and Spring 2021**

**Office Hours:** By appointment

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**Researchers**

**Name of Faculty:** Adam Leventhal, PhD (adam.leventhal@usc.edu), Matthew Kirkpatrick, PhD (mgkirkpa@usc.edu), Jessica Barrington-Trimis, PhD (jtrimis@usc.edu), Junhan Cho, PhD (junhanch@usc.edu), Lorraine Kelley-Quon, MD, MSHS, FAAP (kelleyqu@usc.edu), & Alayna Tackett, PhD (alaynata@usc.edu)

**Contact:** Christie Ngo; Coordinator, Student Research Assistant Program (cngo4350@usc.edu)
**Web:** [https://heal.usc.edu/](https://heal.usc.edu/)
**Phone:** 323-442-2598

**Current Research Topics Under Investigation**

Students will assist with ongoing studies at the Health, Emotion and Addiction Lab (HEAL) under the supervision of USC-HEAL faculty. These studies include:
1. A placebo-controlled, double-blind clinical trial examining the effects of the hormone oxytocin on smoking urge.
2. A smoking cessation EMA study that examines the nature and mechanisms of a smoking romantic partner’s influence on an individual's craving and smoking during attempted smoking cessation.
3. A prospective cohort study to study patterns of vaping and smoking cannabis and nicotine products in young adults.
4. A double-blind clinical trial that will examine the effects of negative reinforcement on obsessive-compulsive symptoms and increased tobacco dependence.
5. A double-blind study clinical trial that will compare the efficacy of two smoking cessation drugs.
7. A study of examining the lung function of young adults who are e-cigarette users, cigarette smokers, or dual users.
8. A study exploring the appeal and lung function of switching to iQOS device among never-vaping cigarette smokers.
9. A study investigating the year effects of e-cigarette use on pulmonary functioning compared to non-users.

Remote responsibilities include:
- Conducting health history eligibility screening interviews
- Assisting with participant recruitment
- Data collection in lab-based behavioral experiments with adult substance users
- Preparation of research materials

Specific Qualifications for Research Assistants
Opportunities are available for bright, motivated, and curious students to gain human-subjects based research experience while working with faculty, staff, and students at the Keck School of Medicine Department of Preventive Medicine. Students should have strong organizational, listening, and interpersonal skills.

All our studies require a minimum commitment of:
- Weekly volunteer shifts totaling 8 hours during normal business hours
- Two semesters of commitment to the Student Research Assistant position
- Attendance at weekly lab meetings, Fridays 2:30-4pm

Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?
Students may participate virtually during Fall 2020 and Spring 2021

Office Location: 2250 Alcazar St, CSC 270 & 271, Los Angeles, CA 90033
Office Hours: Monday – Friday 8:30am to 4:30pm
**Current Research Topics Under Investigation**
We use functional neuroimaging and behavioral methods to investigate how emotion influences memory and cognition. We also examine age and sex differences in these processes.

**Specific Qualifications for Research Assistants**
- Must be able to commit at least 12 hours per week (preferably doing blocks of 4-5 hours) for a minimum of 2 semesters.
- Must be highly detail-oriented
- Must be reliable, punctual, and have good history of time management
- Must be a team player

Research Assistants are most often involved with running experiment sessions with participants, coding and enter data, preparing stimuli, doing literature searches, and recruiting participants for studies. Depending on the project, there is also the opportunity to assist with data analysis.

**Desired Qualifications for Research Assistants**
Experience working with older adults and software programming skills a plus, but not required.

**Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?** Yes, as positions become available.

**Office Location:**
USC Davis School of Gerontology
3715 McClintock Ave. Room 341
Los Angeles, CA 90089-0191

**Office Hours:** Monday-Friday, 9am-5pm
Current Research Topics Under Investigation

In my laboratory, we are currently focusing on an NIH-funded study that brings people into the lab to consume alcohol while wearing numerous biosensors and being measured on breath and transdermal alcohol and various physical responses to alcohol. This study provides a good opportunity for undergraduates wanting to get clinical psychology research experience directly interacting with human subjects. Students would be part of a team that includes students, staff, and faculty in the Psychology and Math Departments, and like prior undergraduates if they do well volunteering, there could be future opportunities for SURF/SOAR/URAP/PURF awards, 290/490 courses, and the honors program.

