1. Measuring the Effectiveness of Cognitive Play on Reasoning and Math Achievement
   Building Blocks of Cognition Laboratory
2. Cognitive Behavior Therapy and Science Center
3. Walker lab
4. Language, Emotion, and Development project (Project LEAD)
5. The Effect of Oxytocin on Cohesion and Teambuilding
6. Sleep and Neuroimaging
7. Social perception photo project
8. Measuring the Effectiveness of Cognitive Play on Reasoning and Math Achievement
9. Language and Emotion in Chinese- and Mexican- American Preschoolers
10. Does practice make perfect when it comes to reasoning skills?
11. Berkeley Early Learning Lab Research Assistant Position
12. Examining Personal Reputation and Compassion
13. Depression Treatment Study
14. Improving Intergroup Relations in the Digital Age
15. Learning and generalization
16. EEG correlates of working memory in learning
17. Emotion and Cognition study
18. Social class, Inequality, and Identity
19. Risk Resilience Research Lab
20. Immigrant Adolescent Project
21. Social reasoning and sport
   22. Cross-cultural studies of the emotion of awe
23. UCSF and San Francisco VA Medical Center research study
24. Inequality, Threat, and the Social Fabric: Laboratory Studies on the Harmful Effects of Income Inequality on Social Relations and Well-Being
25. Assorted topics related to the SIR lab--see website--but examples include research projects on income inequality, power/hierarchy, the self-concept, authenticity, close relationships

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**Measuring the Effectiveness of Cognitive Play on Reasoning and Math Achievement**
**Building Blocks of Cognition Laboratory**
**PI: Silvia Bunge Ph.D.**
**Lead Post Graduate Researcher: Ariel Starr, Ph.D.**
**Graduate Student Mentor: Chloe Green, M.A.**

We are seeking undergraduate students to work 3 days (9 hours per week) on an intervention research study to earn PSC99 units. Students must have prior experience working with young children. Eligible students must be available between 2-5pm during 3 days per week. Please email bungelab@berkeley.edu with your resume, cover letter, availability, and questions if you are interested. Please title the email “Cognitive Play RA Position.”

**Goal: Specific Aims**
Prior work demonstrates that children’s reasoning ability can be improved through interventions focused on cognitive play. This research aims to capitalize on these successes to elucidate the nature of the relationship between reasoning and academic achievement. In the current study, we aim to assess the
impact of cognitive play on cognitive abilities and academic skills (e.g. math ability) in young children who have just begun formal math education. The intervention will take place in after-school program settings and will involve playing games geared towards improving relational reasoning, processing speed, and/or number sense games. Participants will complete cognitive and academic assessments before and after the training, some of which will be performed while eye-gaze and pupillometric measures will be recorded. The eyetracking metrics provide information regarding the strategies engaged during the task, which will provide insight into how cognitive play alters children’s reasoning strategies.

2. Methods:
This fall semester we will be working in the Berkeley School District After School Program with kindergarten and first-grade students. We will recruit approximately 25 children per cognitive play condition. Participants will complete pre- and post-testing using cognitive and academic tests as well as eyetracking measures. The cognitive play intervention itself will consist of a specially selected curriculum of board games that target either reasoning skills or processing speed. The entire length of the study will be approximately 10 weeks.

3. Student's Role:
Research assistants will be involved in all aspects of the study, from subject recruitment to data interpretation. Some students will administer the pre- and post-testing measures, and assist in scoring and entering testing data. Other students will be primarily involved in facilitating the cognitive play intervention. Ideally these teams will be separate so that researchers conducting the post-test will be blind to the cognitive play condition of the participants. Research assistants will be responsible for scoring and entering testing data, as well as maintaining accurate training logs throughout the study, and will also participate in data analysis. Research assistants are also encouraged to attend regular lab meetings as their schedules permit.
- conduct a study examining how the quality of social relationships might impact symptom change over the course of therapy
- build infrastructure to allow us to easily collect data from our patients
- organize and help run research meetings
- read and present research articles to the group

You will also be able to:
- have limited opportunities to assist us in our clinical work
- learn about assessments and measures used in clinical practice
- learn about combining quantitative and qualitative research methods
- learn about cognitive behavior therapy

We are looking for an advanced undergraduate student or a recent college graduate who is familiar with Excel and SPSS (or willing to learn), is comfortable working independently, has experience coding and managing data, and is able to spend all day Friday at our offices (10 AM to 5 PM). We are located in the Rockridge area of Oakland, easily accessible by bus or BART. This is a volunteer position, so unfortunately we are not able to pay for your time.

If you’re interested, please send a CV and a description of why you are interested in this position to Dr. Janie Hong at hong@cbtscience.com.

Psych 199 - Walker Lab

Objectives:
In this project we are examining the role of sleep in brain and body health in young and old adults. Using fMRI, EEG, behavior, and peripheral physiology, we examine the effects of sleep and sleep deprivation on cognitive and affective brain function. We employ a variety of tasks to measure memory, emotion/affect, social interactions, and peripheral physiology. We aim to characterize how these various factors change with sleep deprivation and how they relate to age-related sleep changes.

Methods:
Participants in the study come to the lab for a night of monitored sleep (or sleep deprivation). To characterize brain activity during sleep, after sleep, and after sleep deprivation, we employ EEG and fMRI. Across the study period, participants fill out questionnaires, participate in cognitive tasks, and have their pulse and blood pressure recorded.