Specific Qualifications for Research Assistants

Highly motivated, reliable, and detail-oriented. Able to commit 8-10 hours per week.

Desired Qualifications for Research Assistants

Knowledge of SPSS and Excel preferable. GPA 3.0 or higher. Completion of course in research methods.

If interested, please email Dr. Luczak with a copy of your resume and your unofficial transcript.

Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?

New undergraduate positions will open in the spring more likely than in the fall, with additional projects likely starting in the spring and summer.

Office Location: SGM 826
Office Hours: By Appointment

Researcher

Name of Faculty: Gayla Margolin
Email: margolin@usc.edu
Web: http://dornsife.usc.edu/labs/margolinfamilystudies/

Current Research Topics Under Investigation

The Family Studies Project aims to identify factors that affect how young adults respond in close relationships—particularly with dating partners. We look closely at the influences based on childhood experiences of aggression and adversity. To delve deeply into young adults' romantic relationships, we collect data on their physiological reactivity, compassion, and also capture behavioral samples of how dating partners talk with one another. If you are interested in becoming a research assistant, please read our webpage, submit a resume and fill out the form available on our website on the Prospective Students page: http://dornsife.usc.edu/labs/margolinfamilystudies/admission/

Specific Qualifications for Research Assistants

Research assistants will be involved with processing physiological data as well as coding real-life discussion collected in either the lab or in couples’ homes. Research assistants should have 8 hours minimum per week (10 or more preferred) to work on the research. The ability to work as part of a team and attention to detail are essential. Research assistants who make a serious commitment to the project may be asked to assist our data collection efforts with our community-recruited participants.

Desired Qualifications for Research Assistants

Desired qualifications include interest in and/or experience with learning about psychological methods such as physiological measurement and/or behavioral observation as well as an interest in young adult couples and young parenthood. GPA of 3.5 or higher is desired. If interested, please email Dr. Margolin with a copy of your resume and your transcript (unofficial is fine).

Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?

Fall 2020 will be strictly virtual experiences. Spring 2021 will be virtual unless campus is opened.

Office Location: SGM 923, 924, 925

Office Hours: By appointment
Researcher

Name of Faculty: Jonathan Stange
Email: jstange@usc.edu
Web: https://www.psych.uic.edu/research/lab-directory/cognition-and-affect-regulation-carr-lab (Note: the lab will be moving to the University of Southern California in Fall 2020.)
Phone: TBD

Current Research Topics Under Investigation
The Cognition and Affect Regulation Lab examines cognitive and affective processes involved in the regulation of negative affect, in an effort to identify vulnerability factors for mood disorders and suicide. For example, how do people help themselves to feel better when they feel sad – and how do these processes go awry in depression?

This work involves laboratory-based measures of brain activity (using fMRI and event-related potentials), autonomic nervous system functioning (ECG and respiration), and behavior (cognitive tasks and questionnaires). In addition, to understand behavior outside of the lab, we utilize ambulatory assessment to measure autonomic nervous system functioning (with wearable devices), sleep quality (with actigraphy), affect and regulation strategies (using ecological momentary assessment on smartphones), and digital phenotyping approaches to measuring behavior. The ultimate goal of this research is to characterize phenotypes of risk for mood disorders, and to inform the development of personalized, real-time interventions to improve flexibility and regulatory success, and in doing so, to reduce risk for problems such as depression and suicide.

Specific Qualifications for Research Assistants
- Must be very detail-oriented, hard-working, professional, prompt, reliable and good with people. You will be helping make the lab run; therefore, your commitment and reliability are extremely important.
- Strong interpersonal skills and excellent communication, organization, presentation and computer skills.
- Ability to work effectively as part of a team (e.g., share duties with other research assistants when recruiting and running study participants; complete components of data analysis, slide presentations and manuscript preparations with the PI).
- Ability to complete work remotely (e.g., reliable computer and internet access at home) as may be required during pandemic.

Desired Qualifications for Research Assistants
- Preference will be given to students who have an interest or experience working with psychophysiology, ambulatory assessment, and/or neuroimaging data and who can commit to the lab for 1 year or more.
- Programming experience is a plus, ideally in Python and/or Matlab, or if neither of those, ability to quickly learn these types of programming languages.
- Prefer sophomores or above, and those who have taken coursework in research methods.
- Minimum GPA of 3.3 (will consider exceptions with strong potential).
- BIPOC students are strongly encouraged to apply.

**Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?**
- Regulations around the pandemic are changing frequently. At the moment we plan to operate primarily virtually, but we hope to make the experience a hybrid of in-person and remote-access at some point this year.

**Office Location:** SGM 1010

**Office Hours:** TBD

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**Researcher:** Sarah Townsend  
**Email:** sarahtow@marshall.usc.edu  
**Web:** https://www.sarahsmtownsend.com/

**Current Research Topics Under Investigation**
The Cultural Diversity and Psychophysiology (CDP) Lab specializes in research on the psychological foundations of inequality. Her research reveals the dysfunctional behaviors and physiological costs that can result when individuals’ cultural norms collide with the dominant cultural norms of organizations. We examine how these “cultural divides” are often a hidden source of inequality, but how they can be used to lessen opportunity gaps and fuel greater cross-group understanding.

**Specific Qualifications for Research Assistants:**
The CDP Lab is looking for motivated, conscientious, and responsible undergraduate Research Assistants for 2020-21 school year. This is a great opportunity to gain valuable research experience, bolster your applications for graduate programs, and have the opportunity to develop your interests within the field. RAs will work remotely and will be responsible for helping with online data collection and related tasks. We are looking for RAs with a 3.3 GPA or higher, who are detail-oriented, hardworking and are broadly interested in social class, race, and/or psychophysiology.

No previous research experiences necessary, but RAs are asked to give a minimum 1-year commitment with at least 8-10 hours per week. Fall participation will be conducted virtually. It is unknown at the moment if research in the Spring will be conducted virtually or in person.

We are committed to building a diverse research team. Accordingly, we strongly encourage applications from women, racial/ethnic minorities, and other underrepresented groups.

**Office Location:** Hoffman Hall, 403  
**Office Hours:** By appointment
GRADUATE STUDENTS
NOTE: STUDENTS SEEKING PSYC 490 CREDIT FOR RESEARCH EXPERIENCE MUST BE WORKING UNDER THE SUPERVISION OF A FACULTY MEMBER. THE INDIVIDUALS LISTED BELOW ARE GRADUATE STUDENTS AND MAY NOT SERVE AS YOUR PRIMARY SUPERVISOR TOWARDS 490 CREDIT. CONSULT WITH THEIR SUPERVISING FACULTY MEMBER CONCERNING THE POSSIBILITY OF 490 CREDIT.

Researcher

Ian Anderson (works with Dr. Wood)

Email: iaanders@usc.edu

Current Research Topics Under Investigation

My general focus is on media habits. For example: Can habits explain why people use social media, and the different behaviors such as posting and scrolling that take place there? My current project with Dr. Wood focuses on posting behavior on Facebook and Twitter. These may expand to include work on Instagram and other social networking sites. App usage habits, gaming habits, and other media-based habits are also potentially interesting future areas of study.

Specific Qualifications for Research Assistants

Research assistants will be expected to collaborate on data collection and have the opportunity to learn hands-on regarding data analysis as well. I am seeking reliable students who can collaborate with others and are willing to give their input both in lab meeting and regarding current projects.

I will primarily be looking at monitoring Facebook posting behavior for a project we’re looking to wrap up during the Fall 2020 semester. If you are interested in media habits, this is a great project to become involved with as an introduction to this area of study.

Desired Qualifications for Research Assistants

Intro psych and social psych coursework, along with a research methods class, may be helpful. Knowledge of basic statistics and experience with SPSS or R is a plus, though not required. Programming experience, particularly in web scraping or text analysis, would also be very useful for these projects, but is not a requirement.
Will students be able to participate in this lab experience in-person, hybrid, or virtually during Fall 2020 and Spring 2021?

Fall 2020 will be virtual, Spring 2021 will be as-needed, possibly hybrid if the coronavirus situation improves.

**Office Location:** SGM 801  
**Office Hours:** By appointment; email if you’re interested