Students’ Role
Students are expected to assist with data collection as a first priority and may work within multiple concurrent projects in the lab. This will include various training pre-requisites. Lab members will hold trainings in order to teach standard sleep EEG setup, techniques for physiological monitoring and behavioral methodologies. In addition, students are expected to assist with sleep deprivation overnight monitoring, sleep-rested EEG overnight monitoring, and morning fMRI scanning. Students are expected and required to be available to help nights and weekends to run studies. Once new RAs learn basic sleep science techniques, there will be additional opportunities for students to assist with data entry and analysis. This will include the various questionnaires, behavioral, and physiological data collected throughout the study.
Mentors’ Role
Students may work with one or more lab members who will serve as a mentor(s). Lab members will hold multiple required meetings where new RAs will be trained on sleep EEG methodology, general sleep science techniques and protocols. In these meetings, time will be dedicated for students to discuss theoretical questions in the study. A reading list is provided to fuel such discussions.

Criteria for Final Evaluation and Grading
There will be no formal assignments as part of this course. Final evaluations are primarily based on students’ dedication, participation, and conscientiousness in their work. Research assistants will be expected to remain available for the number of hours the assistant and mentor have agreed upon, and must help with data collection, including overnights and weekends. Finally, RAs are expected to show up to these hours on time, and to uphold all research ethics when conducting studies.

Reading List

Polysomnography Manual – Walker Lab – get copy from lab members when needed.


https://youtu.be/_d583swchPA

Title of Research/project: Language, Emotion, and Development project (Project LEAD)

Faculty sponsor: Qing Zhou, PhD

Supervisor Name: Aya Williams

Supervisor email: aiwilliams@berkeley.edu

Main contact email: qingzhou@berkeley.edu

Location: UCB

Website: https://zhoulab.berkeley.edu/join-us.html

Description:
The Language, Emotion, and Development project (Project LEAD) conducted by Dr. Qing Zhou at the UC Berkeley Family and Culture lab is a pilot study seeking to examine the relationship between bilingualism and children’s emotion regulation. While research shows that there are many cognitive benefits to bilingualism, little is known about the relation between bilingualism and emotional
development. Therefore we will recruit Mexican American and Chinese American families, the two largest bilingual immigrant groups in the United States, with children (3-5 years of age) in Head Start Preschool programs in the San Francisco Bay Area. Families will participate in a 2.5-3 hour long assessment during which a parent is interviewed and his or her child is assessed.

**Responsibilities:**

- learn assessment procedures which include standardized psychological assessments of language proficiency, behavioral tasks to assess children’s emotion regulation abilities, and interviews with parents consisting of standardized questionnaires that use likert scales to measure parenting styles, acculturation, ethnic identity, ethnic socialization, parenting stress, emotion regulation, parental self-efficacy and children’s socio-emotional development
- code language and emotion data from observational video recordings of parent-child interactions
- assist with data entry and cleaning using excel, SPSS, R

**Application:**

In addition to filling out the URAP application, we ask that interested applicants fill out an additional form which can be found on our lab website: http://zhoulab.berkeley.edu/join-us.html. Please email the completed form and your CV (preferably in one pdf file) to Professor Zhou at qingzhou@berkeley.edu. You will be contacted if selected for an interview. We are currently seeking students fluent (speaking and writing/reading) in SPANISH and/or CHINESE. Previous experience working with quantitative and qualitative data in research/work settings is desired. Prior coursework in Research Methods, Developmental Psychology, and/or Clinical Psychology or Developmental Psychopathology is desired but not required. Quantitative skills (e.g. SPSS)/experience in database construction is a plus.

**Deadline:** Until filled

**Title of Research/project:** The Effect of Oxytocin on Cohesion and Teambuilding

**Faculty sponsor:** Dacher Keltner

**Supervisor Name:** Craig L Anderson

**Supervisor email:** clanderson@berkeley.edu

**Main contact email:** clanderson@berkeley.edu

**Location:** UCB

**Description:**

The goal of this project is to investigate how the administration of the neuropeptide oxytocin affects team cooperation and cohesion in small groups of three.

**Qualifications:**
• Applicants are expected to be able to dedicate at least 10 hours to the lab per week consisting of at least two 4-hour blocks, and to commit for the entire 2016/17 academic year. It is possible to gain course credit for working on this project.
• Excellent communication and organizational skills.
• The ability to actively contribute as a team player, manage details, track participant progress, think creatively, work independently, and meet deadlines.
• Previous research experience is preferred, but not required.

Application process:

Applicants should email a resume and a short statement of purpose to Dr. Craig Anderson at clanderson@berkeley.edu to receive a link for an application survey.

Deadline: Until filled

Title of Research/project: Sleep and Neuroimaging

Faculty sponsor: Matthew Walker

Supervisor Name: Matthew Walker

Supervisor email: mpwalker@berkeley.edu

Main contact email: adamkra@berkeley.edu ; etoosh@gmail.com

Location: 5316 Tolman Hall

Website: https://walkerlab.berkeley.edu/index.html

Description:

In this project we are examining the role of sleep in brain and body health in young and old adults. Using fMRI, EEG, behavior, and peripheral physiology, we examine the effects of sleep and sleep deprivation on cognitive and affective brain function. We employ a variety of tasks to measure memory, emotion/affect, social interactions, and peripheral physiology. We aim to characterize how these various factors change with sleep deprivation and how they relate to age-related sleep changes.

Responsibilities:

Students are expected to assist with data collection as a first priority and may work within multiple concurrent projects in the lab. This will include various training pre-requisites. Lab members will hold trainings in order to teach standard sleep EEG setup, techniques for physiological monitoring and behavioral methodologies. In addition, students are expected to assist with sleep deprivation overnight monitoring, sleep-rested EEG overnight monitoring, and morning fMRI scanning. Students are expected and required to be available to help nights and weekends to run studies.
Once new RAs learn basic sleep science techniques, there will be additional opportunities for students to assist with data entry and analysis. This will include the various questionnaires, behavioral, and physiological data collected throughout the study.

Criteria for Final Evaluation and Grading

There will be no formal assignments as part of this course. Final evaluations are primarily based on students’ dedication, participation, and conscientiousness in their work. Research assistants will be expected to remain available for the number of hours the assistant and mentor have agreed upon, and must help with data collection, including overnights and weekends. Finally, RAs are expected to show up to these hours on time, and to uphold all research ethics when conducting studies.

Application process:

If interested please send message to adamkra@berkeley and/or etoosh@gmail.com with your name, year, and attach a resume/CV if available.

Deadline: Until filled

Title of Research/project: Social perception photo project

Faculty sponsor: Dacher Keltner

Supervisor Name: Paul Connor

Supervisor email: pconnor@berkeley.edu

Main contact email: pconnor@berkeley.edu

Location: other

Website: http://socrates.berkeley.edu/~keltner/

Description:

We are researching a few questions, including the way exposure to apparent inequality affects the way people perceive and judge others, and how this varies according to the socioeconomic status of both the perceiver and observer, and the way racial and social class stereotypes and biases interact.

Responsibilities:

We need student RAs to help us continue to develop and organise a database of photographic experimental stimuli. This will involve spending time approaching volunteers from the public, finding images online, editing images, and maintaining and organising the image database. No specific experience is required.
Application process:

To apply, send an email to pconnor@berkeley.edu and explain why you're interested in the position. If you can, please include a resume and a writing sample.

Deadline: Until filled

Title of Research/project: Measuring the Effectiveness of Cognitive Play on Reasoning and Math Achievement

Faculty sponsor: Silvia Bunge

Supervisor Name: Ariel Starr and Chloe Green

Supervisor email: arielstarr@berkeley.edu

Main contact email: Bungelab@gmail.com

Location: Other

Description:

Prior work demonstrates that children’s reasoning ability can be improved through interventions focused on cognitive play. This research aims to capitalize on these successes to elucidate the nature of the relationship between reasoning and academic achievement. In the current study, we aim to assess the impact of cognitive play on cognitive abilities and academic skills (e.g. math ability) in young children who have just begun formal math education. The intervention will take place in after-school program settings and will involve playing games geared towards improving relational reasoning, processing speed, and/or number sense games. Participants will complete cognitive and academic assessments before and after the training, some of which will be performed while eye-gaze and pupillometric measures will be recorded. The eyetracking metrics provide information regarding the strategies engaged during the task, which will provide insight into how cognitive play alters children’s reasoning strategies.

This fall semester we will be working in the Berkeley School District After School Program with kindergarten and first-grade students. We will recruit approximately 25 children per cognitive play condition. Participants will complete pre- and post testing using cognitive and academic tests as well as eyetracking measures. The cognitive play intervention itself will consist of a specially selected curriculum of board games that target either reasoning skills or processing speed. The entire length of the study will be approximately 10 weeks.

Responsibilities:

Research assistants will be involved in all aspects of the study, from conducting the intervention (playing reasoning and math games on the study site), to administering pre/post assessments, and data interpretation. Some students will administer the pre- and post-testing measures, and assist in scoring and
entering testing data. Other students will be primarily involved in facilitating the cognitive play intervention. Ideally these teams will be separate so that researchers conducting the post-test will be blind to the cognitive play condition of the participants. Research assistants will be responsible for scoring and entering testing data, as well as maintaining accurate training logs throughout the study, and will also participate in data analysis. Research assistants are also encouraged to attend regular lab meetings as their schedules permit.

Application process:

Please send a cover letter, resume, and class/work schedule to bungelab@gmail.com. Please title the email "RA application for Cogplay study." Interviews will be scheduled during the 2nd and 3rd week of classes. Please only apply if you have have availability 2-3 days per week between 2-5pm. Availability during this time is a prerequisite for the position because data collection will take place during an after-school program at a nearby school site. Time commitment for the study will vary between 6-9 hours per week. Prior experience and interest in working with children is favorable.

Deadline: Until filled

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Title of Research/project: Language and Emotion in Chinese- and Mexican- American Preschoolers

Faculty sponsor: Iris Mauss

Supervisor Name: Helena rose Karnilowicz

Supervisor email: hkarnilowicz@gmail.com

Main contact email: hkarnilowicz@gmail.com

Location: 4209 Tolman Hall

Website: https://eerlab.berkeley.edu/

Description:

This study seeks to understand the relations among language, emotion, and cognition in the development of emotion regulation among monolingual and bilingual children. Our participants are American and Mexican American children (aged 3 to 5 years) and their families from Head Start Preschool programs in the San Francisco Bay Area.

Responsibilities:

- Code behavior of parents and their children, such as affect and coordination, during a naturalistic puzzle task.
- Watch videos of families and applying a coding scheme to quantify behavior
- Meet with your fellow coders and discuss/justify your codes
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- Fluent in Cantonese or Spanish.

Application process:

If interested, please email a cover letter, resume/vita, and weekly availability to Helena Rose Karnilowicz at hkarnilowicz@gmail.com.

Deadline: Until filled

Title of Research/project: Does practice make perfect when it comes to reasoning skills?

Faculty sponsor: Silvia Bunge

Supervisor Name: Belen Guerra-Carrillo

Supervisor email: belyguerra@berkeley.edu

Main contact email: belyguerra@berkeley.edu

Location: Tolman/Baker

Website: http://bungelab.berkeley.edu/

Description:

The Building Blocks of Cognition Laboratory, led by Prof. Silvia Bunge, is studying whether and how reasoning skills change as a function of experience. The lab has shown previously that preparing to take a cognitively demanding standardized test strengthens the brain network that supports reasoning (e.g., Mackey et al., Journal of Neuroscience, 2013). We seek to follow up on these findings by randomly assigning students to receive either training in reasoning or reading comprehension, and testing for changes in cognitive task performance and patterns of eye movements that reflect the process of reasoning.

Responsibilities:

We are looking for a research assistant that will help with the following research efforts: participant recruitment, behavioral and eyetracking data collection at several timepoints, keeping tabs on the participants, and data analysis. The student will work closely with graduate student Belén Guerra-Carrillo from beginning to end, learning about all phases of scientific research.

Qualifications:

- The student must be highly motivated to see this project through to completion and available to spend at least one year on the project.
- Strong communication skills required, and some background with a programming language (e.g. python, R) a plus.
Application process:

Send us an email telling us about yourself, any prior experience that might be relevant to the project, your weekly availability for the semester, and a copy of your transcript. We will aim to hold interviews throughout the week of August 15th.

Deadline: Until filled

Title of Research/project: Berkeley Early Learning Lab Research Assistant Position

Faculty sponsor: Fei Xu

Supervisor Name: Phyllis Lun

Main contact email: babylab@berkeley.edu

Location: Tolman Hall

Website: babylab.berkeley.edu

Description:
The Berkeley Early Learning Lab, under the direction of Professor Fei Xu, researches statistical inference, categorization development, social cognition, information search, decision-making and language acquisition in infants and children aged 11 months to 12 years. Children participate in our studies at our Tolman Hall lab, at preschools and elementary schools, and at local children’s museums. Our lab conducts studies using a variety of exciting developmental and psychological methods, including violation of expectation, behavioral measures, verbal tasks, choice paradigms, iPad games and eye tracking. Becoming a research assistant in the Berkeley Early Learning Lab offers students the opportunity to learn more about child development research and the research process, as well as gain first-hand experience interacting with participants in a highly productive research lab.

Responsibilities:

• Research assistants will be responsible for running experiments and will receive training in how to execute several studies and how to record data from studies.
• Testing participants in the lab includes greeting participants and their parents in the waiting room; testing at science museums would include recruiting parents from the museum floor, and inviting them to participate.
• All sessions require research assistants to obtain informed consent from participants’ parents and assent from participants. Research assistants will participate in bi-weekly lab meetings with the principle investigator, graduate students, and postdoctoral researchers of the lab to discuss progress of current projects.
• Other administrative duties of research assistants may include providing temporary childcare for siblings of participants, preparing and filing consent documents, and creating stimuli.
• About half of students’ hours will be dedicated to off campus testing, and half to lab work (including running participants in the lab and entering data).

Application process:

In order to apply, please send a CV detailing relevant coursework, research, and experience with children, along with a cover letter explaining your interest in our research, to Phyllis Lun, Lab Manager, at babylab@berkeley.edu. Applications accepted on a rolling basis.

Deadline: Until filled

Title of Research/project: Examining Personal Reputation and Compassion

Faculty Sponsor: Professor Dacher Keltner

Supervisor: Hooria Jazaieri

Contact Email: Hooria@berkeley.edu

Location: On campus and remotely

Position Available: Fall 2016, Spring 2017, Summer 2017

Description of Research:

The proposed research will examine personal reputation and compassion within the United States and countries around the world. The central goal is to understand the processes that underlie the formation and maintenance of personal reputation through a series of studies that implement a multi-method approach. Study designs include qualitative data collection, narrative accounts acquired online (and subsequent qualitative data coding), and experimental laboratory studies.

Description of student responsibilities:

Research assistants will be involved in several stages of this research including:

1. Reading empirical articles and performing literature searches and reviews to aid in study design and provide substantive background for designing studies and manuscript preparation.
2. Performing qualitative data coding of participant narrative data according to a detailed coding manual.
3. Assisting with the organization and management of data.
4. Running select experimental lab studies.

Application process:

Interested applicants should email their resume to the supervisor, Hooria Jazaieri (hooria@berkeley.edu). Interviews will be arranged with qualified applicants.

Application deadline: Positions will remain open until filled.
Title of Research/project: Depression Treatment Study

Faculty sponsor: Allison Harvey

Supervisor Name: Molly McNamara

Main contact email: mollymc@berkeley.edu

Location: Tolman Hall

Website: https://www.ocf.berkeley.edu/~ahsleep/

Description:

The prevalence of mental illness is on the rise and has both huge social and economic implications. The cost of mental illness is estimated to reach 6 trillion dollars by 2030, ahead of diabetes, chronic obstructive pulmonary disease (COPD), cardiovascular diseases, and cancer. MDD is one of the most common mental illnesses, with about 1 in 5 people experiencing depression in their lifetime. Depression causes significant impairment in multiple domains in people's lives (social, home life, work/academic life, etc.) While treatments for depression have improved over the years, a need exists to improve treatments for MDD because a proportion of patients do not respond to existing treatments. Of those who do, the majority relapse.

Why focus on Cognitive Therapy (CT) for MDD?

CT for MDD is well articulated and well studied. Meta-analyses confirm CT as a frontline treatment, with patients less likely to relapse than those on anti-depressant medications alone. Despite these impressive outcomes, there is room for improvement, as only one-third of all patients respond to treatment and last a year without relapse.

Joining the research team for a depression treatment study is a phenomenal opportunity, for a multitude of reasons. Depression is multi-faceted, and its crossroads are an intersection between psychology, biology, neurology, philosophy, and public health, just to name a few. Not only will you gain experience with mental health research, but you will develop skills by working in a large lab at one of the top 3 clinical psychology programs in the country.

Responsibilities:

Must be organized, punctual, professional, and responsible. RAs will help project coordinators with aspects of the study including recruiting participants, preparing for sessions, doing post-session tasks, and other odd jobs. This is an excellent way to learn about how research works for those who have not worked in a lab before. RAs will also be responsible for downloading and editing video and audio recordings of therapy sessions after they take place, and ensuring that they are encrypted. RAs will be responsible for uploading recordings in a timely manner after sessions. There may be opportunities in the future to be involved in more advanced projects with direct clinical exposure.

Application process:
Please send an email to Molly McNamara at mollymc@berkeley.edu with the subject line, “RA Position [Your name].” Please attach a resume or CV and submit the form below.

Google Form: https://goo.gl/forms/knqZVAEvmZGKqi6R2

Deadline: Until filled

Title of Research/project: Improving Intergroup Relations in the Digital Age

Faculty sponsor: Rodolfo Mendoza-Denton

Supervisor Name: Amanda Perez

Main contact email: amandaadanielle@berkeley.edu

Description:

Broadly, this project will focus on studying the underlying mechanisms of the formation of positive online cross-group friendships. It is estimated that by 2050 there will be no racial or ethnic majority in the United States. With the inevitability of cross-group interactions, improving outgroup attitudes and reducing prejudice become important societal goals. Cross-group friendship has been shown to have a stronger prejudice reduction effect than other cross-group contact relationships, such as neighbors and coworkers. At the same time that society is diversifying, however, it is also becoming increasingly reliant on digital media as a means of social contact. Such increasing internet and social media use highlights the importance of focusing on improving cross-group relations in the online domain. In the United States, the internet is used by 71.7% of individuals and provides a unique medium to tackle important societal issues such as prejudice and discrimination. The current research seeks to examine the potential role that the internet can play in facilitating cross-group contact and friendships.

Responsibilities:

RA's will work with the graduate student, the professor, and each other, and will gain experience in all aspects of the research process, including literature reviews, study design, running studies, and data analysis.

Qualifications:

1. The ideal candidate will have a desire to pursue graduate school in psychology, as the skills you will acquire will make you competitive for graduate school.
2. Extremely organized, reliable, and devoted to moving the research program forward. You will be asked to solve problems, and you will be expected to do this independently with minimal supervision.
3. Genuinely interested in the research questions we are investigating.
4. Up to 8-9 hours/week to devote to the project necessary.
5. Previous experience with Excel, video editing, and general comfort with using technology are all desired, but not required.
6. Previous research experience is not required.

**Application process:**

Please send your resume including your GPA and past research experience (if any) to amandaadanielle@berkeley.edu. Type "RA POSITION" in the subject line. In the email itself, indicate the following:

1. How many hours you can commit per week
2. How many semesters you can commit to
3. Whether you want to volunteer or get course credit
4. A very brief summary of why you are interested in this project and what you hope to gain from being a Research Assistant.

If you do NOT hear back from us, this means we do not have a position.

**Deadline:** Until filled

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**Title of Research/project:** Learning and generalization

**Faculty sponsor:** Anne Collins

**Supervisor Name:** Anne Collins

**Main contact email:** annecollins@berkeley.edu

**Location:** Tolman 5307

**Website:** https://www.ocf.berkeley.edu/~acollins/

**Description:**

To learn quickly in a new situation, we often simply figure out the best way to reuse skills we already learned in the past. Identifying which skills to generalize now is a challenging task. How do we do it?

The proposed research plans to investigate learning and decision making in healthy young adults. We use computerized tasks to probe how multiple systems contribute to let us learn efficiently in different situations; and how these different systems interact with each other. In this particular project, we investigate how we learn to generalize, and how this ability changes with time.

This research project involves three steps. First, we will develop the code needed to run the experiments. The mentor will provide a precisely defined experimental design as well as existing code for similar experiments; they will guide the RA through adapting code for the proposed experiment. Second, we will recruit participants and collect data for this experiment. Third, we will analyze this behavioral data, potentially including computational model fitting.

Experiments for this project will take place online through the Amazon Mechanical Turk platform.
Project details:

The project will extend the structure learning task to investigate new aspects of rule learning, generalization, and how our ability to generalize this changes over learning. To understand this project, it is important to understand the original task (1-2), how it and similar tasks support generalization (5). This is a short introductory (non-exhaustive!) reading list that should familiarize the RA with important aspects of the project.

Bibliography review:


To work on this project, we will use the Amazon Mechanical Turk platform, with support from Psiturk. For this project, RAs will need to gain some familiarity with javascript, html, python, and SQL databases. Mentors will provide support to learn these skills, but some initial coding skills are strongly recommended and preferred.

https://psiturk.org/
https://www.mturk.com/mturk/

Goals:

- become familiar with psiturk
- become familiar with amazon mechanical turk
- implement changes to the task code to include modifications to the experiment through piloting
- collect pilot data
- analyze pilot data
- become sufficiently familiar with the literature to be able to explain the project and its context.

Responsibilities:
Research assistants will have an opportunity to participate in multiple stages of the research process and to receive mentoring along the way.

In particular, research assistants will be responsible for coding the experiment. They will then be responsible for running the experiment online, through the several steps required: advertising, running the task, monitoring the software and data collection, organizing collected data and analyzing data. They will receive training and supervision in these tasks.

Furthermore, research assistants will be expected to familiarize themselves with the goals and the contents of the project. They should be able to clearly explain the purpose and predictions of the experiment. The mentor will provide guidance in reading some of the relevant literature, to put the specific project in a broader context.

Research assistants will be required to meet regularly with their mentor and to keep track of their progress in the project.

**Application process:**

To apply to this position, please email annecollins@berkeley.edu. Put in the subject line “RA position: Learning and Generalization”. Indicate in your email why you are interested in this project, why you think you are a good fit for this project, and how much time you would like to commit to it. If possible, attach a cv including any previous experience relevant to the skills needed for this project.

**Deadline:** Until filled

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**Title of Research/project:** EEG correlates of working memory in learning

**Faculty sponsor:** Anne Collins

**Supervisor Name:** Anne Collins

**Main contact email:** annecollins@berkeley.edu

**Location:** Tolamn 5307

**Website:** https://www.ocf.berkeley.edu/~acollins/

**Description:**

To make the best decisions possible, we sometimes simply need to remember well a few things, and sometimes need to integrate lots of information and before figuring out which choice is most valuable. Efficiently learning to use both strategies as needed challenging task. How do we do it?

The proposed research plans to investigate learning and decision making in healthy young adults. We use computerized tasks to probe how multiple systems contribute to let us learn efficiently in different
situations; and how these different systems interact with each other. In this particular project, we investigate how we learn to generalize, and how this ability changes with time.

In this research project, we will analyze data from an EEG experiment to try to understand how different strategies (reinforcement learning and working memory) contribute to learning. The mentor will provide already collected EEG data, and existing code to start analyzing the data. They will guide the RA through the cleaning and analysis of EEG data.

**Project details:**

The project will use the learning and working memory task (RLWM) to investigate the contributions of working memory to reinforcement learning. To understand this project, it is important to understand the RLWM task, how it can be applied to ask more questions about learning (1-2), and how EEG methods can be applied to the study of reinforcement learning (3-5). This is a short introductory (non-exhaustive!) reading list that should familiarize the RA with important aspects of the project. Reference 6 is given as a resource, but RAs are not expected to read the whole book.

**Bibliography review:**


To analyze the data, we will need matlab experience. Many good matlab tutorials can be found online. Tutorials on EEG data analysis can be found here:

http://mikexcohen.com/lectures.html

**Goals:**

- become familiar with Matlab
- become familiar with EEG data cleaning
- become familiar with EEG data analysis
- clean and analyze existing data
- become sufficiently familiar with the literature to be able to explain the project and its context.
Responsibilities:

Research assistants will have an opportunity to participate in multiple stages of the research process and to receive mentoring along the way.

In particular, research assistants will be responsible for analyzing the behavioral data from the experiment, cleaning the EEG data, and analyzing the EEG data. They will learn how to test hypotheses using EEG methods. They will receive training and supervision in these tasks.

Furthermore, research assistants will be expected to familiarize themselves with the goals and the contents of the project. They should be able to clearly explain the purpose and predictions of the experiment. The mentor will provide guidance in reading some of the relevant literature, to put the specific project in a broader context.

Research assistants will be required to meet regularly with their mentor and to keep track of their progress in the project.

Application process:

To apply to this position, please email annecollins@berkeley.edu. Put in the subject line “RA position: EEG correlates of working memory in learning”. Indicate in your email why you are interested in this project, why you think you are a good fit for this project, and how much time you would like to commit to it. If possible, attach a cv including any previous experience relevant to the skills needed for this project.

Deadline: Until filled

Title of Research/project: Emotion and Cognition study

Faculty sponsor: Dacher Keltner

Supervisor Name: Maria Monroy

Main contact email: mariamonroy@berkeley.edu

Location: UCB

Website: http://socrates.berkeley.edu/~keltner/

Description:

The objective of the project is to examine the cognitive benefits of positive emotions, particularly of the emotion of awe. We collect self-report and videotape data during hour-long lab sessions. The goal is that by the end of the semester we have both collected new data and have all data coded for behaviors such as emotional expression.
New research assistants in the BSI Lab will be expected to collect new data, and code videotape data for behaviors such as emotional expression, clean and organize existing self-report data, and engage with the existing literature on the emotion of awe and its cognitive benefits. Research assistants that demonstrate high quality of work and dependability will be invited to take on a larger role in the lab, which might entail training on the collection and analysis of video data, and assisting in the planning of future studies. If there is an opportunity to run participants in the lab, research assistants will get proper training by myself and other graduate students. Moreover, procedures will differ depending on what project they’re able to work on. Generally, in most lab projects, research assistants assign their own hours to run participants, on weekdays between 9 to 5pm. The research assistant will arrive to the assigned room in Tolman Hall and prepare the experiment materials prior the schedule time. Then they will conduct the experiment, debrief, and thank the participant for participating.

Core readings will be provided for student in a weekly basis when needed.

**Responsibilities:**

The primary responsibility of a research assistant will be to run lab experiments, and organize and code video data. Research assistants will receive detailed training on the project protocol and on how to properly conduct the lab experiment. In the lab, the research assistant’s role will be to prepare the laboratory, greet participants, acquire consent form, explain the instructions to participant, be available to answer questions in case needed during the study, and debrief and thank them for participating. The student may also be asked to assist in numerous other tasks, including attending weekly lab meetings to discuss the progress of the study. The time commitment is 6hrs per week.

**Application process:**

Interested students please email Maria at mariamonroy@berkeley.edu with subject line: “RA: Emotion and Cognition study” to receive the application survey.

**Deadline:** Until filled

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**Title of Research/project:** Social class, Inequality, and Identity

**Faculty sponsor:** Serena Chen

**Supervisor Name:** Arianna Benedetti

**Main contact email:** abenedetti@berkeley.edu

**Location:** Tolman

**Website:** http://serena-chen.squarespace.com/

**Description:**

Research Assistants (RAs) will work on one or more of three projects involving social class, inequality, and identity. Project A examines how current social class affects future social class aspirations,
expectations, and fears. Project B focuses on social class as a group identity and how in-group bias, and self-enhancement or self-verification play into group identification. Project C focuses on inequality in an applied context by examining how CEO-to-worker compensation ratios affect consumer and employee perceptions of companies.

**Responsibilities:**

- Studies are conducted online and in person. For both studies, RAs may be responsible for coding data (for instance, categorizing jobs by prestige level, or rating adjectives based on positive or negative valence.) Coding will require access to a personal computer.
- In-person studies require an RA to run the experiment by greeting the participant, having the consent form signed, lead the participant through the experiment – typically a group or computer-based activity, and debriefing the participant in the end.
- Occasionally, RAs will be responsible for achieving an understanding of related research topics and theories. This may involve reading several assigned papers or completing a short literature review on a given topic.
- RAs will be required to attend an RA meeting approximately 1-2x per month.
- The unit requirement is 1 unit of credit for every 3 hours of work per week in the lab. While you are allowed to enroll in up to 3 units, I only offer 1-2 units based on students' time commitment. Time commitments will never exceed 6 hours per week.

**Application process:**

Email Arianna Benedetti at abenedetti@berkeley.edu if interested. Include answers to the following questions in the body of the email:

1. What is your year in school, major, and GPA?
2. Why do you want to be a research assistant?
3. Please describe your background in social science research. If you do not have any research experience, please list relevant classes taken and the grades received.
4. Please describe any professional, club, or volunteer experiences that attest to your responsibility and dependability.
5. Do you have any skills in statistical analysis programs or computer programming? Note: None are required for the position.
6. How many hours are you able to commit this semester? What times (M-F, 9am-5pm) are you NOT available for an RA meeting (to take place 1-2x per month)?

Upon receiving the application, I will contact students with next steps, which may involve one short in-person interview.

Please send applications sooner, rather than later, if interested. The positions are open until filled.

**Deadline:** Until filled

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**Title of Research/project:**
Faculty sponsor: Professor Jennifer Skeem

Supervisor Name: Sara Ellis

Main contact email: seellis@berkeley.edu

Location: School of Social Welfare

Website: http://risk-resilience.berkeley.edu/

Description: We are recruiting new RA's for our small, cohesive team. If you are a student or a recent graduate with interests in research that can inform efforts to prevent violence and improve the lives of people at-risk, this is the perfect position for you!

Responsibilities:

- Assisting with data collection in various projects (involving both youth and adults)
- Data coding, entry, and analysis; literature searches
- Attending a 1-hour team check-in meeting every other week

Requirements:

- Availability during normal business hours (9am - 5pm; Monday - Friday)
- Ability to commit to at least one semester (interest in continued collaboration throughout the year—or more—is preferred)
- Previous research experience not required; all training will be provided.

Application process: If interested, please complete an application here: http://risk-resilience.berkeley.edu/undergraduate-research-assistant-application

Deadline: Until filled

Title of Research/project: The Immigrant Adolescent Project (IAP)

Faculty sponsor: Professor Sita G. Patel

Main contact email: spatel@paloaltonu.edu

Description:

Global mental health is sometimes much closer to home than we imagine. Each year, large numbers of youth from around the world migrate to the United States without their parents or guardians, and the number of these unaccompanied minors have dramatically increased in recent years. This population faces multiple challenges, including adjusting to a new cultural context, learning a language, forming friendships, separation and reunification with family, traumas during migration, and the normative developmental challenges associated with adolescence. Despite the high risk, most urban schools serving
newcomers fall dramatically short in terms of the resources necessary for complete and accurate assessment of student needs.

The Immigrant Adolescent Project (IAP) works with recently-arrived, or “newcomer” immigrant adolescents through a community collaboration with two Bay Area public high schools exclusively serving this population. In a public school system already over-burdened with high-needs students, high schools like Oakland International and San Francisco International, which are both devoted to receiving and educating new immigrants, have the added burden of a student population facing the myriad challenges of acculturation. Teachers and administrators are left without comprehensive understanding of their students’ complex life circumstances (e.g., unaccompanied minor and legal status, health coverage, educational gaps) or practical needs (e.g., legal, mental health, housing, health).

To address this need, IAP included a newcomer adolescent assessment program for SF International High School. The immediate goal was to help identify students in need of services. The project used community-based participatory methods to develop the scope of the assessment, including collaborating with the school’s staff and students. We conducted interviews (in Spanish, Chinese, and English) with all ninth and tenth grade students. Most had arrived in the past year from Central America (El Salvador, Guatemala, Honduras). We asked students about their immigration experiences, current living circumstances (home, family, work, social), health and legal needs.

Through the assessment process, our team learned that nearly two-thirds of participants arrived in the United States unaccompanied by an adult, had experienced some form of migration trauma, and spent some period of time held in an immigration detention center after crossing the border to the U.S. The students described an incredibly complex combination of risk factors: complex trauma histories like crossing the border on foot, family separation, working to support themselves and their extended family, and significant periods of their lives without formal education. Despite such formidable life circumstances, immigrant adolescents exhibit incredible resilience. A better understanding of risk and resilience, as well as practical and psychological needs, will allow schools and other service providers to better serve immigrant students.

Responsibilities:

- Transcribe 30-minute audio files of interviews conducted in Spanish.
- Translate Spanish transcriptions into English.
- Transcription work can be completed remotely.
- RA’s are encouraged to attend 1-2 meetings of the Cultural Transitions Research Group at Palo Alto University (10-11:30am on Mondays).
- RA’s are also encouraged to participate as co-authors on conference presentations and publications generated from the data.
- RA’s who wish to continue their work with the project may be included in new data collection at Oakland and SF International High Schools taking place in Spring 2017.

Application process:

- Please email Sarah Tilzey (Graduate Program Manager) to apply: stilzey@paloaltou.edu
RA 199 – 08/24/2016

- Professor Stephen Hinshaw of the Psychology Department will be the faculty sponsor for Psychology 199 units.

Reading List:

Deadline: Until filled

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Title of Research/project: Social reasoning and sport

Supervisor Name: Amy Banas

Main contact email: amyb@berkeley.edu

Description:
The study employs the clinical interview method and asks participants to make decisions about social situations that might occur in sport activities, as well as non-sport activities. This includes thinking about rules, about conflicts and the resolution of conflicts, about how people act toward each other in sport and daily life situations, and instances of harm.

Responsibilities:
- Help me transcribe interviews and code the data.
- Expect to learn theories of social and moral development, the clinical interview method, the design of an interview protocol, building a coding scheme, and achieving inter-rater reliability
- Gain Psych 99/199 units.

Application process:
To apply, please send an email to Amy Banas (amyb@berkeley.edu) stating your interest, some info about yourself, and a description of relevant experience/description of how you might be a good fit for this team. Please also include the number of units you wish to sign up for/how many hours a week you are able to work.

Deadline: Until filled

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Title of Research/project: Cross-cultural studies of the emotion of awe
Awe is an emotional experience defined by two appraisals: that one is in the presence of something vast, and that that stimulus or idea transcends one’s current understanding of the world, requiring the accommodation of current knowledge structures to make sense of the awe-eliciting stimulus. The rising interest in awe literature and the current dearth of cross-culture research merit more explorations in this area. Our work tries to cover this gap. Through investigating people's awe experiences in 25 cultures, we want to get a full understanding of awe, this unique positive emotion, around the world.

Responsibilities:

Responsibilities for research assistants will include scheduling and running experiments, preparing stimuli, and learning and contributing to research design. Depending on the interests and skills of the student, there might be opportunities to be involved in experimental design/programming (knowledge in Matlab/R will be taught through the process), data analyzing and academic paper writing. We require commitments of 4-6 hours per week. Psych 199 course credit is available.

Application process:

If you are interested, please send along your CV and the following information:

1) Major and year in school
2) Completed coursework in psychology and GPA
3) Prior research experience
4) Language skills
5) Number of hours available per week.
6) Written skill (ONE page writing sample is welcome)
7) Special skills such as Photoshop, programing skill(R, MATLAB, Python etc.), etc.

Qualified applicants will be notified and will be expected to come in for a brief interview.

Deadline: Until filled

Title of Research/project: UCSF and San Francisco VA Medical Center research study

Faculty sponsor: Dr. Beth Cohen
Supervisor Name: Melanie Arenson
Main contact email: Melanie.Arenson@va.gov
Location: San Francisco VA
Website: http://mindyourheartstudy.ucsf.edu

Description:
The Mind Your Heart Study is an observational prospective cohort study, seeking to evaluate the mechanisms through which posttraumatic stress disorder causes physical health problems, particularly cardiovascular disease. The study is conducted at the San Francisco VA Medical Center.

Responsibilities:
The Mind Your Heart Study seeks dedicated volunteers who have high attention to detail and are able to prioritize effectively. The research volunteer position includes administrative duties such as mailing and logging interviews, data entry and cleaning, and medical record review. This is a great opportunity to gain experience in a clinical research environment! Volunteers who can make an extended commitment may participate in scientific manuscript preparation.

Requirements:
Volunteers must be able to travel to the San Francisco VA and will be asked to work 8 hours a week. Prior research experience is not required, but applicants should have a strong interest in research methods and science and excellent communication skills. This is an ideal position for someone interested in graduate or medical school.

Application process:
To apply, please send your resume (including GPA) to Melanie.Arenson@va.gov

Deadline: Until filled

Title of Research/project: Inequality, Threat, and the Social Fabric: Laboratory Studies on the Harmful Effects of Income Inequality on Social Relations and Well-Being
Faculty sponsor: Dacher Keltner
Supervisor Name: Daniel Stancato
Main contact email: dstancato@berkeley.edu
Location: 4121 Tolman
Website: http://socrates.berkeley.edu/~keltner/
Description: This research is testing the effects of economic factors, such as income inequality and socioeconomic status, on interpersonal behavior, emotional responses, and health outcomes.

Responsibilities: Student's primary responsibilities involve assisting with data collection (i.e., running participants through experimental protocols) and helping to numerically code qualitative data such as open-ended written responses and video footage. Student will also be asked to attend weekly 30-60 minute meetings with supervisor and the team of assistants to discuss progress and any issues that arise. Other possible tasks include literature review and helping to pilot test new procedures.

Application process:

Please email Daniel Stancato (dstancato@berkeley.edu) and provide the following information:

1. Past research experience (if any)
2. Psychology courses you have taken
3. Research interests
4. Number of hours willing to work per week

Deadline: Until filled

Title of Research/project: Assorted topics related to the SIR lab—see website—but examples include research projects on income inequality, power/hierarchy, the self-concept, authenticity, close relationships

Faculty sponsor: Serena Chen

Supervisor Name: Dan Stancato

Main contact email: contactsirlab@gmail.com

Location: UCB

Website: https://serena-chen.squarespace.com/

Description: Description varies depending on the topic. We are mainly looking for RAs who are motivated to learn, conscientious, want hands-on experience, and are willing to commit to a full year of being a research assistant. Can volunteer or receive credit. We can promise an in-depth research experience. Prior research experience is less important than a strong work ethic, strong desire to learn, and strong sense of responsibility.

Responsibilities: Students will primarily aid in data collection. This will entail being reliable, conscientious, responsible, engaged, and motivated—throughout the semester. We will have set hours so you can plan your schedule.

Requirements:

Application process:
Please email contactsirlab@gmail.com if you are interested. In your email, please provide the following information:

- Your name
- Your year in school
- Your major
- Your cumulative and major GPAs
- Your ability to commit to fall and spring semesters
- The number of available hours you have to commit per week
- The days/times you have available (as your schedule currently stands)
- Any prior research experience

**Deadline:** Until filled

**Title of Research/project:**

**Faculty sponsor:**

**Supervisor Name:**

**Main contact email:**

**Location:**

**Website:**

**Description:**

**Responsibilities:**

**Requirements:**

**Application process:**

**Deadline:** Until filled